UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/214,317	01/12/2021	10890723	USCO-053-03	7700

152017 7590 12/22/2020

Us Conec Ltd.
1138 25th Street Southeast
Hickory, NC 28602

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Hiep V. Nguyen, Fort Mill, SC;
US Conec, Ltd, Hickory, NC
Darrell R. Childers, Hickory, NC;
Michael E. Hughes, Hickory, NC;
Jillcha Fekadu Wakjira, Hickory, NC;
Joseph P. Howard, Hickory, NC;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

Document Description: Issue Fee Payment (PTO-85B)

Issue Fee Transmittal Form

Application Number	Filing Date	First Named Inventor	Atty. Docket No.	Confirmation No.
16214317	10-Dec-2018	Hiep Nguyen	USCO-053-03	7700

TITLE OF INVENTION :

ALIGNMENT ADAPTER AND ALIGNMENT DESIGN FOR A CONNECTOR THEREFOR

Entity Status	Application Type	Art Unit	Class - Subclass	EXAMINER
Regular Undiscounted	Utility under 35 USC 111(a)	2883	059000	OMAR ROJAS

Issue Fee Due	Publication Due	Total Fee(s) Due	Date Due	Prev. Paid Fee
$1000	$0	$1000	10-Dec-2020	$0

1.Change of Correspondence Address and/or Indication Of Fee Address (37 CFR 1.33 & 1.363)

Current Correspondence Address:	Current Indicated Fee Address :
152017 Us Conec Ltd. 1138 25th Street Southeast Hickory NC 28602 UNITED STATES 828-323-8883 eofficeaction@appcoll.com	
☐ Change of correspondence address requested, system generated AIA/122-EFS form attached	☐ Fee Address indication requested, system generated SB/47-EFS form attached

2.Entity Status

Change in Entity Status

○ Applicant certifying micro entity status; system generated Micro Entity certification form attached. See 37 CFR 1.29.
Note: Absent a valid certification of micro entity status, issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment. If this box is checked, you will be prompted to choose a micro entity status on the gross income basis (37 CFR 1.29(a)) or the institution of higher education basis (37 CFR 1.29(d)), and make the applicable certification online.

○ Applicant asserting small entity status. See 37 CFR 1.27.
Note: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

◉ Applicant changing to regular undiscounted fee status.
Note: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

Document Description: Issue Fee Payment (PTO-85B)

3.The Following Fee(s) Are Submitted:

☒ Issue Fee	☐ I authorize USPTO to apply my previously paid issue fee to the current fees due
☐ Publication Fee	☐ The Director is hereby authorized to apply my previously paid issue fee to the current fee due and to charge deficient fees to Deposit Account Number _____
☐ Advance Order - # of copies _____	☐ If **in addition to** the payment of the issue fee amount submitted with this form, there are any discrepancies in any amount(s) due, the Director is authorized to charge any deficiency, or credit any overpayment, to Deposit Account Number _____ . The **issue fee must be submitted** with this form. **If payment of the issue fee does not accompany this form, checking this box and providing a deposit account number will NOT be effective to satisfy full payment of the fee(s) due.**

4.Firm and/or Attorney Names To Be Printed

NOTE: If no name is listed, no name will be printed
For printing on the patent front page, list to be displayed as entered

1. Michael L. Leetzow, P.A.
2. Shubhrangshu Sengupta
3.

5.Assignee Name(s) and Residence Data To Be Printed

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

Name	City	State	Country	Category
US Conec, Ltd.	Hickory	NORTH CAROLINA	united states	corporation

6.Signature

I certify, in accordance with 37 CFR 1.4(d)(4) that I am an attorney or agent registered to practice before the Patent and Trademark Office who has filed and has been granted power of attorney in this application. I also certify that this Fee(s) Transmittal form is being transmitted to the USPTO via EFS-WEB on the date indicated below.

Signature	/Michael L. Leetzow/	**Date**	12-09-2020
Name	MICHAEL LEETZOW	**Registration Number**	35932

Senko Ex. 1015, Page 3
Senko Advanced Components v. US Connec Ltd.
IPR2024-00805

Electronic Patent Application Fee Transmittal

Application Number:	16214317
Filing Date:	10-Dec-2018
Title of Invention:	ALIGNMENT ADAPTER AND ALIGNMENT DESIGN FOR A CONNECTOR THEREFOR
First Named Inventor/Applicant Name:	Hiep V. Nguyen
Filer:	MICHAEL LEETZOW
Attorney Docket Number:	USCO-053-03

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
UTILITY APPL ISSUE FEE	1501	1	1000	1000
PUBL. FEE- EARLY, VOLUNTARY, OR NORMAL	1504	1	0	0
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**1000**

Electronic Acknowledgement Receipt

EFS ID:	41340250
Application Number:	16214317
International Application Number:	
Confirmation Number:	7700
Title of Invention:	ALIGNMENT ADAPTER AND ALIGNMENT DESIGN FOR A CONNECTOR THEREFOR
First Named Inventor/Applicant Name:	Hiep V. Nguyen
Customer Number:	152017
Filer:	MICHAEL LEETZOW
Filer Authorized By:	
Attorney Docket Number:	USCO-053-03
Receipt Date:	09-DEC-2020
Filing Date:	10-DEC-2018
Time Stamp:	16:40:41
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1000
RAM confirmation Number	E2020B9G40378870
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	Web85b.pdf	45992 2bd170f7f97f18efd5e33a08ae6ff9f3a8caa9de	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	31850 f8d7fa7e784ce2bc0314247fe5ae55f05c3785d9	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	77842		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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NOTICE OF ALLOWANCE AND FEE(S) DUE

152017 7590 09/10/2020

Us Conec Ltd.
1138 25th Street Southeast
Hickory, NC 28602

EXAMINER	
ROJAS, OMAR R	
ART UNIT	PAPER NUMBER
2883	

DATE MAILED: 09/10/2020

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/214,317	12/10/2018	Hiep V. Nguyen	USCO-053-03	7700

TITLE OF INVENTION: ALIGNMENT ADAPTER AND ALIGNMENT DESIGN FOR A CONNECTOR THEREFOR

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$1000	$0.00	$0.00	$1000	12/10/2020

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

152017 7590 09/10/2020

Us Conec Ltd.
1138 25th Street Southeast
Hickory, NC 28602

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/214,317	12/10/2018	Hiep V. Nguyen	USCO-053-03	7700

TITLE OF INVENTION: ALIGNMENT ADAPTER AND ALIGNMENT DESIGN FOR A CONNECTOR THEREFOR

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$1000	$0.00	$0.00	$1000	12/10/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS
ROJAS, OMAR R	2883	385-059000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. Fees submitted: ❑ Issue Fee ❑ Publication Fee (if required) ❑ Advance Order - # of Copies _____

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

❑ Electronic Payment via EFS-Web ❑ Enclosed check ❑ Non-electronic payment by credit card (Attach form PTO-2038)

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. **Change in Entity Status** (from status indicated above)

❑ Applicant certifying micro entity status. See 37 CFR 1.29

❑ Applicant asserting small entity status. See 37 CFR 1.27

❑ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/214,317	12/10/2018	Hiep V. Nguyen	USCO-053-03	7700

152017 7590 09/10/2020

Us Conec Ltd.
1138 25th Street Southeast
Hickory, NC 28602

EXAMINER	
ROJAS, OMAR R	
ART UNIT	PAPER NUMBER
2883	

DATE MAILED: 09/10/2020

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Senko Ex. 1015, Page 10
Senko Advanced Components v. US Connec Ltd.
IPR2024-00805

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or

Notice of Allowability	Application No. 16/214,317	Applicant(s) Nguyen et al.	
	Examiner Omar R Rojas	Art Unit 2883	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☑ This communication is responsive to the terminal disclaimer filed 08/05/2020.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☑ The allowed claim(s) is/are 15-31 . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see **http://www.uspto.gov/patents/init_events/pph/index.jsp** or send an inquiry to **PPHfeedback@uspto.gov.**

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:

   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____.
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date. _____.
5. ☑ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/Omar R Rojas/
Primary Examiner, Art Unit 2883

EXAMINER'S AMENDMENT/COMMENT

Notice of Pre-AIA or AIA Status

The present application is being examined under the pre-AIA first to invent provisions.

Terminal Disclaimer

The terminal disclaimer filed on 08/05/2020 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Patent No. 10,156,684 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar R. Rojas whose telephone number is (571)272-2357. The examiner can normally be reached on Monday-Friday, 10AM-6PM EST.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Hollweg can be reached on 571-270-1739. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see https://ppair-my.uspto.gov/pair/PrivatePair. Should you have questions on access to

the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Omar R Rojas/
Primary Examiner
Art Unit 2883

or
September 1, 2020

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/214,317	Nguyen et al.
	Examiner	**Art Unit**
	Omar R Rojas	2883

CPC						
Symbol					**Type**	**Version**
G02B	/	6	/	3879	F	2013-01-01
G02B	/	6	/	3817	I	2013-01-01
G02B	/	6	/	3825	I	2013-01-01
G02B	/	6	/	3881	I	2013-01-01
G02B	/	6	/	3885	I	2013-01-01

CPC Combination Sets							
Symbol					**Type**	**Set**	**Ranking**	**Version**
	/		/					

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	17	
/Omar R Rojas/ Primary Examiner, Art Unit 2883	01 September 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	15	3

U.S. Patent and Trademark Office — Part of Paper No.: 20200901

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Senko Advanced Components v. US Connec Ltd.
IPR2024-00805

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/214,317	Nguyen et al.
	Examiner	**Art Unit**
	Omar R Rojas	2883

INTERNATIONAL CLASSIFICATION					
CLAIMED					
G02B6/38	/	6	/	38	
NON-CLAIMED					
	/		/		

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	17	
/Omar R Rojas/ Primary Examiner, Art Unit 2883	01 September 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	15	3

U.S. Patent and Trademark Office — Part of Paper No.: 20200901

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Senko Advanced Components v. US Connec Ltd.
IPR2024-00805

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/214,317	Nguyen et al.
	Examiner	**Art Unit**
	Omar R Rojas	2883

☑ Claims renumbered in the same order as presented by applicant ☐ CPA ☑ T.D. ☐ R.1.47

CLAIMS

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	17	
/Omar R Rojas/ Primary Examiner, Art Unit 2883	01 September 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	15	3

U.S. Patent and Trademark Office — Part of Paper No.: 20200901

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Senko Advanced Components v. US Connec Ltd.
IPR2024-00805

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/214,317	Nguyen et al.
	Examiner	Art Unit
	Omar R Rojas	2883

CPC - Searched*		
Symbol	**Date**	**Examiner**
G02B6/3825,3879	07/23/2020	/ORR/
Updated above.	08/31/2020	/ORR/
G02B6/3885	09/01/2020	/ORR/

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

/Omar R Rojas/ Primary Examiner, Art Unit 2883	

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IPR2024-00805

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/214,317	Nguyen et al.
	Examiner	Art Unit
	Omar R Rojas	2883

Search Notes		
Search Notes	**Date**	**Examiner**
Checked refs. for 15/855,750	06/21/2019	/ORR/
EAST (PGPUB,USPAT,FPRS,EPAB,JPAB,DWPI,IBMT) - See Search History Printout.	06/21/2019	/ORR/
EAST (PGPUB,USPAT,FPRS,EPAB,JPAB,DWPI,IBMT) - See Search History Printout.	06/22/2019	/ORR/
EAST (PGPUB,USPAT,FPRS,EPAB,JPAB,DWPI,IBMT) - See Search History Printout.	10/17/2019	/ORR/
Checked refs. for 15/855,788	10/17/2019	/ORR/
Updated previous EAST search - See Search History Printout.	02/27/2020	/ORR/
EAST (PGPUB,USPAT,FPRS,EPAB,JPAB,DWPI,IBMT) - See Search History Printout.	02/27/2020	/ORR/
EAST (PGPUB,USPAT,FPRS,EPAB,JPAB,DWPI,IBMT) - See Search History Printout.	02/28/2020	/ORR/
Updated previous EAST search - See Search History Printout.	07/23/2020	/ORR/
Updated previous EAST search - See Search History Printout.	09/01/2020	/ORR/

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
PGPUB - text search	See EAST printout.	09/01/2020	/ORR/

/Omar R Rojas/ Primary Examiner, Art Unit 2883	

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Senko Advanced Components v. US Connec Ltd.
IPR2024-00805

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
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		20080037934-$ or US-20080032536-$ or US-20070116412-$ or US-20050226567-$ or US-20050164536-$ or US-20050163429-$ or US-20050095899-$ or US-20050018973-$ or US-20040228582-$ or US-20030031448-$ or US-20030031437-$ or US-20030012520-$ or US-20020167793-$).did. or (US-10571641-$ or US-10539745-$ or US-10527803-$ or US-10514518-$ or US-10429592-$ or US-10401574-$ or US-10302874-$ or US-10234635-$ or US-10133009-$ or US-10120140-$ or US-10120138-$ or US-10101570-$ or US-10094768-$ or US-9971103-$ or US-9678294-$ or US-9658405-$ or US-9645323-$ or US-9606300-$ or US-9581767-$ or US-9557508-$ or US-9557491-$ or US-9551835-$ or US-9482840-$ or US-9482823-$ or US-9448368-$ or US-9366829-$).did. or (US-9335488-$ or US-9291785-$ or US-9274300-$ or US-9110249-$ or US-9103990-$ or US-9057845-$ or US-9052475-$ or US-9033588-$ or US-9022666-$ or US-8985862-$ or US-8979388-$ or US-8845206-$ or US-8821036-$ or US-8801297-$ or US-8573854-$ or US-8419291-$ or US-8406588-$ or US-8202009-$ or US-8157455-$ or US-8104973-$ or US-8009959-$ or US-7980769-$ or US-7887243-$ or US-7758255-$ or US-7744285-$ or US-7717625-$ or US-7374347-$).did. or (US-7336884-$ or US-7261471-$ or US-7234876-$ or US-7111990-$ or US-7090407-$ or US-7073953-$ or US-6994478-$ or US-6945702-$ or US-6920255-$ or US-6872006-$ or US-6866424-$ or US-6832858-$ or US-6805493-$ or US-6789950-$ or US-6769814-$ or US-6762941-$ or US-6761488-$ or US-6572276-$ or US-6554486-$ or US-6513989-$ or US-6459843-$ or US-6435728-$ or US-6434316-$ or US-6434315-$ or US-6398422-$ or US-6364539-$ or US-6357928-$).did. or (US-6351590-$ or US-6264374-$ or US-6259856-$ or US-6257917-$ or US-6256448-$ or US-				

		6203208-$ or US-6149313-$ or US-6146023-$ or US-6139194-$ or US-5963698-$ or US-5600747-$ or US-5511138-$ or US-5428702-$ or US-5335301-$ or US-5265181-$ or US-5216732-$ or US-5183408-$ or US-5166995-$ or US-4986769-$ or US-4950048-$ or US-4904199-$ or US-4711511-$ or US-4657338-$ or US-4580868-$ or US-4478485-$ or US-4448467-$ or US-4376565-$).did. or (US-4186997-$).did. or (WO-2019012006-$ or CA-2864886-$ or WO-2020047283-$ or WO-2017147401-$ or WO-2018183496-$ or GB-201311768-$ or GB-201906387-$ or CN-110618492-$ or WO-2018140873-$ or AU-2015318357-$ or WO-2019222189-$ or WO-2016077167-$ or CN-105425341-$ or WO-2012106510-$ or WO-2019200066-$ or WO-2016086881-$ or WO-2019125963-$ or WO-2016053673-$ or FR-3021415-$ or WO-2019089220-$ or WO-2019060293-$ or WO-2017139430-$ or EP-3330758-$ or WO-2019036297-$ or WO-2018169759-$ or WO-2016049208-$).did. or (CA-2869770-$ or WO-2018045232-$ or WO-2015029585-$ or CN-105283786-$ or WO-2017123460-$ or JP-5805344-$ or CN-205992071-$ or WO-2016068966-$ or WO-2015191024-$ or WO-2011019581-$ or EP-2818903-$ or WO-2014116785-$ or WO-2013049082-$ or CA-2546593-$ or WO-2008045560-$ or WO-2011130445-$ or CA-2304082-$ or WO-2010103465-$ or EP-2251724-$ or AU-2002243312-$ or WO-9909442-$ or CN-1231430-$ or CA-2537354-$ or EP-1221630-$ or WO-0008503-$ or CA-2276631-$ or EP-1229366-$).did. or (EP-1879060-$ or CA-2594549-$ or CN-1258011-$ or WO-2005022228-$ or WO-2004008214-$ or WO-2004107001-$ or EP-1334394-$ or WO-2006007120-$ or CA-2276627-$ or EP-1415186-$ or WO-2005047946-$ or EP-1257012-$ or EP-1299758-$ or				

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		or WO-0182374-$ or EP-1150149-$ or CA-2339502-$ or WO-0155762-$ or EP-1116974-$ or WO-0137010-$ or WO-0075701-$ or WO-0070381-$ or EP-1054278-$ or EP-1039322-$ or JP-2000199833-$ or EP-1016886-$ or EP-1014126-$ or EP-997753-$ or WO-0008503-$ or EP-969299-$ or EP-969298-$ or WO-9964917-$ or EP-961142-$ or WO-9957786-$).did. or (EP-949522-$ or EP-927899-$ or EP-927898-$ or WO-9931539-$ or US-5915058-$ or WO-9928773-$ or US-5909526-$ or EP-916974-$ or WO-9909442-$ or US-5867621-$ or WO-9859271-$ or US-5778122-$ or EP-821253-$ or US-5666456-$ or JP-09145959-$ or GB-2306696-$ or US-5555332-$ or EP-712015-$ or US-5519799-$ or WO-9323777-$ or EP-514722-$ or US-5134673-$ or EP-323920-$ or EP-277390-$ or GB-2176629-$ or GB-2151040-$ or GB-2058392-$).did. or (EP-8329-$).did.				
S788	736	(US-20180321449-$ or US-20190004252-$ or US-20170059785-$ or US-20190137700-$ or US-20130158512-$ or US-20180364422-$ or US-20150378113-$ or US-20200012052-$ or US-20100054668-$ or US-20060093274-$ or US-20140029900-$ or US-20190004251-$ or US-20190258010-$ or US-20140153878-$ or US-20180128988-$ or US-20190170931-$ or US-20140153879-$ or US-20190137697-$ or US-20190137695-$ or US-20160349458-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20170176691-$ or US-20100322563-$).did. or (US-20190033531-$ or US-20170261696-$ or US-20180364436-$ or US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180217336-$ or US-20110058774-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180120517-$ or US-20170363818-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/08/31 19:11

		20160274314-$ or US-20170205586-$ or US-20140169727-$ or US-20160223774-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170176692-$ or US-20120093462-$ or US-20170068064-$ or US-20170063464-$ or US-20170023746-$).did. or (US-20110299266-$ or US-20140016901-$ or US-20160327756-$ or US-20160306122-$ or US-20150260924-$ or US-20160282565-$ or US-20160202428-$ or US-20140205257-$ or US-20160091674-$ or US-20150277059-$ or US-20150260923-$ or US-20150198774-$ or US-20140037253-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20120155803-$ or US-20140168987-$ or US-20140161392-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-$ or US-20110064361-$).did. or (US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20110229092-$ or US-20110229083-$ or US-20080226235-$ or US-20080273840-$ or US-20100178014-$ or US-20100178010-$ or US-20040157499-$ or US-20080013889-$ or US-20100027942-$ or US-20090135429-$ or US-20020126960-$ or US-20060127028-$ or US-20080317415-$ or US-20080090433-$ or US-20060257075-$ or US-20080124033-$ or US-20060083466-$ or US-20070292084-$ or US-20060018603-$ or US-20060204178-$ or US-20070031103-$ or US-20060275007-$ or US-20060257076-$).did. or (US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060063436-$ or US-20060045428-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20020176960-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-				

		$ or US-20020142634-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$ or US-20190219775-$ or US-20200200977-$ or US-20200183092-$).did. or (US-20200150374-$ or US-20200124805-$ or US-20200081193-$ or US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-$).did. or (US-10324264-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$ or US-7857523-$ or US-7572063-$ or US-5971625-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6179476-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$).did. or (US-6364537-$ or US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-5717533-$ or US-5212752-$ or US-6179477-$ or US-6130977-$ or US-5546281-$ or US-6062739-$ or US-5970598-$ or US-5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$).did. or (US-5577146-$ or US-5436994-$ or US-5121454-$ or US-5400428-$ or US-5396572-$ or US-5265182-$ or US-5329604-$ or US-5261019-$ or US-5289554-$ or US-5276755-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or				

		US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$ or US-5067783-$).did. or (US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$ or US-4728171-$).did. or (US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$ or US-10670824-$ or US-10444442-$).did. or (CA-3068131-$ or EP-3180644-$ or WO-2016140710-$ or WO-2018009426-$ or WO-2015070382-$ or EP-3123221-$ or WO-2019246241-$ or EP-3579031-$ or GB-201905648-$ or CN-105683795-$ or WO-2018044728-$ or WO-2019086961-$ or EP-2852856-$ or WO-2017182535-$ or EP-3330757-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$ or CN-107636504-$ or CN-206479676-$ or WO-2016174980-$ or AU-2004274992-$ or CA-2866107-$ or WO-2012015713-$ or FR-2997767-$ or CN-102520489-$).did. or (CN-102445735-$ or CN-103676018-$ or AU-2006295165-$ or WO-2015120031-$ or GB-				

		9525323-$ or GB-201220748-$ or CN-102385113-$ or WO-2014054357-$ or CA-2593676-$ or DE-102010021179-$ or GB-201004720-$ or EP-1762871-$ or DE-112006003952-$ or CA-2441872-$ or DE-60026115-$ or WO-2008033262-$ or KR-20040020797-$ or EP-1783524-$ or KR-100452879-$ or WO-9723794-$ or DE-19601949-$ or CA-2302068-$ or DE-20111078-$ or DE-10031931-$ or DE-19834723-$ or MX-9201992-$ or DE-19525739-$).did. or (DE-29614436-$ or DE-3914978-$ or EP-0339876-$ or EP-0546936-$ or CH-687105-$ or GB-9408857-$ or EP-0324272-$ or FR-2707402-$ or IT-MI913184-$ or WO-9415232-$ or EP-0183820-$ or GB-9025881-$ or EP-0253426-$ or DE-4203966-$ or GB-9103982-$ or CH-676513-$ or DE-9012174-$ or DE-9010357-$ or EP-0154781-$ or DE-8911081-$ or DE-8911080-$ or EP-0292024-$ or KR-870005264-$ or EP-0166636-$ or DE-8901052-$ or DE-8900623-$ or DE-8812341-$).did. or (DE-3737842-$ or FR-2528984-$ or DE-3701421-$ or EP-0249406-$ or EP-0098190-$ or EP-0098205-$ or EP-0153249-$ or DE-2932986-$ or GB-2086602-$ or DE-2832839-$ or EP-0045271-$ or FR-2502798-$ or AU-3682878-$ or WO-8002213-$ or GB-1450760-$ or GB-1526682-$ or FR-2316611-$ or FR-2268370-$ or WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$).did. or (JP-2005258017-$ or JP-2000241670-$ or JP-03059503-$ or JP-61028909-$ or JP-61129605-$ or JP-59036207-$ or JP-58190910-$ or JP-59038707-$ or JP-56062212-$ or JP-2002098860-$ or JP-05215939-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-				

		55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$ or JP-2019184942-$).did. or (US-20190369336-$ or EP-3579031-$ or CN-110376684-$ or US-20190162914-$ or US-20190162917-$ or US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or CN-108983368-$ or US-20180372962-$ or US-20180364422-$ or KR-2018131725-$).did. or (US-20180341069-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or CN-207965228-$ or CN-207965231-$ or US-20180292612-$ or CN-108508541-$ or CN-108490551-$ or CN-108279462-$ or JP-6363784-$ or US-20180203196-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or WO-2018057615-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018006987-$ or WO-2018008399-$ or CN-107479141-$).did. or (EP-3249434-$ or WO-2017182535-$ or KR-2017103050-$ or US-20170264045-$ or US-20180231722-$ or US-20170261698-$ or US-20170261696-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017095928-$ or WO-2017106514-$ or US-20170176691-$ or US-20170176692-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-				

		20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$).did. or (US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or CN-104914515-$ or WO-2015142551-$ or US-20150260923-$ or WO-2015126470-$ or WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$).did. or (US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$ or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$ or WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$).did. or (US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$ or US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or				

		WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$).did. or (EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9637793-$ or DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$).did. or (EP-440447-$ or EP-420490-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or EP-335531-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$ or EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$).did. or (EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$ or GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$ or US-20200209492-$ or US-20200200977-$ or US-20200200979-$ or US-20200183093-$ or US-20200166716-$ or US-20200150374-$ or US-20200142141-$ or US-20200124805-$ or US-20200116949-$ or US-20200116952-$).did. or (US-20200116953-$ or US-20200116954-$ or US-20200110224-$ or US-20200103598-$ or US-20200103599-$ or US-20200096709-$ or US-20200096710-$ or US-20200096708-$ or US-20200081198-$ or US-20200057205-$ or US-20200049899-				

		$ or US-20200033539-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$).did. or (EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190219775-$ or US-20190204513-$ or US-20200081193-$ or US-20200012053-$ or US-20200003961-$ or US-20190227240-$).did.				
S789	2,183	(US-20200225425-$ or US-20200225424-$ or US-20200225422-$ or US-20190056557-$ or US-20190179086-$ or US-20190064447-$ or US-20180217337-$ or US-20200183093-$ or US-20160018593-$ or US-20200166716-$ or US-20110222819-$ or US-20170285282-$ or US-20180246282-$ or US-20160259135-$ or US-20180143384-$ or US-20200142133-$ or US-20190041584-$ or US-20200132934-$ or US-20200116957-$ or US-20200110224-$ or US-20200096708-$ or US-20200088954-$ or US-20160274311-$ or US-20200088949-$ or US-20200073059-$ or US-20200018909-$).did. or (US-20160124160-$ or US-20190146160-$ or US-20140064665-$ or US-20170139158-$ or US-20190377139-$ or US-20160209599-$ or US-20160025942-$ or US-20140072265-$ or US-20180329158-$ or US-20180011254-$ or US-20080175541-$ or US-20190018201-$ or US-20180267255-$ or US-20180081127-$ or US-20170373756-$ or US-20160216454-$ or US-20170219779-$ or US-20090148101-$ or US-20180252872-$ or US-20190187392-$ or US-20190179085-$ or US-20130216186-$ or US-20190170957-$ or US-20180156985-$ or US-20190154924-$ or US-20160327757-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/08/31 19:11

		$ or US-20190113691-$).did. or (US-20160161680-$ or US-20190101709-$ or US-20190086617-$ or US-20190033533-$ or US-20190025523-$ or US-20190025522-$ or US-20190004261-$ or US-20180364421-$ or US-20180348443-$ or US-20180341072-$ or US-20160018604-$ or US-20180329155-$ or US-20180329153-$ or US-20180292618-$ or US-20180292612-$ or US-20160139346-$ or US-20160349464-$ or US-20180239091-$ or US-20180231730-$ or US-20160209610-$ or US-20180231722-$ or US-20170219789-$ or US-20160131857-$ or US-20180217338-$ or US-20180210155-$ or US-20180210154-$ or US-20180210153-$).did. or (US-20180196204-$ or US-20180196202-$ or US-20180188460-$ or US-20180180819-$ or US-20180172942-$ or US-20180164510-$ or US-20180157002-$ or US-20180156988-$ or US-20180149813-$ or US-20180143381-$ or US-20180136410-$ or US-20180128991-$ or US-20150036980-$ or US-20180113268-$ or US-20180113259-$ or US-20180106975-$ or US-20180106973-$ or US-20180095232-$ or US-20180088289-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180081139-$ or US-20180081128-$ or US-20180081125-$ or US-20180081122-$).did. or (US-20180078781-$ or US-20180077472-$ or US-20180074277-$ or US-20180059338-$ or US-20180052288-$ or US-20150362681-$ or US-20180031782-$ or US-20180031775-$ or US-20180031774-$ or US-20180024302-$ or US-20180024301-$ or US-20180024300-$ or US-20180024294-$ or US-20180017740-$ or US-20180013228-$ or US-20180013227-$ or US-20180011261-$ or US-20180011258-$ or US-20180003910-$ or US-20180003903-$ or US-20170371118-$ or US-20170371116-$ or US-20170371107-$ or US-20170363829-$ or US-				

		20170363827-$ or US-20170363815-$ or US-20170363810-$).did. or (US-20170363509-$ or US-20170359091-$ or US-20170357060-$ or US-20170357059-$ or US-20170351038-$ or US-20170351037-$ or US-20170343760-$ or US-20170343742-$ or US-20170343741-$ or US-20170341972-$ or US-20170336577-$ or US-20170336571-$ or US-20170331234-$ or US-20170329090-$ or US-20170315308-$ or US-20170315307-$ or US-20170315305-$ or US-20170315304-$ or US-20170315303-$ or US-20170307832-$ or US-20170307831-$ or US-20170307829-$ or US-20170303772-$ or US-20170299821-$ or US-20170299818-$ or US-20170299817-$ or US-20170299816-$).did. or (US-20170293091-$ or US-20170293089-$ or US-20170293088-$ or US-20170293087-$ or US-20140133808-$ or US-20170285272-$ or US-20170276887-$ or US-20170276886-$ or US-20170276883-$ or US-20170276881-$ or US-20170269312-$ or US-20170269309-$ or US-20170261699-$ or US-20170261698-$ or US-20170254967-$ or US-20170254966-$ or US-20170254962-$ or US-20170254961-$ or US-20170254960-$ or US-20170248762-$ or US-20170242200-$ or US-20170242199-$ or US-20170242198-$ or US-20170242196-$ or US-20170235077-$ or US-20170235060-$ or US-20170227727-$).did. or (US-20170227720-$ or US-20170227718-$ or US-20170222347-$ or US-20170212310-$ or US-20170212309-$ or US-20170205591-$ or US-20170205588-$ or US-20170205587-$ or US-20170199338-$ or US-20170199336-$ or US-20170192182-$ or US-20170184800-$ or US-20170184798-$ or US-20170184790-$ or US-20170176252-$ or US-20130266268-$ or US-20170168244-$ or US-20170163573-$ or US-20170162978-$ or US-20170160500-$ or US-20170160496-$ or US-20170160494-$ or US-20170160486-				

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		$ or US-20050271328-$ or US-20050260880-$ or US-20050238292-$ or US-20050238289-$ or US-20050232552-$ or US-20050226586-$ or US-20050220423-$ or US-20050220420-$ or US-20050215119-$ or US-20050207708-$ or US-20050196104-$ or US-20050185894-$ or US-20050157985-$ or US-20050135753-$ or US-20050135752-$ or US-20050123246-$).did. or (US-20050118880-$ or US-20050112939-$ or US-20050111796-$ or US-20050111795-$ or US-20050094948-$ or US-20050094943-$ or US-20050089278-$ or US-20050074211-$ or US-20050069263-$ or US-20050053342-$ or US-20050041928-$ or US-20050036744-$ or US-20050036740-$ or US-20050013547-$ or US-20050008300-$ or US-20040266257-$ or US-20040264908-$ or US-20040264876-$ or US-20040247257-$ or US-20040247255-$ or US-20040240793-$ or US-20040228589-$ or US-20040223701-$ or US-20040223699-$ or US-20040208459-$ or US-20040202431-$ or US-20020176671-$).did. or (US-20040197053-$ or US-20040184740-$ or US-20040182971-$ or US-20040179787-$ or US-20040171283-$ or US-20040165830-$ or US-20040161204-$ or US-20040156592-$ or US-20040151464-$ or US-20040151438-$ or US-20040141693-$ or US-20040141692-$ or US-20040136656-$ or US-20040131317-$ or US-20040131315-$ or US-20040126118-$ or US-20040120652-$ or US-20040105628-$ or US-20040105325-$ or US-20040105278-$ or US-20040101253-$ or US-20040101250-$ or US-20040091228-$ or US-20040081418-$ or US-20040076377-$ or US-20040074852-$ or US-20040072454-$).did. or (US-20040071438-$ or US-20040071407-$ or US-20040062498-$ or US-20040062488-$ or US-20040062486-$ or US-20040054761-$ or US-20040052472-$ or US-20040052471-$ or US-20040042710-$ or US-				

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		$ or US-20020166226-$ or US-20020164899-$ or US-20020159745-$ or US-20020159714-$ or US-20020159712-$ or US-20020159710-$ or US-20020150353-$ or US-20020150346-$ or US-20020150345-$ or US-20020150344-$ or US-20020150343-$ or US-20020150342-$ or US-20020146213-$ or US-20020131720-$ or US-20020126961-$ or US-20020122652-$ or US-20020118926-$ or US-20020114589-$ or US-20020114582-$).did. or (US-20020114581-$ or US-20020106167-$ or US-20020106162-$ or US-20020094727-$ or US-20020090177-$ or US-20020081076-$ or US-20020064349-$ or US-20020061171-$ or US-20020031313-$ or US-20020031310-$ or US-20020031309-$ or US-20020028055-$ or US-20020025125-$ or US-20020025121-$ or US-20020025099-$ or US-20020012503-$ or US-20020012502-$ or US-20020012501-$ or US-20020012238-$ or US-20020006253-$ or US-20020003932-$ or US-20010048790-$ or US-20010043776-$ or US-20010041030-$ or US-20010038737-$ or US-20010033730-$ or US-20010016102-$).did. or (US-20010010741-$ or US-20190204513-$ or US-20200064561-$ or US-20200057208-$ or US-20200041730-$ or US-20190235182-$ or US-20190391350-$ or US-20190384017-$ or US-20190353852-$ or US-20190346631-$ or US-20190317281-$ or US-20190310432-$ or US-20190278039-$ or US-20190278025-$ or US-20190271816-$ or US-20190250340-$ or US-20190243083-$ or US-20190235178-$ or US-20190227244-$ or US-20190219772-$).did. or (US-10718914-$ or US-10718911-$ or US-10718909-$ or US-10705306-$ or US-10295760-$ or US-10261275-$ or US-10156683-$ or US-10146014-$ or US-10107967-$ or US-10067302-$ or US-10067300-$ or US-10018787-$ or US-10007069-$ or US-9989710-$ or US-9948017-$ or US-9946038-$				

		or US-9946037-$ or US-9946036-$ or US-9939600-$ or US-9939590-$ or US-9939589-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9927582-$ or US-9915793-$).did. or (US-9910229-$ or US-9910228-$ or US-9910226-$ or US-9904021-$ or US-9904020-$ or US-9904019-$ or US-9897767-$ or US-9893813-$ or US-9891392-$ or US-9891390-$ or US-9891387-$ or US-9891385-$ or US-9885841-$ or US-9880365-$ or US-9880357-$ or US-9876309-$ or US-9874702-$ or US-9869826-$ or US-9869824-$ or US-9864151-$ or US-9857545-$ or US-9857537-$ or US-9851512-$ or US-9846283-$ or US-9841566-$ or US-9835808-$ or US-9835807-$).did. or (US-9829650-$ or US-9829643-$ or US-9827438-$ or US-9823428-$ or US-9817195-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9798096-$ or US-9798090-$ or US-9797806-$ or US-9784928-$ or US-9778425-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9759874-$ or US-9759869-$ or US-9746625-$ or US-9746368-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9735523-$).did. or (US-9733436-$ or US-9733434-$ or US-9733123-$ or US-9726830-$ or US-9726829-$ or US-9722367-$ or US-9720184-$ or US-9709753-$ or US-9703062-$ or US-9696497-$ or US-9696477-$ or US-9684134-$ or US-9678286-$ or US-9678283-$ or US-9678282-$ or US-9671570-$ or US-9671568-$ or US-9664864-$ or US-9658407-$ or US-9645335-$ or US-9645326-$ or US-9638871-$ or US-9638868-$ or US-9632267-$ or US-9625658-$ or US-9625657-$ or US-9625655-$).did. or (US-9606303-$ or US-9551831-$ or US-9482825-$ or US-9453972-$ or US-9448369-$ or US-9389368-$ or US-9377591-$ or US-9323007-$ or US-9316794-$ or US-9316791-$ or US-9291781-$ or US-9229177-$ or US-9229170-$ or US-				

		9207454-$ or US-9002168-$ or US-8953922-$ or US-8814443-$ or US-8757893-$ or US-8588571-$ or US-8517614-$ or US-8459879-$ or US-8388235-$ or US-8206040-$ or US-8070366-$ or US-7972066-$ or US-7738757-$ or US-7712970-$).did. or (US-7706657-$ or US-7630609-$ or US-7588373-$ or US-7585118-$ or US-7530845-$ or US-7412148-$ or US-7232261-$ or US-7229220-$ or US-7192198-$ or US-7052186-$ or US-7036996-$ or US-6944378-$ or US-6895146-$ or US-6856748-$ or US-6848834-$ or US-6840680-$ or US-6839583-$ or US-6830382-$ or US-6817777-$ or US-6793399-$ or US-6789953-$ or US-6786647-$ or US-6712521-$ or US-6702475-$ or US-6695485-$ or US-6688782-$ or US-6667803-$).did. or (US-6644866-$ or US-6634794-$ or US-6632023-$ or US-6623172-$ or US-6619859-$ or US-6619856-$ or US-6612750-$ or US-6601995-$ or US-6599032-$ or US-6595696-$ or US-6582132-$ or US-6572276-$ or US-6572273-$ or US-6561699-$ or US-6558044-$ or US-6554486-$ or US-6554482-$ or US-6543941-$ or US-6533469-$ or US-6533465-$ or US-6527450-$ or US-6526210-$ or US-6524015-$ or US-6510267-$ or US-6508593-$ or US-6501900-$ or US-6498882-$).did. or (US-6497518-$ or US-6497516-$ or US-6226429-$ or US-6491442-$ or US-6487343-$ or US-6485192-$ or US-6481900-$ or US-6481899-$ or US-6474876-$ or US-6471417-$ or US-6471412-$ or US-6467971-$ or US-6467970-$ or US-6466724-$ or US-6464406-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6457876-$ or US-6456768-$ or US-6450698-$ or US-6447172-$ or US-6445867-$ or US-6437894-$ or US-6435946-$ or US-6431762-$ or US-6425694-$).did. or (US-6425692-$ or US-6422761-$ or US-6422760-$ or US-6422759-$ or US-6419810-$ or US-6412987-$ or US-6412986-$ or US-6409394-$ or US-6409392-$ or US-6409391-$ or				

		US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6389212-$ or US-6386768-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6379052-$ or US-6377840-$ or US-6375363-$ or US-6305849-$ or US-6371659-$ or US-6371657-$ or US-6367986-$ or US-6367984-$ or US-6364536-$).did. or (US-6361218-$ or US-6357932-$ or US-6357931-$ or US-6354746-$ or US-6352372-$ or US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6343950-$ or US-6334715-$ or US-6331079-$ or US-6328481-$ or US-6318904-$ or US-6318903-$ or US-6318902-$ or US-6089759-$ or US-6309111-$ or US-6302592-$ or US-6301004-$ or US-6095695-$ or US-6293706-$ or US-6290527-$ or US-6283640-$ or US-6045270-$ or US-6273618-$ or US-6267513-$ or US-6264375-$).did. or (US-6264373-$ or US-6264372-$ or US-6259839-$ or US-6256446-$ or US-6250817-$ or US-6247851-$ or US-6247849-$ or US-6243526-$ or US-6243518-$ or US-6240235-$ or US-6240229-$ or US-6238249-$ or US-6234681-$ or US-6231244-$ or US-6227719-$ or US-6227718-$ or US-6224269-$ or US-6220763-$ or US-6220762-$ or US-6219479-$ or US-6217226-$ or US-6215944-$ or US-6210045-$ or US-6206577-$ or US-6200040-$ or US-6196729-$ or US-6195477-$).did. or (US-6193420-$ or US-6190616-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6179480-$ or US-6179475-$ or US-6173099-$ or US-6164835-$ or US-6164834-$ or US-6154597-$ or US-6149315-$ or US-6149313-$ or US-6142676-$ or US-6139346-$ or US-6132105-$ or US-6116789-$ or US-6116101-$ or US-6108482-$ or US-6104856-$ or US-6102581-$ or US-6095694-$ or US-6088502-$ or US-6081647-$ or US-6079881-$ or US-6076975-$ or US-6064791-$).did. or (US-6059461-$ or US-6053639-$ or US-6048103-$ or US-6048102-$ or US-6045269-$ or US-6041155-$ or US-6027252-$				

		or US-6024498-$ or US-6022149-$ or US-6017154-$ or US-6012852-$ or US-6007256-$ or US-6004043-$ or US-6004042-$ or US-5993071-$ or US-5987203-$ or US-5984533-$ or US-5980117-$ or US-5971626-$ or US-5969294-$ or US-5963689-$ or US-5960137-$ or US-5956444-$ or US-5953474-$ or US-5953473-$ or US-5949946-$ or US-5862289-$).did. or (US-5940561-$ or US-5940559-$ or US-5937121-$ or US-5930426-$ or US-5930425-$ or US-5923805-$ or US-5921796-$ or US-5920670-$ or US-5920669-$ or US-5915058-$ or US-5909526-$ or US-5909298-$ or US-5742720-$ or US-5737463-$ or US-5896477-$ or US-5892870-$ or US-5887100-$ or US-5887098-$ or US-5881191-$ or US-5870515-$ or US-5867894-$ or US-5867621-$ or US-5862282-$ or US-5845036-$ or US-5727097-$ or US-5838856-$ or US-5838855-$).did. or (US-5832158-$ or US-5825955-$ or US-5818993-$ or US-5815621-$ or US-5815618-$ or US-5809191-$ or US-5799122-$ or US-5796896-$ or US-5781680-$ or US-5778123-$ or US-5778122-$ or US-5774612-$ or US-5774611-$ or US-5768738-$ or US-5548677-$ or US-5764043-$ or US-5761359-$ or US-5751874-$ or US-5748818-$ or US-5737464-$ or US-5734770-$ or US-5732174-$ or US-5732173-$ or US-5727102-$ or US-5721799-$ or US-5701380-$ or US-5694507-$).did. or (US-5694506-$ or US-5692089-$ or US-5692080-$ or US-5687268-$ or US-5682449-$ or US-5680494-$ or US-5673346-$ or US-5671310-$ or US-5668904-$ or US-5666456-$ or US-5666449-$ or US-5664955-$ or US-5661833-$ or US-5581644-$ or US-5651084-$ or US-5647043-$ or US-5645449-$ or US-5642450-$ or US-5633969-$ or US-5620634-$ or US-5619610-$ or US-5386485-$ or US-5611017-$ or US-5611010-$ or US-5607323-$ or US-5603631-$ or US-5602951-$).did. or (US-5600749-$ or US-5600746-$ or US-5325454-$ or US-				

		5592323-$ or US-5588086-$ or US-5588079-$ or US-5579429-$ or US-5574817-$ or US-5574813-$ or US-5570445-$ or US-5563978-$ or US-5563974-$ or US-5563971-$ or US-5555332-$ or US-5550943-$ or US-5548674-$ or US-5542015-$ or US-5537501-$ or US-5530783-$ or US-5528711-$ or US-5521998-$ or US-5521997-$ or US-5519799-$ or US-5506922-$ or US-5499310-$ or US-5497444-$ or US-5485537-$).did. or (US-5483608-$ or US-5473717-$ or US-5452391-$ or US-5450519-$ or US-5446817-$ or US-5444806-$ or US-5420951-$ or US-5418875-$ or US-5339376-$ or US-5414786-$ or US-5408557-$ or US-5367595-$ or US-5384885-$ or US-5379360-$ or US-5372758-$ or US-5367594-$ or US-5366383-$ or US-5363460-$ or US-5359688-$ or US-5339377-$ or US-5335301-$ or US-5333225-$ or US-5333222-$ or US-5333221-$ or US-5329541-$ or US-5323475-$ or US-5317663-$).did. or (US-5315679-$ or US-5315678-$ or US-5305409-$ or US-5297227-$ or US-5293581-$ or US-5282259-$ or US-5280552-$ or US-5274729-$ or US-5267342-$ or US-5265181-$ or US-5259052-$ or US-5239606-$ or US-5233675-$ or US-5233674-$ or US-5231685-$ or US-5228104-$ or US-5222168-$ or US-5214730-$ or US-5210815-$ or US-5199093-$ or US-5179607-$ or US-5177808-$ or US-5166995-$ or US-5159654-$ or US-5157749-$ or US-5155795-$ or US-5134677-$).did. or (US-5134676-$ or US-5134673-$ or US-5133032-$ or US-5129024-$ or US-5127073-$ or US-5124506-$ or US-5119455-$ or US-5115484-$ or US-5109468-$ or US-5109453-$ or US-5101463-$ or US-5091991-$ or US-5091990-$ or US-5082346-$ or US-5082344-$ or US-5077815-$ or US-5076656-$ or US-5073042-$ or US-5064268-$ or US-5058983-$ or US-5052774-$ or US-5048916-$ or US-5042891-$ or US-5018823-$ or US-5016972-$ or US-5016970-$ or US-5015060-$).did. or				

		(US-5013124-$ or US-4998797-$ or US-4998796-$ or US-4995688-$ or US-4993803-$ or US-4991929-$ or US-4986762-$ or US-4986622-$ or US-4976510-$ or US-4973127-$ or US-4973126-$ or US-4964688-$ or US-4960317-$ or US-4955976-$ or US-4953929-$ or US-4944079-$ or US-4921325-$ or US-4915472-$ or US-4900118-$ or US-4898446-$ or US-4892380-$ or US-4886335-$ or US-4877303-$ or US-4856866-$ or US-4854664-$ or US-4852963-$ or US-4850671-$).did. or (US-4850536-$ or US-4848870-$ or US-4846544-$ or US-4844570-$ or US-4842361-$ or US-4834486-$ or US-4830456-$ or US-4824196-$ or US-4818058-$ or US-4813760-$ or US-4807957-$ or US-4805980-$ or US-4795231-$ or US-4793683-$ or US-4789216-$ or US-4787700-$ or US-4786135-$ or US-4784456-$ or US-4783137-$ or US-4781429-$ or US-4773725-$ or US-4767178-$ or US-4762389-$ or US-4762387-$ or US-4759600-$ or US-4759599-$ or US-4758719-$).did. or (US-4741590-$ or US-4740052-$ or US-4737009-$ or US-4722081-$ or US-4718744-$ or US-4717234-$ or US-4715674-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4699460-$ or US-4688887-$ or US-4687291-$ or US-4681398-$ or US-4674831-$ or US-4666241-$ or US-4648688-$ or US-4645296-$ or US-4615581-$ or US-4614402-$ or US-4579418-$ or US-4575183-$ or US-4548467-$ or US-4526438-$ or US-4515434-$ or US-4506946-$ or US-4497536-$).did. or (US-4487474-$ or US-4486072-$ or US-4484796-$ or US-4477146-$ or US-4466009-$ or US-4464817-$ or US-4461539-$ or US-4447121-$ or US-4445753-$ or US-4444461-$ or US-4422716-$ or US-4415232-$ or US-4387957-$ or US-4385801-$ or US-4371233-$ or US-4368948-$ or US-4354731-$ or US-4341439-$ or US-4330172-$ or US-4327964-$ or US-4320938-$ or US-4310218-$ or US-4295707-$ or US-4291943-$ or				

		US-4279469-$ or US-4268115-$ or US-4268114-$).did. or (US-4252407-$ or US-4240695-$ or US-4223976-$ or US-4218113-$ or US-4214812-$ or US-4201445-$ or US-4201444-$ or US-4186997-$ or US-4186996-$ or US-4168109-$ or US-4167304-$ or US-4160580-$ or US-4140365-$ or US-4101198-$ or US-4087158-$ or US-4080044-$ or US-3999837-$ or US-3933409-$ or US-10545295-$ or US-10502903-$ or US-10401575-$ or US-10353155-$).did. or (EP-3258301-$ or EP-3054333-$ or CA-2885821-$ or EP-2444827-$ or WO-2018004847-$ or JP-6173629-$ or WO-2015043158-$ or CN-206584076-$ or WO-2016161341-$ or DE-202016103178-$ or WO-2016082160-$ or EP-3021145-$ or JP-5905950-$ or CA-2689768-$ or CA-2928026-$ or CA-2762411-$ or CA-2859345-$ or DE-202013012295-$ or WO-2016004347-$ or WO-2015190211-$ or EP-2942653-$ or CN-204595258-$ or WO-2015116589-$ or WO-2015103783-$ or GB-201507758-$ or CA-2932688-$).did. or (WO-2015068103-$ or EP-2843452-$ or WO-2014143748-$ or JP-5433802-$ or CN-102870023-$ or WO-2012151175-$ or WO-2014049469-$ or WO-2014009463-$ or CA-2912155-$ or WO-2013126068-$ or WO-2013115791-$ or WO-2013115789-$ or CA-2662854-$ or WO-2011152874-$ or GB-201218194-$ or CN-102456976-$ or WO-2011139938-$ or WO-2011044724-$ or CN-101122658-$ or CN-101931134-$ or WO-2010068896-$ or WO-2010025180-$ or EP-2138880-$ or WO-2009110421-$ or CA-2503690-$ or WO-2008006402-$ or CN-1331421-$).did. or (EP-1168016-$ or EP-1172672-$ or EP-1530068-$ or CA-2321428-$ or AU-2003291687-$ or JP-3106420-$ or EP-1168018-$ or CA-2191600-$ or WO-03093883-$ or CA-2484569-$ or DE-10114144-$ or CN-1118443-$ or WO-03016975-$ or NL-1018440-$ or CA-2284331-$ or				

		EP-0690319-$ or CA-2030897-$ or WO-0155762-$ or CA-2418331-$ or DE-20118858-$ or EP-1124147-$ or EP-1172673-$ or WO-0137010-$ or CA-2198522-$ or WO-0161397-$ or EP-1039324-$ or EP-1039322-$).did. or (EP-1033595-$ or EP-1033594-$ or GB-0007281-$ or EP-0992819-$ or GB-9919699-$ or CA-2262351-$ or CA-2294930-$ or EP-0696748-$ or WO-9734176-$ or CA-2171494-$ or WO-9627811-$ or EP-0633485-$ or EP-0249237-$ or EP-0262847-$ or CA-2082276-$ or GB-9106183-$ or DE-9107960-$ or GB-9103604-$ or WO-9015350-$ or DE-8626183-$ or EP-0262631-$ or EP-0061243-$ or WO-8600147-$ or DE-3112078-$ or GB-2081468-$ or IT-8323399-$ or IT-8323399-$).did. or (GB-2057158-$ or GB-8306227-$ or DK-208682-$ or FR-2487528-$ or FR-2435053-$ or BE-871785-$ or CA-1097111-$ or IT-7925110-$ or FR-2363124-$ or BE-871785-$ or CA-1043604-$ or WO-2019190616-$ or CN-110068899-$).did. or (JP-09033756-$ or JP-04214510-$ or JP-11072659-$ or JP-04220604-$ or JP-56074211-$ or JP-2017138535-$ or JP-05313040-$ or JP-62111222-$ or JP-59140411-$ or JP-59075218-$ or JP-57044113-$ or JP-56066811-$ or JP-55101904-$ or JP-54034251-$).did. or (US-20190107679-$ or US-20180224615-$ or WO-2018125706-$ or US-20180156985-$ or US-20180128988-$ or US-20180120519-$ or US-20180106973-$ or US-20180081128-$ or US-20180052288-$ or US-20180011258-$ or US-20180003903-$ or US-20180364421-$ or US-20170371109-$ or CN-107450131-$ or US-20170336577-$ or US-20170343760-$ or US-9804340-$ or US-20170307830-$ or FR-3050286-$ or US-20170299820-$ or US-20170293088-$ or US-20170261699-$ or US-20170254967-$ or US-20170254966-$ or US-20170227720-$ or US-9726830-$).did. or (US-20170219779-$ or JP-6173629-$ or US-20170205587-$ or				

		US-9709753-$ or US-20170184790-$ or US-9678283-$ or US-20170153398-$ or US-20170139150-$ or US-20170139156-$ or US-20170102504-$ or US-20170115457-$ or WO-2017065999-$ or US-20170090127-$ or WO-2017038704-$ or US-20170059784-$ or US-20170031106-$ or US-20160377819-$ or US-20160349466-$ or US-20160341908-$ or US-20160341911-$ or WO-2016182556-$ or US-20160327757-$ or US-9482820-$ or WO-2016161341-$ or US-20160282566-$ or CN-105978629-$ or US-20160259135-$).did. or (US-20170329090-$ or EP-3054333-$ or US-9389368-$ or WO-2016105567-$ or US-9377591-$ or US-20160178852-$ or US-20160178859-$ or US-20160161680-$ or EP-3021145-$ or US-20160131854-$ or US-20160124158-$ or JP-5905950-$ or WO-2016053853-$ or WO-2016043922-$ or WO-2016033577-$ or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016024014-$ or JP-5860948-$ or CA-2859345-$ or US-20160025937-$ or US-20160004016-$ or US-20160004018-$ or US-20150378110-$ or WO-2015190211-$ or EP-2947485-$).did. or (US-20150331201-$ or CN-104950402-$ or DE-102015106225-$ or US-20160306125-$ or US-20150286012-$ or WO-2015144883-$ or US-20150241644-$ or US-20150226926-$ or US-20150226925-$ or WO-2015116589-$ or US-20150219864-$ or WO-2015103783-$ or CN-104570229-$ or CN-104516061-$ or US-20150177463-$ or US-20150162982-$ or WO-2015070382-$ or WO-2015068103-$ or WO-2015028433-$ or US-20150049989-$ or WO-2015009435-$ or US-20150023637-$ or EP-2818903-$ or US-20140363131-$ or WO-2014197701-$ or US-20140321808-$ or WO-2014165175-$).did. or (WO-2014143748-$ or US-20140219624-$ or EP-2759860-$ or WO-				

		2014113753-$ or US-20140205247-$ or US-20140199034-$ or US-20140153879-$ or US-20140147081-$ or ES-1110405-$ or WO-2014049469-$ or TW-474924-$ or US-20140064688-$ or JP-5433802-$ or EP-2700992-$ or WO-2014011898-$ or US-20140016901-$ or WO-2014011283-$ or WO-2013177234-$ or WO-2013155395-$ or US-20130259429-$ or US-20130230283-$ or WO-2013126068-$ or WO-2013122865-$ or WO-2013117598-$ or WO-2013115789-$ or WO-2013115791-$ or US-20130121645-$).did. or (CN-103091793-$ or WO-2013036843-$ or US-20130051749-$ or TW-201309089-$ or CN-102870023-$ or US-20120308183-$ or WO-2012151175-$ or US-20120263419-$ or US-20120251051-$ or US-20120251054-$ or TW-201233549-$ or US-20120099822-$ or EP-2444827-$ or US-20120082416-$ or US-20120057824-$ or KR-2012000895-$ or US-20120027355-$ or KR-2012000895-$ or WO-2011152874-$ or US-20110274437-$ or US-20110249942-$ or EP-2302431-$ or WO-2010137426-$ or EP-2206458-$ or WO-2010068896-$ or US-7712970-$ or WO-2010025180-$).did. or (US-20100040330-$ or WO-2009110421-$ or US-20090060423-$ or US-20090041411-$ or US-7435009-$ or US-20070098327-$ or US-20070077010-$ or US-20070058907-$ or EP-1752805-$ or US-20060193562-$ or US-20060165352-$ or US-20060153503-$ or WO-2006022840-$ or US-20050053342-$ or US-20040228589-$ or US-20040223699-$ or US-20040062498-$ or EP-1394584-$ or WO-03094297-$ or WO-03093883-$ or US-20030044125-$ or US-20030031437-$ or WO-02061481-$ or US-6422760-$ or WO-02056060-$ or DE-20118858-$ or EP-1172673-$).did. or (EP-1172672-$ or EP-1168020-$ or EP-1168018-$ or EP-				

		1168016-$ or US-20010041030-$ or WO-0181965-$ or EP-1124147-$ or EP-1107031-$ or WO-0140839-$ or EP-1092995-$ or EP-1091225-$ or EP-1041416-$ or EP-1041414-$ or EP-1020745-$ or EP-1016885-$ or EP-1010999-$ or GB-2341455-$ or WO-9947958-$ or US-5940561-$ or WO-9928774-$ or WO-9857208-$ or DE-19626036-$ or WO-9746900-$ or US-5692080-$ or EP-803750-$ or WO-9734176-$ or WO-9723794-$).did. or (EP-758099-$ or WO-9634176-$ or WO-9627811-$ or JP-08201656-$ or WO-9616080-$ or EP-697608-$ or EP-696748-$ or WO-9600917-$ or EP-663602-$ or EP-663601-$ or EP-660145-$ or EP-660144-$ or EP-505197-$ or EP-490698-$ or US-5101463-$ or EP-458608-$ or WO-9117540-$ or US-5064268-$ or GB-2241794-$ or EP-430107-$ or WO-9015350-$ or US-4953929-$ or EP-262631-$ or EP-249237-$ or WO-8600147-$ or US-4496213-$ or EP-125398-$).did. or (DE-3208797-$ or GB-2098354-$ or EP-61243-$ or GB-2081468-$ or GB-2057158-$ or DE-2932986-$ or BE-871785-$ or DE-2805949-$ or DE-2558445-$ or US-10502903-$).did.				
S790	1,871	(G02B6/3879).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/08/31 19:11
S791	6,057	(G02B6/3885).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/08/31 19:11
S792	1,321	S790 not (S786 S787 S788 S789)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/08/31 19:11
S793	696	(US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/08/31 19:11

		$ or US-20190219775-$ or US-20190170931-$ or US-20190137700-$ or US-20190137697-$ or US-20190137695-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20190033531-$ or US-20190004252-$ or US-20190004251-$ or US-20180364422-$ or US-20180364436-$).did. or (US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180321449-$ or US-20180217336-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180128988-$ or US-20170363818-$ or US-20170261696-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170205586-$ or US-20170176691-$ or US-20170176692-$ or US-20170068064-$ or US-20170059785-$ or US-20170063464-$ or US-20170023746-$ or US-20160349458-$ or US-20160327756-$ or US-20160306122-$ or US-20160282565-$).did. or (US-20160274314-$ or US-20160223774-$ or US-20160202428-$ or US-20160091674-$ or US-20150378113-$ or US-20150277059-$ or US-20150260924-$ or US-20150260923-$ or US-20150198774-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20140205257-$ or US-20140169727-$ or US-20140168987-$ or US-20140161392-$ or US-20140153878-$ or US-20140153879-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140037253-$ or US-20140029900-$ or US-20140022627-$ or US-20140016901-$ or US-20140003771-$).did. or (US-20130322825-$ or US-20130158512-$ or US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20120155803-$ or US-20120093462-$ or US-20110299266-$ or US-20110229092-$ or US-20110229083-				

		$ or US-20110064361-$ or US-20110058774-$ or US-20100322563-$ or US-20100178014-$ or US-20100178010-$ or US-20100054668-$ or US-20100027942-$ or US-20090135429-$ or US-20080317415-$ or US-20080273840-$ or US-20080226235-$ or US-20080124033-$ or US-20080090433-$ or US-20080013889-$ or US-20070292084-$ or US-20070031103-$).did. or (US-20060275007-$ or US-20060257075-$ or US-20060257076-$ or US-20060204178-$ or US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060127028-$ or US-20060093274-$ or US-20060083466-$ or US-20060063436-$ or US-20060045428-$ or US-20060018603-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20040157499-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020176960-$ or US-20020142634-$).did. or (US-20020126960-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$).did. or (US-10444442-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9977197-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$ or US-7857523-$ or US-7572063-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$ or US-6364537-$).did. or (US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-6179476-$ or US-6179477-$ or US-6130977-$ or US-6062739-$ or US-5971625-$ or US-5970598-$ or US-				

		5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717533-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$ or US-5577146-$).did. or (US-5546281-$ or US-5436994-$ or US-5400428-$ or US-5396572-$ or US-5329604-$ or US-5289554-$ or US-5276755-$ or US-5265182-$ or US-5261019-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212752-$ or US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5121454-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$).did. or (US-5067783-$ or US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$).did. or (US-4728171-$ or US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$).did. or (WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$ or WO-2019086961-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$				

		or EP-3330757-$ or WO-2018044728-$ or EP-3278153-$ or CN-107636504-$ or WO-2018009426-$ or WO-2017182535-$ or CN-206479676-$ or EP-3180644-$ or EP-3123221-$ or WO-2016174980-$ or WO-2016140710-$ or CN-105683795-$ or WO-2015120031-$ or WO-2015070382-$ or EP-2852856-$ or WO-2015009435-$ or FR-2997767-$ or WO-2014054357-$ or CN-103676018-$).did. or (CA-2866107-$ or GB-201220748-$ or CN-102520489-$ or CN-102445735-$ or CN-102385113-$ or WO-2012015713-$ or DE-102010021179-$ or GB-201004720-$ or DE-112006003952-$ or CA-2593676-$ or WO-2008033262-$ or EP-1783524-$ or AU-2006295165-$ or EP-1762871-$ or DE-60026115-$ or KR-100452879-$ or AU-2004274992-$ or CA-2441872-$ or KR-20040020797-$ or CN-1334472-$ or DE-20111078-$ or DE-10031931-$ or CA-2302068-$ or DE-19834723-$ or WO-9723794-$ or DE-29614436-$ or DE-19525739-$).did. or (CH-687105-$ or DE-19601949-$ or GB-9525323-$ or FR-2707402-$ or WO-9415232-$ or GB-9408857-$ or EP-0546936-$ or MX-9201992-$ or DE-4203966-$ or IT-MI913184-$ or GB-9103982-$ or CH-676513-$ or GB-9025881-$ or DE-3914978-$ or DE-9012174-$ or DE-9010357-$ or DE-8911081-$ or DE-8911080-$ or EP-0339876-$ or EP-0324272-$ or DE-8901052-$ or DE-8900623-$ or EP-0292024-$ or DE-8812341-$ or DE-3737842-$ or DE-3701421-$ or EP-0253426-$).did. or (EP-0249406-$ or KR-870005264-$ or EP-0183820-$ or EP-0166636-$ or EP-0154781-$ or EP-0153249-$ or EP-0098190-$ or EP-0098205-$ or FR-2528984-$ or FR-2502798-$ or GB-2086602-$ or EP-0045271-$ or WO-8002213-$ or DE-2932986-$ or DE-2832839-$ or AU-3682878-$ or GB-1526682-$ or FR-2316611-$ or GB-1450760-$ or FR-2268370-$).did. or (JP-				

		2019184942-$ or JP-2005258017-$ or JP-2000241670-$ or JP-05215939-$ or JP-03059503-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-61129605-$ or JP-61028909-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-59038707-$ or JP-59036207-$ or JP-58190910-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56062212-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$).did. or (US-20200033539-$ or US-20200012053-$ or US-20200003961-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$ or EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190227240-$ or US-20190219775-$ or US-20190204513-$ or US-20190162914-$ or US-20190162917-$).did. or (US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or US-20180372962-$ or US-20180364422-$ or CN-108983368-$ or KR-2018131725-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or US-20180292612-$ or CN-108490551-$).did. or (US-20180231722-$ or JP-6363784-$ or				

		US-20180203196-$ or CN-108279462-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018008399-$ or CN-107479141-$ or EP-3249434-$ or WO-2017182535-$ or US-20170264045-$ or US-20170261698-$ or US-20170261696-$ or KR-2017103050-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017106514-$).did. or (US-20170176691-$ or US-20170176692-$ or WO-2017095928-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$ or US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or WO-2015142551-$ or US-20150260923-$ or CN-104914515-$ or WO-2015126470-$).did. or (WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$ or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$).did. or (WO-				

		2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$ or US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$).did. or (US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$ or EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9723794-$ or WO-9637793-$).did. or (DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-420490-$ or EP-335531-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$ or EP-440447-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$).did. or (EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-				

		3344864-$ or EP-118804-$ or EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$).did. or (GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$).did.				
S794	1,321	S792 not S793	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/08/31 19:11
S795	5,306	(G02B6/3825).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/08/31 19:11
S796	2,725	S795 not (S786 S787 S788 S789 S794)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/08/31 19:11
S797	4,518	S791 not (S786 S787 S788 S789 S794 S796)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/08/31 19:11
S798	3,186	S791 not (S786 S787 S788 S789 S794 S796)	US-PGPUB; USPAT; EPO; JPO	OR	ON	2020/08/31 19:14
S799	55	(US-20140241689-$ or US-20200057205-$ or US-20200070211-$ or US-20190377139-$ or US-20190346644-$ or US-20190331862-$ or US-20190285806-$ or US-20190278028-$ or US-20190101703-$ or US-20180031783-$ or US-20160062050-$ or US-20160035201-$ or US-20150241650-$ or US-20150063758-$ or US-20140348481-$ or US-20140348467-$ or US-20140241688-$ or US-20140233893-$ or US-20140219609-$ or US-20130272671-$ or US-20130259429-$ or US-20130051733-$ or US-20130044978-$ or US-20120251051-$ or US-20110038592-$ or US-20100322580-$).did. or (US-20100199447-$ or US-20100111484-	US-PGPUB; USPAT; DERWENT	OR	ON	2020/09/01 11:59

		$ or US-20100054665-$ or US-20090274432-$ or US-20080273837-$ or US-20050163431-$ or US-20050111810-$ or US-20050111809-$ or US-20030190130-$ or US-20030108301-$).did. or (US-8858089-$ or US-6857900-$ or US-6705765-$ or US-6547585-$ or US-6485189-$ or US-6412986-$ or US-6146023-$ or US-6041155-$ or US-5870515-$ or US-5675682-$ or US-5600747-$).did. or (US-10459172-$ or US-20150063758-$ or US-20140348467-$ or US-20140348481-$ or US-20140241688-$ or US-20140241689-$ or WO-2013155395-$ or US-20130259429-$).did.				
S800	623	(US-20150260936-$ or US-20190324218-$ or US-20150219864-$ or US-20160170154-$ or US-20200150353-$ or US-20180267258-$ or US-20200132941-$ or US-20180335577-$ or US-20200116950-$ or US-20190181586-$ or US-20200088955-$ or US-20200081194-$ or US-20200057204-$ or US-20200057199-$ or US-20200049902-$ or US-20190129104-$ or US-20190377138-$ or US-20190369335-$ or US-20190353865-$ or US-20190346635-$ or US-20190346634-$ or US-20180217339-$ or US-20190331862-$ or US-20190302371-$ or US-20190190199-$ or US-20160195682-$).did. or (US-20190271815-$ or US-20190243084-$ or US-20090238522-$ or US-20190243075-$ or US-20190235174-$ or US-20180292617-$ or US-20190200103-$ or US-20190187383-$ or US-20170227719-$ or US-20190113693-$ or US-20190113692-$ or US-20190113689-$ or US-20190101706-$ or US-20190101705-$ or US-20190101704-$ or US-20190079252-$ or US-20190072729-$ or US-20190064452-$ or US-20190049678-$ or US-20190041587-$ or US-20190025526-$ or US-20170371109-$ or US-20180356600-$ or US-20180335571-$ or US-20180329154-$ or US-20180314018-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 11:59

		$ or US-20140321808-$).did. or (US-20170045702-$ or US-20180306984-$ or US-20180299624-$ or US-20180284357-$ or US-20180267256-$ or US-20130089293-$ or US-20180136416-$ or US-20180100982-$ or US-20180081129-$ or US-20180052287-$ or US-20170293090-$ or US-20170205590-$ or US-20160062050-$ or US-20160320572-$ or US-20160341905-$ or US-20160306125-$ or US-20150162982-$ or US-20160223757-$ or US-20150063815-$ or US-20140363131-$ or US-20140321810-$ or US-20140301701-$ or US-20140241671-$ or US-20120257865-$ or US-20080311781-$ or US-20110274437-$ or US-20120128302-$).did. or (US-20120099819-$ or US-20120057824-$ or US-20110091158-$ or US-20110059642-$ or US-20100310213-$ or US-20100226610-$ or US-20100104355-$ or US-20070077010-$ or US-20080248691-$ or US-20080175543-$ or US-20080131055-$ or US-20070292082-$ or US-20080037934-$ or US-20080032536-$ or US-20070116412-$ or US-20050226567-$ or US-20050164536-$ or US-20050163429-$ or US-20050095899-$ or US-20050018973-$ or US-20040228582-$ or US-20030031448-$ or US-20030031437-$ or US-20030012520-$ or US-20020167793-$).did. or (US-10571641-$ or US-10539745-$ or US-10527803-$ or US-10514518-$ or US-10429592-$ or US-10401574-$ or US-10302874-$ or US-10234635-$ or US-10133009-$ or US-10120140-$ or US-10120138-$ or US-10101570-$ or US-10094768-$ or US-9971103-$ or US-9678294-$ or US-9658405-$ or US-9645323-$ or US-9606300-$ or US-9581767-$ or US-9557508-$ or US-9557491-$ or US-9551835-$ or US-9482840-$ or US-9482823-$ or US-9448368-$ or US-9366829-$).did. or (US-9335488-$ or US-9291785-$ or US-9274300-$ or US-9110249-$ or US-9103990-$ or US-9057845-$ or US-			

		9052475-$ or US-9033588-$ or US-9022666-$ or US-8985862-$ or US-8979388-$ or US-8845206-$ or US-8821036-$ or US-8801297-$ or US-8573854-$ or US-8419291-$ or US-8406588-$ or US-8202009-$ or US-8157455-$ or US-8104973-$ or US-8009959-$ or US-7980769-$ or US-7887243-$ or US-7758255-$ or US-7744285-$ or US-7717625-$ or US-7374347-$).did. or (US-7336884-$ or US-7261471-$ or US-7234876-$ or US-7111990-$ or US-7090407-$ or US-7073953-$ or US-6994478-$ or US-6945702-$ or US-6920255-$ or US-6872006-$ or US-6866424-$ or US-6832858-$ or US-6805493-$ or US-6789950-$ or US-6769814-$ or US-6762941-$ or US-6761488-$ or US-6572276-$ or US-6554486-$ or US-6513989-$ or US-6459843-$ or US-6435728-$ or US-6434316-$ or US-6434315-$ or US-6398422-$ or US-6364539-$ or US-6357928-$).did. or (US-6351590-$ or US-6264374-$ or US-6259856-$ or US-6257917-$ or US-6256448-$ or US-6203208-$ or US-6149313-$ or US-6146023-$ or US-6139194-$ or US-5963698-$ or US-5600747-$ or US-5511138-$ or US-5428702-$ or US-5335301-$ or US-5265181-$ or US-5216732-$ or US-5183408-$ or US-5166995-$ or US-4986769-$ or US-4950048-$ or US-4904199-$ or US-4711511-$ or US-4657338-$ or US-4580868-$ or US-4478485-$ or US-4448467-$ or US-4376565-$).did. or (US-4186997-$).did. or (WO-2019012006-$ or CA-2864886-$ or WO-2020047283-$ or WO-2017147401-$ or WO-2018183496-$ or GB-201311768-$ or GB-201906387-$ or CN-110618492-$ or WO-2018140873-$ or AU-2015318357-$ or WO-2019222189-$ or WO-2016077167-$ or CN-105425341-$ or WO-2012106510-$ or WO-2019200066-$ or WO-2016086881-$ or WO-2019125963-$ or WO-2016053673-$ or FR-3021415-$ or WO-2019089220-$ or WO-2019060293-$ or WO-				

		2017139430-$ or EP-3330758-$ or WO-2019036297-$ or WO-2018169759-$ or WO-2016049208-$).did. or (CA-2869770-$ or WO-2018045232-$ or WO-2015029585-$ or CN-105283786-$ or WO-2017123460-$ or JP-5805344-$ or CN-205992071-$ or WO-2016068966-$ or WO-2015191024-$ or WO-2011019581-$ or EP-2818903-$ or WO-2014116785-$ or WO-2013049082-$ or CA-2546593-$ or WO-2008045560-$ or WO-2011130445-$ or CA-2304082-$ or WO-2010103465-$ or EP-2251724-$ or AU-2002243312-$ or WO-9909442-$ or CN-1231430-$ or CA-2537354-$ or EP-1221630-$ or WO-0008503-$ or CA-2276631-$ or EP-1229366-$).did. or (EP-1879060-$ or CA-2594549-$ or CN-1258011-$ or WO-2005022228-$ or WO-2004008214-$ or WO-2004107001-$ or EP-1334394-$ or WO-2006007120-$ or CA-2276627-$ or EP-1415186-$ or WO-2005047946-$ or EP-1257012-$ or EP-1299758-$ or CA-2283016-$ or WO-9746900-$ or WO-9857208-$ or CA-2339502-$ or CA-2327007-$ or CA-2136212-$ or CN-1231429-$ or EP-0927899-$ or EP-0927898-$ or WO-0075701-$ or AU-1587897-$ or CA-2288247-$ or EP-1273944-$ or CA-2068453-$).did. or (GB-9011424-$ or WO-0182374-$ or EP-0927895-$ or CA-2312241-$ or MX-9202155-$ or CA-2330965-$ or DE-19846731-$ or EP-1039323-$ or FR-2752951-$ or WO-9964917-$ or GB-9622511-$ or EP-0961142-$ or CA-2237481-$ or WO-9931539-$ or EP-0821253-$ or CA-2222237-$ or EP-0323920-$ or EP-0490698-$ or CA-1299407-$ or AU-1019788-$ or WO-9308493-$ or FR-2648240-$ or DE-9108955-$ or GB-8614272-$ or CA-1239820-$ or DE-3633340-$ or IT-7925047-$).did. or (GB-8332694-$ or EP-0109870-$ or DE-2933790-$ or DE-3021001-$ or GB-2058392-$).did. or (JP-2016009081-$ or JP-2016122050-$ or JP-2016085422-$ or JP-10050400-$ or JP-				

		2002048946-$ or JP-08110439-$ or JP-09145959-$ or JP-10311934-$ or JP-09145957-$ or JP-07248434-$ or JP-01177508-$ or JP-59157605-$ or JP-56060409-$).did. or (US-20200174200-$ or US-20200166717-$ or US-20200142140-$ or US-20200124802-$ or US-20190384018-$ or US-20190339464-$ or US-20190339470-$ or US-20190324218-$ or US-20190302376-$ or US-20190285811-$ or US-20190243076-$ or US-20190235174-$ or CN-110031940-$ or US-20190219776-$ or US-20190212504-$ or US-20190200103-$ or US-20190190199-$ or US-20190179089-$ or US-20190179086-$ or US-20190179088-$ or US-20190181586-$ or US-20190154928-$ or US-20190129104-$ or US-20190101704-$ or US-20190101705-$ or WO-2019060293-$).did. or (US-20200088955-$ or US-10234635-$ or US-20190079252-$ or US-10222562-$ or KR-2019006212-$ or WO-2019012006-$ or US-20190025526-$ or US-20190011645-$ or US-20190064452-$ or US-20180356600-$ or KR-2018129442-$ or US-20180329154-$ or US-20180335571-$ or US-20180335577-$ or US-20180335581-$ or US-10107967-$ or US-20180314014-$ or US-20180306997-$ or US-10107972-$ or US-20180299624-$ or US-10101570-$ or US-20180292617-$ or WO-2018183496-$ or US-20180267255-$ or US-20180239093-$ or US-20180217338-$ or US-20180217339-$).did. or (US-20180210155-$ or US-10018787-$ or US-20180188455-$ or CN-108227089-$ or US-20180156988-$ or US-9989712-$ or US-20190113692-$ or US-20180136416-$ or WO-2018085767-$ or US-9933582-$ or US-20180077472-$ or WO-2018045232-$ or WO-2018045234-$ or US-20180011261-$ or US-20170357060-$ or EP-3258301-$ or US-9823428-$ or US-20170299831-$ or US-20170293089-$ or WO-2017172600-				

		$ or US-20170285277-$ or WO-2017160697-$ or WO-2017147401-$ or CN-106918869-$ or US-20170242199-$ or WO-2017136437-$ or US-20170227719-$).did. or (JP-2017134310-$ or US-20170212316-$ or US-20170205591-$ or US-20170192182-$ or WO-2017066139-$ or US-20170045702-$ or US-20170045695-$ or US-20170003456-$ or US-20160349464-$ or US-9482823-$ or US-9482825-$ or US-20160306124-$ or EP-3078999-$ or US-20160282562-$ or US-9448369-$ or WO-2016137934-$ or US-20160238789-$ or WO-2016123128-$ or US-20160223757-$ or US-20160223763-$ or US-20160195682-$ or WO-2016104132-$ or US-20160161681-$ or WO-2016086881-$ or WO-2016082160-$ or US-20160139345-$ or EP-3021144-$).did. or (EP-3021146-$ or WO-2016068966-$ or US-20160109676-$ or WO-2016053852-$ or WO-2016053673-$ or WO-2016049208-$ or US-20160091673-$ or US-20160085045-$ or US-20160077284-$ or WO-2016039383-$ or US-20150370017-$ or WO-2015191024-$ or US-20160370549-$ or US-20150355417-$ or JP-5805344-$ or US-20150309279-$ or WO-2015158564-$ or WO-2015150149-$ or US-20150253518-$ or AU-2014101479-$ or US-20150131946-$ or WO-2015047380-$ or WO-2015029585-$ or WO-2014186436-$ or US-20140314385-$ or US-20140294339-$ or US-20140241667-$).did. or (US-20140219615-$ or US-20140205241-$ or AU-2014100325-$ or CN-103645545-$ or US-20140072265-$ or US-20180100982-$ or US-20130302004-$ or WO-2013126429-$ or US-20130209041-$ or US-20130170796-$ or US-20130170797-$ or WO-2013077969-$ or US-20130089293-$ or WO-2013019622-$ or WO-2013019189-$ or US-20120263423-$ or WO-2012106510-$ or WO-2012106513-$ or WO-2012106518-$ or JP-				

		2012120095-$ or US-20120141070-$ or US-20110243504-$ or US-20110150396-$ or US-20110081798-$ or US-20110044590-$ or WO-2011019581-$ or KR-2011002571-$).did. or (US-20100322554-$ or US-20100310213-$ or WO-2010138446-$ or EP-2251724-$ or US-20100135618-$ or US-20100074616-$ or US-20090290838-$ or US-20090238522-$ or WO-2009023673-$ or EP-1990665-$ or US-20080253719-$ or WO-2008045560-$ or EP-1887395-$ or US-20070160327-$ or US-20050271328-$ or US-20050226567-$ or WO-2005022229-$ or WO-2005022228-$ or WO-2005022227-$ or US-20040223701-$ or US-20040105628-$ or US-20040062486-$ or WO-2004008214-$ or US-20040008494-$ or KR-2003071425-$ or US-20030044127-$ or KR-2003012941-$).did. or (US-20030031448-$ or US-20030031419-$ or EP-1257012-$ or KR-2002019797-$ or WO-0219002-$ or WO-0216989-$ or WO-0216530-$ or WO-0182374-$ or EP-1150149-$ or CA-2339502-$ or WO-0155762-$ or EP-1116974-$ or WO-0137010-$ or WO-0075701-$ or WO-0070381-$ or EP-1054278-$ or EP-1039322-$ or JP-2000199833-$ or EP-1016886-$ or EP-1014126-$ or EP-997753-$ or WO-0008503-$ or EP-969299-$ or EP-969298-$ or WO-9964917-$ or EP-961142-$ or WO-9957786-$).did. or (EP-949522-$ or EP-927899-$ or EP-927898-$ or WO-9931539-$ or US-5915058-$ or WO-9928773-$ or US-5909526-$ or EP-916974-$ or WO-9909442-$ or US-5867621-$ or WO-9859271-$ or US-5778122-$ or EP-821253-$ or US-5666456-$ or JP-09145959-$ or GB-2306696-$ or US-5555332-$ or EP-712015-$ or US-5519799-$ or WO-9323777-$ or EP-514722-$ or US-5134673-$ or EP-323920-$ or EP-277390-$ or GB-2176629-$ or GB-2151040-$ or GB-2058392-$).did. or (EP-8329-$).did.				

S801	736	(US-20180321449-$ or US-20190004252-$ or US-20170059785-$ or US-20190137700-$ or US-20130158512-$ or US-20180364422-$ or US-20150378113-$ or US-20200012052-$ or US-20100054668-$ or US-20060093274-$ or US-20140029900-$ or US-20190004251-$ or US-20190258010-$ or US-20140153878-$ or US-20180128988-$ or US-20190170931-$ or US-20140153879-$ or US-20190137697-$ or US-20190137695-$ or US-20160349458-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20170176691-$ or US-20100322563-$).did. or (US-20190033531-$ or US-20170261696-$ or US-20180364436-$ or US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180217336-$ or US-20110058774-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180120517-$ or US-20170363818-$ or US-20160274314-$ or US-20170205586-$ or US-20140169727-$ or US-20160223774-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170176692-$ or US-20120093462-$ or US-20170068064-$ or US-20170063464-$ or US-20170023746-$).did. or (US-20110299266-$ or US-20140016901-$ or US-20160327756-$ or US-20160306122-$ or US-20150260924-$ or US-20160282565-$ or US-20160202428-$ or US-20140205257-$ or US-20160091674-$ or US-20150277059-$ or US-20150260923-$ or US-20150198774-$ or US-20140037253-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20120155803-$ or US-20140168987-$ or US-20140161392-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 11:59

		$ or US-20110064361-$).did. or (US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20110229092-$ or US-20110229083-$ or US-20080226235-$ or US-20080273840-$ or US-20100178014-$ or US-20100178010-$ or US-20040157499-$ or US-20080013889-$ or US-20100027942-$ or US-20090135429-$ or US-20020126960-$ or US-20060127028-$ or US-20080317415-$ or US-20080090433-$ or US-20060257075-$ or US-20080124033-$ or US-20060083466-$ or US-20070292084-$ or US-20060018603-$ or US-20060204178-$ or US-20070031103-$ or US-20060275007-$ or US-20060257076-$).did. or (US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060063436-$ or US-20060045428-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20020176960-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20020142634-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$ or US-20190219775-$ or US-20200200977-$ or US-20200183092-$).did. or (US-20200150374-$ or US-20200124805-$ or US-20200081193-$ or US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-$).did. or (US-10324264-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$				

		or US-7857523-$ or US-7572063-$ or US-5971625-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6179476-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$).did. or (US-6364537-$ or US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-5717533-$ or US-5212752-$ or US-6179477-$ or US-6130977-$ or US-5546281-$ or US-6062739-$ or US-5970598-$ or US-5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$).did. or (US-5577146-$ or US-5436994-$ or US-5121454-$ or US-5400428-$ or US-5396572-$ or US-5265182-$ or US-5329604-$ or US-5261019-$ or US-5289554-$ or US-5276755-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$ or US-5067783-$).did. or (US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$ or US-4728171-$).did. or (US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-				

		4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$ or US-10670824-$ or US-10444442-$).did. or (CA-3068131-$ or EP-3180644-$ or WO-2016140710-$ or WO-2018009426-$ or WO-2015070382-$ or EP-3123221-$ or WO-2019246241-$ or EP-3579031-$ or GB-201905648-$ or CN-105683795-$ or WO-2018044728-$ or WO-2019086961-$ or EP-2852856-$ or WO-2017182535-$ or EP-3330757-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$ or CN-107636504-$ or CN-206479676-$ or WO-2016174980-$ or AU-2004274992-$ or CA-2866107-$ or WO-2012015713-$ or FR-2997767-$ or CN-102520489-$).did. or (CN-102445735-$ or CN-103676018-$ or AU-2006295165-$ or WO-2015120031-$ or GB-9525323-$ or GB-201220748-$ or CN-102385113-$ or WO-2014054357-$ or CA-2593676-$ or DE-102010021179-$ or GB-201004720-$ or EP-1762871-$ or DE-112006003952-$ or CA-2441872-$ or DE-60026115-$ or WO-2008033262-$ or KR-20040020797-$ or EP-1783524-$ or KR-100452879-$ or WO-9723794-$ or DE-19601949-$ or CA-2302068-$ or DE-20111078-$ or DE-10031931-$ or DE-19834723-$ or MX-9201992-$ or DE-19525739-$).did. or (DE-29614436-$ or DE-3914978-$ or EP-0339876-$ or EP-0546936-$ or CH-687105-$ or GB-9408857-$ or EP-0324272-$ or FR-2707402-$ or IT-MI913184-$ or WO-9415232-$ or EP-0183820-$ or GB-9025881-$ or EP-0253426-$ or DE-4203966-$ or GB-9103982-$ or CH-676513-$ or DE-9012174-$ or DE-9010357-$ or EP-0154781-$ or DE-8911081-$ or DE-8911080-$ or EP-0292024-$ or KR-870005264-$ or				

		EP-0166636-$ or DE-8901052-$ or DE-8900623-$ or DE-8812341-$).did. or (DE-3737842-$ or FR-2528984-$ or DE-3701421-$ or EP-0249406-$ or EP-0098190-$ or EP-0098205-$ or EP-0153249-$ or DE-2932986-$ or GB-2086602-$ or DE-2832839-$ or EP-0045271-$ or FR-2502798-$ or AU-3682878-$ or WO-8002213-$ or GB-1450760-$ or GB-1526682-$ or FR-2316611-$ or FR-2268370-$ or WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$).did. or (JP-2005258017-$ or JP-2000241670-$ or JP-03059503-$ or JP-61028909-$ or JP-61129605-$ or JP-59036207-$ or JP-58190910-$ or JP-59038707-$ or JP-56062212-$ or JP-2002098860-$ or JP-05215939-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$ or JP-2019184942-$).did. or (US-20190369336-$ or EP-3579031-$ or CN-110376684-$ or US-20190162914-$ or US-20190162917-$ or US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or CN-108983368-$ or US-20180372962-$ or US-20180364422-$ or KR-2018131725-$).did. or (US-20180341069-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or CN-207965228-$ or CN-207965231-$ or US-				

		20180292612-$ or CN-108508541-$ or CN-108490551-$ or CN-108279462-$ or JP-6363784-$ or US-20180203196-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or WO-2018057615-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018006987-$ or WO-2018008399-$ or CN-107479141-$).did. or (EP-3249434-$ or WO-2017182535-$ or KR-2017103050-$ or US-20170264045-$ or US-20180231722-$ or US-20170261698-$ or US-20170261696-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017095928-$ or WO-2017106514-$ or US-20170176691-$ or US-20170176692-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$).did. or (US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or CN-104914515-$ or WO-2015142551-$ or US-20150260923-$ or WO-2015126470-$ or WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$).did. or (US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$				

		or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$ or WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$).did. or (US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$ or US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$).did. or (EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9637793-$ or DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$).did. or (EP-440447-$ or EP-420490-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or EP-335531-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$ or EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-				

		220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$).did. or (EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$ or GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$ or US-20200209492-$ or US-20200200977-$ or US-20200200979-$ or US-20200183093-$ or US-20200166716-$ or US-20200150374-$ or US-20200142141-$ or US-20200124805-$ or US-20200116949-$ or US-20200116952-$).did. or (US-20200116953-$ or US-20200116954-$ or US-20200110224-$ or US-20200103598-$ or US-20200103599-$ or US-20200096709-$ or US-20200096710-$ or US-20200096708-$ or US-20200081198-$ or US-20200057205-$ or US-20200049899-$ or US-20200033539-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$).did. or (EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190219775-$ or US-20190204513-$ or US-20200081193-$ or US-20200012053-$ or US-20200003961-$ or US-20190227240-$).did.				
S802	2,183	(US-20200225425-$ or US-20200225424-$ or US-20200225422-$ or US-20190056557-$ or US-20190179086-$ or US-20190064447-$ or US-20180217337-$ or US-20200183093-$ or US-20160018593-$ or US-20200166716-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 11:59

		20110222819-$ or US-20170285282-$ or US-20180246282-$ or US-20160259135-$ or US-20180143384-$ or US-20200142133-$ or US-20190041584-$ or US-20200132934-$ or US-20200116957-$ or US-20200110224-$ or US-20200096708-$ or US-20200088954-$ or US-20160274311-$ or US-20200088949-$ or US-20200073059-$ or US-20200018909-$).did. or (US-20160124160-$ or US-20190146160-$ or US-20140064665-$ or US-20170139158-$ or US-20190377139-$ or US-20160209599-$ or US-20160025942-$ or US-20140072265-$ or US-20180329158-$ or US-20180011254-$ or US-20080175541-$ or US-20190018201-$ or US-20180267255-$ or US-20180081127-$ or US-20170373756-$ or US-20160216454-$ or US-20170219779-$ or US-20090148101-$ or US-20180252872-$ or US-20190187392-$ or US-20190179085-$ or US-20130216186-$ or US-20190170957-$ or US-20180156985-$ or US-20190154924-$ or US-20160327757-$ or US-20190113691-$).did. or (US-20160161680-$ or US-20190101709-$ or US-20190086617-$ or US-20190033533-$ or US-20190025523-$ or US-20190025522-$ or US-20190004261-$ or US-20180364421-$ or US-20180348443-$ or US-20180341072-$ or US-20160018604-$ or US-20180329155-$ or US-20180329153-$ or US-20180292618-$ or US-20180292612-$ or US-20160139346-$ or US-20160349464-$ or US-20180239091-$ or US-20180231730-$ or US-20160209610-$ or US-20180231722-$ or US-20170219789-$ or US-20160131857-$ or US-20180217338-$ or US-20180210155-$ or US-20180210154-$ or US-20180210153-$).did. or (US-20180196204-$ or US-20180196202-$ or US-20180188460-$ or US-20180180819-$ or US-20180172942-$ or US-20180164510-$ or US-20180157002-$ or US-20180156988-$ or US-20180149813-$ or US-				

		20180143381-$ or US-20180136410-$ or US-20180128991-$ or US-20150036980-$ or US-20180113268-$ or US-20180113259-$ or US-20180106975-$ or US-20180106973-$ or US-20180095232-$ or US-20180088289-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180081139-$ or US-20180081128-$ or US-20180081125-$ or US-20180081122-$).did. or (US-20180078781-$ or US-20180077472-$ or US-20180074277-$ or US-20180059338-$ or US-20180052288-$ or US-20150362681-$ or US-20180031782-$ or US-20180031775-$ or US-20180031774-$ or US-20180024302-$ or US-20180024301-$ or US-20180024300-$ or US-20180024294-$ or US-20180017740-$ or US-20180013228-$ or US-20180013227-$ or US-20180011261-$ or US-20180011258-$ or US-20180003910-$ or US-20180003903-$ or US-20170371118-$ or US-20170371116-$ or US-20170371107-$ or US-20170363829-$ or US-20170363827-$ or US-20170363815-$ or US-20170363810-$).did. or (US-20170363509-$ or US-20170359091-$ or US-20170357060-$ or US-20170357059-$ or US-20170351038-$ or US-20170351037-$ or US-20170343760-$ or US-20170343742-$ or US-20170343741-$ or US-20170341972-$ or US-20170336577-$ or US-20170336571-$ or US-20170331234-$ or US-20170329090-$ or US-20170315308-$ or US-20170315307-$ or US-20170315305-$ or US-20170315304-$ or US-20170315303-$ or US-20170307832-$ or US-20170307831-$ or US-20170307829-$ or US-20170303772-$ or US-20170299821-$ or US-20170299818-$ or US-20170299817-$ or US-20170299816-$).did. or (US-20170293091-$ or US-20170293089-$ or US-20170293088-$ or US-20170293087-$ or US-20140133808-$ or US-20170285272-$ or US-20170276887-$ or US-20170276886-				

		$ or US-20170276883-$ or US-20170276881-$ or US-20170269312-$ or US-20170269309-$ or US-20170261699-$ or US-20170261698-$ or US-20170254967-$ or US-20170254966-$ or US-20170254962-$ or US-20170254961-$ or US-20170254960-$ or US-20170248762-$ or US-20170242200-$ or US-20170242199-$ or US-20170242198-$ or US-20170242196-$ or US-20170235077-$ or US-20170235060-$ or US-20170227727-$).did. or (US-20170227720-$ or US-20170227718-$ or US-20170222347-$ or US-20170212310-$ or US-20170212309-$ or US-20170205591-$ or US-20170205588-$ or US-20170205587-$ or US-20170199338-$ or US-20170199336-$ or US-20170192182-$ or US-20170184800-$ or US-20170184798-$ or US-20170184790-$ or US-20170176252-$ or US-20130266268-$ or US-20170168244-$ or US-20170163573-$ or US-20170162978-$ or US-20170160500-$ or US-20170160496-$ or US-20170160494-$ or US-20170160486-$ or US-20170160478-$ or US-20170160477-$ or US-20170160476-$ or US-20170153398-$).did. or (US-20170153394-$ or US-20170146749-$ or US-20170139157-$ or US-20170139150-$ or US-20170138131-$ or US-20170131481-$ or US-20170123171-$ or US-20170123163-$ or US-20170115457-$ or US-20170108659-$ or US-20160004017-$ or US-20170108653-$ or US-20170108430-$ or US-20170102507-$ or US-20170102506-$ or US-20170102504-$ or US-20170097485-$ or US-20140219624-$ or US-20170097471-$ or US-20170090128-$ or US-20170090127-$ or US-20170082806-$ or US-20170068063-$ or US-20170059784-$ or US-20170059782-$ or US-20170045701-$ or US-20170045698-$).did. or (US-20170045691-$ or US-20170035275-$ or US-20150331201-$ or US-20170003459-$ or US-20160370549-$ or US-20160370548-$ or US-				

		20160370544-$ or US-20160365685-$ or US-20160356966-$ or US-20160356965-$ or US-20160334586-$ or US-20160324402-$ or US-20160320571-$ or US-20160320570-$ or US-20160320567-$ or US-20160320566-$ or US-20160313513-$ or US-20160085045-$ or US-20160306123-$ or US-20160306121-$ or US-20160291263-$ or US-20160291259-$ or US-20160282566-$ or US-20160282562-$ or US-20160266330-$ or US-20160266329-$ or US-20160266327-$).did. or (US-20160252687-$ or US-20160252685-$ or US-20160246011-$ or US-20160238804-$ or US-20160238798-$ or US-20160238794-$ or US-20160238789-$ or US-20160223763-$ or US-20160216460-$ or US-20160209605-$ or US-20160202429-$ or US-20160195683-$ or US-20160195681-$ or US-20160187589-$ or US-20160178860-$ or US-20160178859-$ or US-20160178855-$ or US-20160170152-$ or US-20160161679-$ or US-20160154190-$ or US-20160147022-$ or US-20120294572-$ or US-20140205241-$ or US-20160139342-$ or US-20160139339-$ or US-20160131854-$ or US-20160131849-$).did. or (US-20130094827-$ or US-20160116685-$ or US-20160116683-$ or US-20160116681-$ or US-20160111808-$ or US-20160109676-$ or US-20160109661-$ or US-20160091673-$ or US-20160091672-$ or US-20160085035-$ or US-20160085034-$ or US-20160085031-$ or US-20160077287-$ or US-20160077284-$ or US-20160070081-$ or US-20160062051-$ or US-20160047998-$ or US-20160047996-$ or US-20160047994-$ or US-20160041356-$ or US-20160033723-$ or US-20160025937-$ or US-20160018606-$ or US-20160011383-$ or US-20160011381-$ or US-20160011376-$ or US-20160004018-$).did. or (US-20160004016-$ or US-20150378117-$ or US-20150378112-$ or US-20150378111-$ or US-20150376956-				

		$ or US-20150370017-$ or US-20150362682-$ or US-20150362678-$ or US-20150355417-$ or US-20150355414-$ or US-20150346452-$ or US-20150346449-$ or US-20150346434-$ or US-20150338583-$ or US-20150323752-$ or US-20150309279-$ or US-20150301293-$ or US-20150301290-$ or US-20150301288-$ or US-20150301286-$ or US-20150277066-$ or US-20150288449-$ or US-20150288447-$ or US-20150286014-$ or US-20150286013-$ or US-20150286011-$ or US-20150285999-$).did. or (US-20150280355-$ or US-20150277062-$ or US-20150277061-$ or US-20150277058-$ or US-20150277057-$ or US-20150268424-$ or US-20150260927-$ or US-20150260926-$ or US-20130183001-$ or US-20130156379-$ or US-20150253183-$ or US-20150247977-$ or US-20150241650-$ or US-20150241644-$ or US-20150241642-$ or US-20150241635-$ or US-20150234131-$ or US-20150234128-$ or US-20150226926-$ or US-20150226923-$ or US-20150219857-$ or US-20150219856-$ or US-20150212284-$ or US-20150212279-$ or US-20150205060-$ or US-20150205053-$ or US-20010043777-$).did. or (US-20150198766-$ or US-20150192744-$ or US-20150185423-$ or US-20150177467-$ or US-20140270652-$ or US-20150177463-$ or US-20150160420-$ or US-20150153516-$ or US-20150147036-$ or US-20150147033-$ or US-20150147031-$ or US-20150139589-$ or US-20150139588-$ or US-20100202730-$ or US-20150093077-$ or US-20150078710-$ or US-20150071591-$ or US-20150063761-$ or US-20150063758-$ or US-20150060539-$ or US-20150055928-$ or US-20150055917-$ or US-20150050002-$ or US-20150049989-$ or US-20150030323-$ or US-20150023637-$ or US-20150023634-$).did. or (US-20150016781-$ or US-20150012072-$ or US-20100069721-$ or US-				

		20150003785-$ or US-20150003774-$ or US-20140376870-$ or US-20140355936-$ or US-20140348481-$ or US-20140348467-$ or US-20140341510-$ or US-20100215318-$ or US-20140334790-$ or US-20140334780-$ or US-20140334778-$ or US-20140328063-$ or US-20140321814-$ or US-20140321813-$ or US-20140321809-$ or US-20140314385-$ or US-20140308011-$ or US-20140308010-$ or US-20140308008-$ or US-20140294339-$ or US-20140286609-$ or US-20140273584-$ or US-20140270646-$ or US-20140241690-$).did. or (US-20140241689-$ or US-20140241688-$ or US-20140241667-$ or US-20140220794-$ or US-20140219619-$ or US-20140219615-$ or US-20140219614-$ or US-20140205253-$ or US-20140205247-$ or US-20140178007-$ or US-20140169732-$ or US-20140161407-$ or US-20140161400-$ or US-20140161394-$ or US-20140147082-$ or US-20140147081-$ or US-20140144468-$ or US-20140141649-$ or US-20140133821-$ or US-20140133803-$ or US-20140126875-$ or US-20140126874-$ or US-20140124140-$ or US-20140105552-$ or US-20120281951-$ or US-20140105542-$ or US-20140104808-$).did. or (US-20140093210-$ or US-20140086545-$ or US-20140082913-$ or US-20140072297-$ or US-20140072263-$ or US-20140064690-$ or US-20140064688-$ or US-20140064674-$ or US-20140064664-$ or US-20140056562-$ or US-20140056560-$ or US-20140050443-$ or US-20140044394-$ or US-20140038462-$ or US-20130308908-$ or US-20140023326-$ or US-20140023325-$ or US-20140023322-$ or US-20140016902-$ or US-20140016900-$ or US-20140010499-$ or US-20130343764-$ or US-20130343707-$ or US-20130330957-$ or US-20130323940-$ or US-20130322834-$ or US-20130322828-$).did. or (US-20130322826-$ or US-20130315539-				

		$ or US-20070286554-$ or US-20130302004-$ or US-20130287358-$ or US-20130284844-$ or US-20130272671-$ or US-20130259429-$ or US-20130230283-$ or US-20130216189-$ or US-20130216188-$ or US-20130209052-$ or US-20130209051-$ or US-20130209050-$ or US-20130209049-$ or US-20130209041-$ or US-20130209040-$ or US-20130202253-$ or US-20130195418-$ or US-20130195405-$ or US-20130183018-$ or US-20130170797-$ or US-20130170796-$ or US-20130163937-$ or US-20130163934-$ or US-20130163933-$ or US-20130163931-$).did. or (US-20130156382-$ or US-20130136401-$ or US-20130129285-$ or US-20130129280-$ or US-20130121645-$ or US-20130121643-$ or US-20130108231-$ or US-20130101257-$ or US-20130094815-$ or US-20130094811-$ or US-20130084041-$ or US-20130077914-$ or US-20130071070-$ or US-20130071068-$ or US-20130071067-$ or US-20130064517-$ or US-20130064508-$ or US-20130051749-$ or US-20130051732-$ or US-20130028560-$ or US-20130011099-$ or US-20120328245-$ or US-20120321269-$ or US-20120321266-$ or US-20120321254-$ or US-20120308183-$ or US-20120301088-$).did. or (US-20120301086-$ or US-20120301080-$ or US-20120294570-$ or US-20120263426-$ or US-20120263423-$ or US-20120263419-$ or US-20120257860-$ or US-20120257859-$ or US-20120252244-$ or US-20120251067-$ or US-20120251054-$ or US-20120251051-$ or US-20120251050-$ or US-20120243834-$ or US-20120243831-$ or US-20120243829-$ or US-20120237223-$ or US-20120237171-$ or US-20120224823-$ or US-20120219253-$ or US-20120195555-$ or US-20120177326-$ or US-20120170895-$ or US-20120163757-$ or US-20120155808-$ or US-20120141084-$ or US-20120141070-$).did. or (US-				

		20120128307-$ or US-20120114295-$ or US-20120106901-$ or US-20120106899-$ or US-20120099870-$ or US-20120099822-$ or US-20120082416-$ or US-20120076459-$ or US-20120069348-$ or US-20120063735-$ or US-20120057831-$ or US-20120057830-$ or US-20120057827-$ or US-20120057824-$ or US-20120039569-$ or US-20120033918-$ or US-20120027355-$ or US-20120014649-$ or US-20120014648-$ or US-20120002928-$ or US-20120002925-$ or US-20110317976-$ or US-20110311186-$ or US-20110299814-$ or US-20110293223-$ or US-20110268391-$ or US-20110262079-$).did. or (US-20110103797-$ or US-20110249942-$ or US-20110243508-$ or US-20110243505-$ or US-20110243504-$ or US-20110229094-$ or US-20090103878-$ or US-20110222821-$ or US-20100080517-$ or US-20110211792-$ or US-20110206335-$ or US-20110206325-$ or US-20110206324-$ or US-20110200294-$ or US-20110200286-$ or US-20110198324-$ or US-20110194828-$ or US-20110188809-$ or US-20110188000-$ or US-20110176777-$ or US-20110170830-$ or US-20110158593-$ or US-20110158586-$ or US-20100329613-$ or US-20110150396-$ or US-20110142398-$ or US-20110129186-$).did. or (US-20110123156-$ or US-20110116748-$ or US-20110103747-$ or US-20110091166-$ or US-20110091159-$ or US-20110091154-$ or US-20110085774-$ or US-20110085765-$ or US-20110081798-$ or US-20110081116-$ or US-20110075974-$ or US-20110075971-$ or US-20110075969-$ or US-20110058772-$ or US-20090087147-$ or US-20110044589-$ or US-20110044583-$ or US-20110038592-$ or US-20110038590-$ or US-20110038581-$ or US-20090220227-$ or US-20110019964-$ or US-20100329604-$ or US-20100329602-$ or US-20100322580-$ or US-20100322576-				

		$ or US-20100322561-$).did. or (US-20100322554-$ or US-20100303408-$ or US-20100296792-$ or US-20100290745-$ or US-20100284655-$ or US-20100278497-$ or US-20100278488-$ or US-20100272408-$ or US-20100266245-$ or US-20100260457-$ or US-20100247057-$ or US-20100247042-$ or US-20100247040-$ or US-20100239220-$ or US-20100239213-$ or US-20100232757-$ or US-20100226654-$ or US-20100215322-$ or US-20100209063-$ or US-20100209050-$ or US-20100202737-$ or US-20100183276-$ or US-20100183265-$ or US-20090003772-$ or US-20100158444-$ or US-20100146764-$ or US-20100142899-$).did. or (US-20100141934-$ or US-20100135618-$ or US-20100129032-$ or US-20100129028-$ or US-20100111484-$ or US-20100104355-$ or US-20080019642-$ or US-20100092134-$ or US-20100092131-$ or US-20100086258-$ or US-20100081303-$ or US-20100080513-$ or US-20100074616-$ or US-20100067852-$ or US-20100061681-$ or US-20100059901-$ or US-20100054665-$ or US-20100046893-$ or US-20090003771-$ or US-20100029117-$ or US-20100027944-$ or US-20100027943-$ or US-20100021111-$ or US-20100014815-$ or US-20100002999-$ or US-20090305542-$ or US-20090304335-$).did. or (US-20090290839-$ or US-20090290838-$ or US-20090285534-$ or US-20090285530-$ or US-20090274432-$ or US-20090274431-$ or US-20090257722-$ or US-20090257719-$ or US-20090252458-$ or US-20080124031-$ or US-20090232455-$ or US-20090232454-$ or US-20090226141-$ or US-20090226137-$ or US-20090220200-$ or US-20090214164-$ or US-20090202214-$ or US-20090185778-$ or US-20060263011-$ or US-20090156043-$ or US-20090116791-$ or US-20090080850-$ or US-20050141817-$ or US-20090074359-$ or US-				

		20090060422-$ or US-20090060418-$ or US-20090047800-$).did. or (US-20090046981-$ or US-20090034912-$ or US-20090028507-$ or US-20090010600-$ or US-20070280599-$ or US-20080317411-$ or US-20080310800-$ or US-20080310796-$ or US-20080310795-$ or US-20080304792-$ or US-20080298764-$ or US-20080279503-$ or US-20080273837-$ or US-20080269845-$ or US-20080267566-$ or US-20080253719-$ or US-20080240658-$ or US-20080205825-$ or US-20080193086-$ or US-20080175550-$ or US-20080175546-$ or US-20080175545-$ or US-20080175542-$ or US-20080175532-$ or US-20080170827-$ or US-20080159696-$ or US-20080131055-$).did. or (US-20080112672-$ or US-20080100456-$ or US-20080095502-$ or US-20080095501-$ or US-20080085082-$ or US-20080069501-$ or US-20080050072-$ or US-20080050070-$ or US-20070217751-$ or US-20080044139-$ or US-20050135755-$ or US-20080034519-$ or US-20080019656-$ or US-20040264873-$ or US-20080013897-$ or US-20080013891-$ or US-20080013148-$ or US-20080008425-$ or US-20070297725-$ or US-20070285194-$ or US-20070274657-$ or US-20070263959-$ or US-20070230874-$ or US-20070223862-$ or US-20070217745-$ or US-20070212002-$ or US-20070201808-$).did. or (US-20070201798-$ or US-20070196053-$ or US-20070196052-$ or US-20070190834-$ or US-20070183780-$ or US-20060098914-$ or US-20070165984-$ or US-20070160327-$ or US-20070154135-$ or US-20070140623-$ or US-20070127873-$ or US-20070116414-$ or US-20070116411-$ or US-20040228584-$ or US-20070105452-$ or US-20070098330-$ or US-20070098329-$ or US-20070098327-$ or US-20070058907-$ or US-20050018979-$ or US-20070036487-$ or US-20070019913-$ or US-20060291782-				

		$ or US-20060285807-$ or US-20060280409-$ or US-20060269212-$ or US-20060269206-$).did. or (US-20060269205-$ or US-20050123248-$ or US-20060245711-$ or US-20060204200-$ or US-20060204180-$ or US-20060197943-$ or US-20060193565-$ or US-20060193562-$ or US-20060177182-$ or US-20060169856-$ or US-20060159401-$ or US-20060159399-$ or US-20060154529-$ or US-20060153504-$ or US-20060153503-$ or US-20060147156-$ or US-20060147155-$ or US-20060140542-$ or US-20060133758-$ or US-20060093282-$ or US-20060093275-$ or US-20060088248-$ or US-20060083468-$ or US-20060083467-$ or US-20060072878-$ or US-20060067631-$ or US-20060067628-$).did. or (US-20060056769-$ or US-20060051028-$ or US-20060045430-$ or US-20060029333-$ or US-20060013539-$ or US-20060002662-$ or US-20050286853-$ or US-20050286835-$ or US-20050286833-$ or US-20050281526-$ or US-20050281509-$ or US-20050271328-$ or US-20050260880-$ or US-20050238292-$ or US-20050238289-$ or US-20050232552-$ or US-20050226586-$ or US-20050220423-$ or US-20050220420-$ or US-20050215119-$ or US-20050207708-$ or US-20050196104-$ or US-20050185894-$ or US-20050157985-$ or US-20050135753-$ or US-20050135752-$ or US-20050123246-$).did. or (US-20050118880-$ or US-20050112939-$ or US-20050111796-$ or US-20050111795-$ or US-20050094948-$ or US-20050094943-$ or US-20050089278-$ or US-20050074211-$ or US-20050069263-$ or US-20050053342-$ or US-20050041928-$ or US-20050036744-$ or US-20050036740-$ or US-20050013547-$ or US-20050008300-$ or US-20040266257-$ or US-20040264908-$ or US-20040264876-$ or US-20040247257-$ or US-20040247255-$ or US-20040240793-$ or US-				

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		$ or US-20030095780-$ or US-20030095779-$ or US-20030091297-$ or US-20030091292-$ or US-20030087505-$ or US-20030081905-$ or US-20030072537-$).did. or (US-20030072536-$ or US-20030068135-$ or US-20030063868-$ or US-20030063866-$ or US-20030063862-$ or US-20030053760-$ or US-20030044127-$ or US-20030044125-$ or US-20030044123-$ or US-20030044122-$ or US-20030044115-$ or US-20030031452-$ or US-20030031449-$ or US-20030031422-$ or US-20030012544-$ or US-20030012516-$ or US-20030012512-$ or US-20030007740-$ or US-20030007739-$ or US-20030002816-$ or US-20030002814-$ or US-20030002808-$ or US-20020197018-$ or US-20020191919-$ or US-20020191881-$ or US-20020186934-$ or US-20020186742-$).did. or (US-20020181888-$ or US-20020181884-$ or US-20020177364-$ or US-20020176670-$ or US-20020172469-$ or US-20020172467-$ or US-20020168150-$ or US-20020168149-$ or US-20020166226-$ or US-20020164899-$ or US-20020159745-$ or US-20020159714-$ or US-20020159712-$ or US-20020159710-$ or US-20020150353-$ or US-20020150346-$ or US-20020150345-$ or US-20020150344-$ or US-20020150343-$ or US-20020150342-$ or US-20020146213-$ or US-20020131720-$ or US-20020126961-$ or US-20020122652-$ or US-20020118926-$ or US-20020114589-$ or US-20020114582-$).did. or (US-20020114581-$ or US-20020106167-$ or US-20020106162-$ or US-20020094727-$ or US-20020090177-$ or US-20020081076-$ or US-20020064349-$ or US-20020061171-$ or US-20020031313-$ or US-20020031310-$ or US-20020031309-$ or US-20020028055-$ or US-20020025125-$ or US-20020025121-$ or US-20020025099-$ or US-20020012503-$ or US-20020012502-$ or US-20020012501-$ or US-				

		20020012238-$ or US-20020006253-$ or US-20020003932-$ or US-20010048790-$ or US-20010043776-$ or US-20010041030-$ or US-20010038737-$ or US-20010033730-$ or US-20010016102-$).did. or (US-20010010741-$ or US-20190204513-$ or US-20200064561-$ or US-20200057208-$ or US-20200041730-$ or US-20190235182-$ or US-20190391350-$ or US-20190384017-$ or US-20190353852-$ or US-20190346631-$ or US-20190317281-$ or US-20190310432-$ or US-20190278039-$ or US-20190278025-$ or US-20190271816-$ or US-20190250340-$ or US-20190243083-$ or US-20190235178-$ or US-20190227244-$ or US-20190219772-$).did. or (US-10718914-$ or US-10718911-$ or US-10718909-$ or US-10705306-$ or US-10295760-$ or US-10261275-$ or US-10156683-$ or US-10146014-$ or US-10107967-$ or US-10067302-$ or US-10067300-$ or US-10018787-$ or US-10007069-$ or US-9989710-$ or US-9948017-$ or US-9946038-$ or US-9946037-$ or US-9946036-$ or US-9939600-$ or US-9939590-$ or US-9939589-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9927582-$ or US-9915793-$).did. or (US-9910229-$ or US-9910228-$ or US-9910226-$ or US-9904021-$ or US-9904020-$ or US-9904019-$ or US-9897767-$ or US-9893813-$ or US-9891392-$ or US-9891390-$ or US-9891387-$ or US-9891385-$ or US-9885841-$ or US-9880365-$ or US-9880357-$ or US-9876309-$ or US-9874702-$ or US-9869826-$ or US-9869824-$ or US-9864151-$ or US-9857545-$ or US-9857537-$ or US-9851512-$ or US-9846283-$ or US-9841566-$ or US-9835808-$ or US-9835807-$).did. or (US-9829650-$ or US-9829643-$ or US-9827438-$ or US-9823428-$ or US-9817195-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9798096-$ or				

		US-9798090-$ or US-9797806-$ or US-9784928-$ or US-9778425-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9759874-$ or US-9759869-$ or US-9746625-$ or US-9746368-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9735523-$).did. or (US-9733436-$ or US-9733434-$ or US-9733123-$ or US-9726830-$ or US-9726829-$ or US-9722367-$ or US-9720184-$ or US-9709753-$ or US-9703062-$ or US-9696497-$ or US-9696477-$ or US-9684134-$ or US-9678286-$ or US-9678283-$ or US-9678282-$ or US-9671570-$ or US-9671568-$ or US-9664864-$ or US-9658407-$ or US-9645335-$ or US-9645326-$ or US-9638871-$ or US-9638868-$ or US-9632267-$ or US-9625658-$ or US-9625657-$ or US-9625655-$).did. or (US-9606303-$ or US-9551831-$ or US-9482825-$ or US-9453972-$ or US-9448369-$ or US-9389368-$ or US-9377591-$ or US-9323007-$ or US-9316794-$ or US-9316791-$ or US-9291781-$ or US-9229177-$ or US-9229170-$ or US-9207454-$ or US-9002168-$ or US-8953922-$ or US-8814443-$ or US-8757893-$ or US-8588571-$ or US-8517614-$ or US-8459879-$ or US-8388235-$ or US-8206040-$ or US-8070366-$ or US-7972066-$ or US-7738757-$ or US-7712970-$).did. or (US-7706657-$ or US-7630609-$ or US-7588373-$ or US-7585118-$ or US-7530845-$ or US-7412148-$ or US-7232261-$ or US-7229220-$ or US-7192198-$ or US-7052186-$ or US-7036996-$ or US-6944378-$ or US-6895146-$ or US-6856748-$ or US-6848834-$ or US-6840680-$ or US-6839583-$ or US-6830382-$ or US-6817777-$ or US-6793399-$ or US-6789953-$ or US-6786647-$ or US-6712521-$ or US-6702475-$ or US-6695485-$ or US-6688782-$ or US-6667803-$).did. or (US-6644866-$ or US-6634794-$ or US-6632023-$ or US-6623172-$ or US-6619859-$ or US-6619856-$ or US-6612750-$ or US-6601995-$ or US-6599032-$				

		or US-6595696-$ or US-6582132-$ or US-6572276-$ or US-6572273-$ or US-6561699-$ or US-6558044-$ or US-6554486-$ or US-6554482-$ or US-6543941-$ or US-6533469-$ or US-6533465-$ or US-6527450-$ or US-6526210-$ or US-6524015-$ or US-6510267-$ or US-6508593-$ or US-6501900-$ or US-6498882-$).did. or (US-6497518-$ or US-6497516-$ or US-6226429-$ or US-6491442-$ or US-6487343-$ or US-6485192-$ or US-6481900-$ or US-6481899-$ or US-6474876-$ or US-6471417-$ or US-6471412-$ or US-6467971-$ or US-6467970-$ or US-6466724-$ or US-6464406-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6457876-$ or US-6456768-$ or US-6450698-$ or US-6447172-$ or US-6445867-$ or US-6437894-$ or US-6435946-$ or US-6431762-$ or US-6425694-$).did. or (US-6425692-$ or US-6422761-$ or US-6422760-$ or US-6422759-$ or US-6419810-$ or US-6412987-$ or US-6412986-$ or US-6409394-$ or US-6409392-$ or US-6409391-$ or US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6389212-$ or US-6386768-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6379052-$ or US-6377840-$ or US-6375363-$ or US-6305849-$ or US-6371659-$ or US-6371657-$ or US-6367986-$ or US-6367984-$ or US-6364536-$).did. or (US-6361218-$ or US-6357932-$ or US-6357931-$ or US-6354746-$ or US-6352372-$ or US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6343950-$ or US-6334715-$ or US-6331079-$ or US-6328481-$ or US-6318904-$ or US-6318903-$ or US-6318902-$ or US-6089759-$ or US-6309111-$ or US-6302592-$ or US-6301004-$ or US-6095695-$ or US-6293706-$ or US-6290527-$ or US-6283640-$ or US-6045270-$ or US-6273618-$ or US-6267513-$ or US-6264375-$).did. or (US-6264373-$ or US-6264372-$ or US-6259839-$ or US-6256446-$ or US-6250817-$ or US-				

		6247851-$ or US-6247849-$ or US-6243526-$ or US-6243518-$ or US-6240235-$ or US-6240229-$ or US-6238249-$ or US-6234681-$ or US-6231244-$ or US-6227719-$ or US-6227718-$ or US-6224269-$ or US-6220763-$ or US-6220762-$ or US-6219479-$ or US-6217226-$ or US-6215944-$ or US-6210045-$ or US-6206577-$ or US-6200040-$ or US-6196729-$ or US-6195477-$).did. or (US-6193420-$ or US-6190616-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6179480-$ or US-6179475-$ or US-6173099-$ or US-6164835-$ or US-6164834-$ or US-6154597-$ or US-6149315-$ or US-6149313-$ or US-6142676-$ or US-6139346-$ or US-6132105-$ or US-6116789-$ or US-6116101-$ or US-6108482-$ or US-6104856-$ or US-6102581-$ or US-6095694-$ or US-6088502-$ or US-6081647-$ or US-6079881-$ or US-6076975-$ or US-6064791-$).did. or (US-6059461-$ or US-6053639-$ or US-6048103-$ or US-6048102-$ or US-6045269-$ or US-6041155-$ or US-6027252-$ or US-6024498-$ or US-6022149-$ or US-6017154-$ or US-6012852-$ or US-6007256-$ or US-6004043-$ or US-6004042-$ or US-5993071-$ or US-5987203-$ or US-5984533-$ or US-5980117-$ or US-5971626-$ or US-5969294-$ or US-5963689-$ or US-5960137-$ or US-5956444-$ or US-5953474-$ or US-5953473-$ or US-5949946-$ or US-5862289-$).did. or (US-5940561-$ or US-5940559-$ or US-5937121-$ or US-5930426-$ or US-5930425-$ or US-5923805-$ or US-5921796-$ or US-5920670-$ or US-5920669-$ or US-5915058-$ or US-5909526-$ or US-5909298-$ or US-5742720-$ or US-5737463-$ or US-5896477-$ or US-5892870-$ or US-5887100-$ or US-5887098-$ or US-5881191-$ or US-5870515-$ or US-5867894-$ or US-5867621-$ or US-5862282-$ or US-5845036-$ or US-5727097-$ or US-5838856-$ or US-5838855-$).did. or (US-5832158-$ or US-5825955-$ or				

		US-5818993-$ or US-5815621-$ or US-5815618-$ or US-5809191-$ or US-5799122-$ or US-5796896-$ or US-5781680-$ or US-5778123-$ or US-5778122-$ or US-5774612-$ or US-5774611-$ or US-5768738-$ or US-5548677-$ or US-5764043-$ or US-5761359-$ or US-5751874-$ or US-5748818-$ or US-5737464-$ or US-5734770-$ or US-5732174-$ or US-5732173-$ or US-5727102-$ or US-5721799-$ or US-5701380-$ or US-5694507-$).did. or (US-5694506-$ or US-5692089-$ or US-5692080-$ or US-5687268-$ or US-5682449-$ or US-5680494-$ or US-5673346-$ or US-5671310-$ or US-5668904-$ or US-5666456-$ or US-5666449-$ or US-5664955-$ or US-5661833-$ or US-5581644-$ or US-5651084-$ or US-5647043-$ or US-5645449-$ or US-5642450-$ or US-5633969-$ or US-5620634-$ or US-5619610-$ or US-5386485-$ or US-5611017-$ or US-5611010-$ or US-5607323-$ or US-5603631-$ or US-5602951-$).did. or (US-5600749-$ or US-5600746-$ or US-5325454-$ or US-5592323-$ or US-5588086-$ or US-5588079-$ or US-5579429-$ or US-5574817-$ or US-5574813-$ or US-5570445-$ or US-5563978-$ or US-5563974-$ or US-5563971-$ or US-5555332-$ or US-5550943-$ or US-5548674-$ or US-5542015-$ or US-5537501-$ or US-5530783-$ or US-5528711-$ or US-5521998-$ or US-5521997-$ or US-5519799-$ or US-5506922-$ or US-5499310-$ or US-5497444-$ or US-5485537-$).did. or (US-5483608-$ or US-5473717-$ or US-5452391-$ or US-5450519-$ or US-5446817-$ or US-5444806-$ or US-5420951-$ or US-5418875-$ or US-5339376-$ or US-5414786-$ or US-5408557-$ or US-5367595-$ or US-5384885-$ or US-5379360-$ or US-5372758-$ or US-5367594-$ or US-5366383-$ or US-5363460-$ or US-5359688-$ or US-5339377-$ or US-5335301-$ or US-5333225-$ or US-5333222-$ or US-5333221-$ or US-5329541-$ or US-5323475-$ or				

		US-5317663-$).did. or (US-5315679-$ or US-5315678-$ or US-5305409-$ or US-5297227-$ or US-5293581-$ or US-5282259-$ or US-5280552-$ or US-5274729-$ or US-5267342-$ or US-5265181-$ or US-5259052-$ or US-5239606-$ or US-5233675-$ or US-5233674-$ or US-5231685-$ or US-5228104-$ or US-5222168-$ or US-5214730-$ or US-5210815-$ or US-5199093-$ or US-5179607-$ or US-5177808-$ or US-5166995-$ or US-5159654-$ or US-5157749-$ or US-5155795-$ or US-5134677-$).did. or (US-5134676-$ or US-5134673-$ or US-5133032-$ or US-5129024-$ or US-5127073-$ or US-5124506-$ or US-5119455-$ or US-5115484-$ or US-5109468-$ or US-5109453-$ or US-5101463-$ or US-5091991-$ or US-5091990-$ or US-5082346-$ or US-5082344-$ or US-5077815-$ or US-5076656-$ or US-5073042-$ or US-5064268-$ or US-5058983-$ or US-5052774-$ or US-5048916-$ or US-5042891-$ or US-5018823-$ or US-5016972-$ or US-5016970-$ or US-5015060-$).did. or (US-5013124-$ or US-4998797-$ or US-4998796-$ or US-4995688-$ or US-4993803-$ or US-4991929-$ or US-4986762-$ or US-4986622-$ or US-4976510-$ or US-4973127-$ or US-4973126-$ or US-4964688-$ or US-4960317-$ or US-4955976-$ or US-4953929-$ or US-4944079-$ or US-4921325-$ or US-4915472-$ or US-4900118-$ or US-4898446-$ or US-4892380-$ or US-4886335-$ or US-4877303-$ or US-4856866-$ or US-4854664-$ or US-4852963-$ or US-4850671-$).did. or (US-4850536-$ or US-4848870-$ or US-4846544-$ or US-4844570-$ or US-4842361-$ or US-4834486-$ or US-4830456-$ or US-4824196-$ or US-4818058-$ or US-4813760-$ or US-4807957-$ or US-4805980-$ or US-4795231-$ or US-4793683-$ or US-4789216-$ or US-4787700-$ or US-4786135-$ or US-4784456-$ or US-4783137-$ or US-4781429-$ or US-4773725-$ or US-4767178-$ or US-4762389-$				

		or US-4762387-$ or US-4759600-$ or US-4759599-$ or US-4758719-$).did. or (US-4741590-$ or US-4740052-$ or US-4737009-$ or US-4722081-$ or US-4718744-$ or US-4717234-$ or US-4715674-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4699460-$ or US-4688887-$ or US-4687291-$ or US-4681398-$ or US-4674831-$ or US-4666241-$ or US-4648688-$ or US-4645296-$ or US-4615581-$ or US-4614402-$ or US-4579418-$ or US-4575183-$ or US-4548467-$ or US-4526438-$ or US-4515434-$ or US-4506946-$ or US-4497536-$).did. or (US-4487474-$ or US-4486072-$ or US-4484796-$ or US-4477146-$ or US-4466009-$ or US-4464817-$ or US-4461539-$ or US-4447121-$ or US-4445753-$ or US-4444461-$ or US-4422716-$ or US-4415232-$ or US-4387957-$ or US-4385801-$ or US-4371233-$ or US-4368948-$ or US-4354731-$ or US-4341439-$ or US-4330172-$ or US-4327964-$ or US-4320938-$ or US-4310218-$ or US-4295707-$ or US-4291943-$ or US-4279469-$ or US-4268115-$ or US-4268114-$).did. or (US-4252407-$ or US-4240695-$ or US-4223976-$ or US-4218113-$ or US-4214812-$ or US-4201445-$ or US-4201444-$ or US-4186997-$ or US-4186996-$ or US-4168109-$ or US-4167304-$ or US-4160580-$ or US-4140365-$ or US-4101198-$ or US-4087158-$ or US-4080044-$ or US-3999837-$ or US-3933409-$ or US-10545295-$ or US-10502903-$ or US-10401575-$ or US-10353155-$).did. or (EP-3258301-$ or EP-3054333-$ or CA-2885821-$ or EP-2444827-$ or WO-2018004847-$ or JP-6173629-$ or WO-2015043158-$ or CN-206584076-$ or WO-2016161341-$ or DE-202016103178-$ or WO-2016082160-$ or EP-3021145-$ or JP-5905950-$ or CA-2689768-$ or CA-2928026-$ or CA-2762411-$ or CA-2859345-$ or DE-202013012295-$ or WO-2016004347-$ or WO-2015190211-$ or EP-2942653-$ or				

		CN-204595258-$ or WO-2015116589-$ or WO-2015103783-$ or GB-201507758-$ or CA-2932688-$).did. or (WO-2015068103-$ or EP-2843452-$ or WO-2014143748-$ or JP-5433802-$ or CN-102870023-$ or WO-2012151175-$ or WO-2014049469-$ or WO-2014009463-$ or CA-2912155-$ or WO-2013126068-$ or WO-2013115791-$ or WO-2013115789-$ or CA-2662854-$ or WO-2011152874-$ or GB-201218194-$ or CN-102456976-$ or WO-2011139938-$ or WO-2011044724-$ or CN-101122658-$ or CN-101931134-$ or WO-2010068896-$ or WO-2010025180-$ or EP-2138880-$ or WO-2009110421-$ or CA-2503690-$ or WO-2008006402-$ or CN-1331421-$).did. or (EP-1168016-$ or EP-1172672-$ or EP-1530068-$ or CA-2321428-$ or AU-2003291687-$ or JP-3106420-$ or EP-1168018-$ or CA-2191600-$ or WO-03093883-$ or CA-2484569-$ or DE-10114144-$ or CN-1118443-$ or WO-03016975-$ or NL-1018440-$ or CA-2284331-$ or EP-0690319-$ or CA-2030897-$ or WO-0155762-$ or CA-2418331-$ or DE-20118858-$ or EP-1124147-$ or EP-1172673-$ or WO-0137010-$ or CA-2198522-$ or WO-0161397-$ or EP-1039324-$ or EP-1039322-$).did. or (EP-1033595-$ or EP-1033594-$ or GB-0007281-$ or EP-0992819-$ or GB-9919699-$ or CA-2262351-$ or CA-2294930-$ or EP-0696748-$ or WO-9734176-$ or CA-2171494-$ or WO-9627811-$ or EP-0633485-$ or EP-0249237-$ or EP-0262847-$ or CA-2082276-$ or GB-9106183-$ or DE-9107960-$ or GB-9103604-$ or WO-9015350-$ or DE-8626183-$ or EP-0262631-$ or EP-0061243-$ or WO-8600147-$ or DE-3112078-$ or GB-2081468-$ or IT-8323399-$ or IT-8323399-$).did. or (GB-2057158-$ or GB-8306227-$ or DK-208682-$ or FR-2487528-$ or FR-2435053-$ or BE-871785-$ or CA-1097111-$ or IT-7925110-$ or FR-2363124-$ or BE-871785-$ or CA-1043604-$ or				

		WO-2019190616-$ or CN-110068899-$).did. or (JP-09033756-$ or JP-04214510-$ or JP-11072659-$ or JP-04220604-$ or JP-56074211-$ or JP-2017138535-$ or JP-05313040-$ or JP-62111222-$ or JP-59140411-$ or JP-59075218-$ or JP-57044113-$ or JP-56066811-$ or JP-55101904-$ or JP-54034251-$).did. or (US-20190107679-$ or US-20180224615-$ or WO-2018125706-$ or US-20180156985-$ or US-20180128988-$ or US-20180120519-$ or US-20180106973-$ or US-20180081128-$ or US-20180052288-$ or US-20180011258-$ or US-20180003903-$ or US-20180364421-$ or US-20170371109-$ or CN-107450131-$ or US-20170336577-$ or US-20170343760-$ or US-9804340-$ or US-20170307830-$ or FR-3050286-$ or US-20170299820-$ or US-20170293088-$ or US-20170261699-$ or US-20170254967-$ or US-20170254966-$ or US-20170227720-$ or US-9726830-$).did. or (US-20170219779-$ or JP-6173629-$ or US-20170205587-$ or US-9709753-$ or US-20170184790-$ or US-9678283-$ or US-20170153398-$ or US-20170139150-$ or US-20170139156-$ or US-20170102504-$ or US-20170115457-$ or WO-2017065999-$ or US-20170090127-$ or WO-2017038704-$ or US-20170059784-$ or US-20170031106-$ or US-20160377819-$ or US-20160349466-$ or US-20160341908-$ or US-20160341911-$ or WO-2016182556-$ or US-20160327757-$ or US-9482820-$ or WO-2016161341-$ or US-20160282566-$ or CN-105978629-$ or US-20160259135-$).did. or (US-20170329090-$ or EP-3054333-$ or US-9389368-$ or WO-2016105567-$ or US-9377591-$ or US-20160178852-$ or US-20160178859-$ or US-20160161680-$ or EP-3021145-$ or US-20160131854-$ or US-20160124158-$ or JP-5905950-$ or WO-2016053853-$ or WO-2016043922-$ or WO-2016033577-$				

		or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016024014-$ or JP-5860948-$ or CA-2859345-$ or US-20160025937-$ or US-20160004016-$ or US-20160004018-$ or US-20150378110-$ or WO-2015190211-$ or EP-2947485-$).did. or (US-20150331201-$ or CN-104950402-$ or DE-102015106225-$ or US-20160306125-$ or US-20150286012-$ or WO-2015144883-$ or US-20150241644-$ or US-20150226926-$ or US-20150226925-$ or WO-2015116589-$ or US-20150219864-$ or WO-2015103783-$ or CN-104570229-$ or CN-104516061-$ or US-20150177463-$ or US-20150162982-$ or WO-2015070382-$ or WO-2015068103-$ or WO-2015028433-$ or US-20150049989-$ or WO-2015009435-$ or US-20150023637-$ or EP-2818903-$ or US-20140363131-$ or WO-2014197701-$ or US-20140321808-$ or WO-2014165175-$).did. or (WO-2014143748-$ or US-20140219624-$ or EP-2759860-$ or WO-2014113753-$ or US-20140205247-$ or US-20140199034-$ or US-20140153879-$ or US-20140147081-$ or ES-1110405-$ or WO-2014049469-$ or TW-474924-$ or US-20140064688-$ or JP-5433802-$ or EP-2700992-$ or WO-2014011898-$ or US-20140016901-$ or WO-2014011283-$ or WO-2013177234-$ or WO-2013155395-$ or US-20130259429-$ or US-20130230283-$ or WO-2013126068-$ or WO-2013122865-$ or WO-2013117598-$ or WO-2013115789-$ or WO-2013115791-$ or US-20130121645-$).did. or (CN-103091793-$ or WO-2013036843-$ or US-20130051749-$ or TW-201309089-$ or CN-102870023-$ or US-20120308183-$ or WO-2012151175-$ or US-20120263419-$ or US-20120251051-$ or US-20120251054-$ or TW-201233549-$ or US-20120099822-$ or EP-2444827-$ or US-20120082416-$ or				

		US-20120057824-$ or KR-2012000895-$ or US-20120027355-$ or KR-2012000895-$ or WO-2011152874-$ or US-20110274437-$ or US-20110249942-$ or EP-2302431-$ or WO-2010137426-$ or EP-2206458-$ or WO-2010068896-$ or US-7712970-$ or WO-2010025180-$).did. or (US-20100040330-$ or WO-2009110421-$ or US-20090060423-$ or US-20090041411-$ or US-7435009-$ or US-20070098327-$ or US-20070077010-$ or US-20070058907-$ or EP-1752805-$ or US-20060193562-$ or US-20060165352-$ or US-20060153503-$ or WO-2006022840-$ or US-20050053342-$ or US-20040228589-$ or US-20040223699-$ or US-20040062498-$ or EP-1394584-$ or WO-03094297-$ or WO-03093883-$ or US-20030044125-$ or US-20030031437-$ or WO-02061481-$ or US-6422760-$ or WO-02056060-$ or DE-20118858-$ or EP-1172673-$).did. or (EP-1172672-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or US-20010041030-$ or WO-0181965-$ or EP-1124147-$ or EP-1107031-$ or WO-0140839-$ or EP-1092995-$ or EP-1091225-$ or EP-1041416-$ or EP-1041414-$ or EP-1020745-$ or EP-1016885-$ or EP-1010999-$ or GB-2341455-$ or WO-9947958-$ or US-5940561-$ or WO-9928774-$ or WO-9857208-$ or DE-19626036-$ or WO-9746900-$ or US-5692080-$ or EP-803750-$ or WO-9734176-$ or WO-9723794-$).did. or (EP-758099-$ or WO-9634176-$ or WO-9627811-$ or JP-08201656-$ or WO-9616080-$ or EP-697608-$ or EP-696748-$ or WO-9600917-$ or EP-663602-$ or EP-663601-$ or EP-660145-$ or EP-660144-$ or EP-505197-$ or EP-490698-$ or US-5101463-$ or EP-458608-$ or WO-9117540-$ or US-5064268-$ or GB-2241794-$ or EP-430107-$ or WO-9015350-$ or US-4953929-$ or EP-262631-$ or EP-249237-$ or WO-8600147-$ or US-				

		4496213-$ or EP-125398-$).did. or (DE-3208797-$ or GB-2098354-$ or EP-61243-$ or GB-2081468-$ or GB-2057158-$ or DE-2932986-$ or BE-871785-$ or DE-2805949-$ or DE-2558445-$ or US-10502903-$).did.				
S803	1,872	(G02B6/3879).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 11:59
S804	1,322	S803 not (S799 S800 S801 S802)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 11:59
S805	696	(US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-$ or US-20190219775-$ or US-20190170931-$ or US-20190137700-$ or US-20190137697-$ or US-20190137695-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20190033531-$ or US-20190004252-$ or US-20190004251-$ or US-20180364422-$ or US-20180364436-$).did. or (US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180321449-$ or US-20180217336-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180128988-$ or US-20170363818-$ or US-20170261696-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170205586-$ or US-20170176691-$ or US-20170176692-$ or US-20170068064-$ or US-20170059785-$ or US-20170063464-$ or US-20170023746-$ or US-20160349458-$ or US-20160327756-$ or US-20160306122-$ or US-20160282565-$).did. or (US-20160274314-$ or US-20160223774-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 11:59

		$ or US-20160202428-$ or US-20160091674-$ or US-20150378113-$ or US-20150277059-$ or US-20150260924-$ or US-20150260923-$ or US-20150198774-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20140205257-$ or US-20140169727-$ or US-20140168987-$ or US-20140161392-$ or US-20140153878-$ or US-20140153879-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140037253-$ or US-20140029900-$ or US-20140022627-$ or US-20140016901-$ or US-20140003771-$).did. or (US-20130322825-$ or US-20130158512-$ or US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20120155803-$ or US-20120093462-$ or US-20110299266-$ or US-20110229092-$ or US-20110229083-$ or US-20110064361-$ or US-20110058774-$ or US-20100322563-$ or US-20100178014-$ or US-20100178010-$ or US-20100054668-$ or US-20100027942-$ or US-20090135429-$ or US-20080317415-$ or US-20080273840-$ or US-20080226235-$ or US-20080124033-$ or US-20080090433-$ or US-20080013889-$ or US-20070292084-$ or US-20070031103-$).did. or (US-20060275007-$ or US-20060257075-$ or US-20060257076-$ or US-20060204178-$ or US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060127028-$ or US-20060093274-$ or US-20060083466-$ or US-20060063436-$ or US-20060045428-$ or US-20060018603-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20040157499-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020176960-$ or US-20020142634-$).did. or (US-				

		20020126960-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$).did. or (US-10444442-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9977197-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$ or US-7857523-$ or US-7572063-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$ or US-6364537-$).did. or (US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-6179476-$ or US-6179477-$ or US-6130977-$ or US-6062739-$ or US-5971625-$ or US-5970598-$ or US-5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717533-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$ or US-5577146-$).did. or (US-5546281-$ or US-5436994-$ or US-5400428-$ or US-5396572-$ or US-5329604-$ or US-5289554-$ or US-5276755-$ or US-5265182-$ or US-5261019-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212752-$ or US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5121454-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$).did. or (US-5067783-$ or US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$				

		or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$).did. or (US-4728171-$ or US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$).did. or (WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$ or WO-2019086961-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$ or EP-3330757-$ or WO-2018044728-$ or EP-3278153-$ or CN-107636504-$ or WO-2018009426-$ or WO-2017182535-$ or CN-206479676-$ or EP-3180644-$ or EP-3123221-$ or WO-2016174980-$ or WO-2016140710-$ or CN-105683795-$ or WO-2015120031-$ or WO-2015070382-$ or EP-2852856-$ or WO-2015009435-$ or FR-2997767-$ or WO-2014054357-$ or CN-103676018-$).did. or (CA-2866107-$ or GB-201220748-$ or CN-102520489-$ or CN-102445735-$ or CN-102385113-$ or WO-2012015713-$ or DE-102010021179-$ or GB-201004720-$ or DE-112006003952-$ or CA-2593676-$ or WO-2008033262-$ or EP-1783524-$ or AU-2006295165-$ or EP-1762871-$ or DE-60026115-$ or KR-100452879-$ or AU-2004274992-$ or CA-2441872-$ or KR-20040020797-$ or CN-1334472-$ or DE-20111078-$ or DE-10031931-$ or CA-2302068-$ or DE-19834723-$ or WO-9723794-$ or DE-29614436-$ or DE-19525739-$).did. or (CH-				

		687105-$ or DE-19601949-$ or GB-9525323-$ or FR-2707402-$ or WO-9415232-$ or GB-9408857-$ or EP-0546936-$ or MX-9201992-$ or DE-4203966-$ or IT-MI913184-$ or GB-9103982-$ or CH-676513-$ or GB-9025881-$ or DE-3914978-$ or DE-9012174-$ or DE-9010357-$ or DE-8911081-$ or DE-8911080-$ or EP-0339876-$ or EP-0324272-$ or DE-8901052-$ or DE-8900623-$ or EP-0292024-$ or DE-8812341-$ or DE-3737842-$ or DE-3701421-$ or EP-0253426-$).did. or (EP-0249406-$ or KR-870005264-$ or EP-0183820-$ or EP-0166636-$ or EP-0154781-$ or EP-0153249-$ or EP-0098190-$ or EP-0098205-$ or FR-2528984-$ or FR-2502798-$ or GB-2086602-$ or EP-0045271-$ or WO-8002213-$ or DE-2932986-$ or DE-2832839-$ or AU-3682878-$ or GB-1526682-$ or FR-2316611-$ or GB-1450760-$ or FR-2268370-$).did. or (JP-2019184942-$ or JP-2005258017-$ or JP-2000241670-$ or JP-05215939-$ or JP-03059503-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-61129605-$ or JP-61028909-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-59038707-$ or JP-59036207-$ or JP-58190910-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56062212-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$).did. or (US-20200033539-$ or US-20200012053-$ or US-20200003961-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$ or EP-3518011-$ or US-20190227237-$ or				

		US-20190227241-$ or US-20190227240-$ or US-20190219775-$ or US-20190204513-$ or US-20190162914-$ or US-20190162917-$).did. or (US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or US-20180372962-$ or US-20180364422-$ or CN-108983368-$ or KR-2018131725-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or US-20180292612-$ or CN-108490551-$).did. or (US-20180231722-$ or JP-6363784-$ or US-20180203196-$ or CN-108279462-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018008399-$ or CN-107479141-$ or EP-3249434-$ or WO-2017182535-$ or US-20170264045-$ or US-20170261698-$ or US-20170261696-$ or KR-2017103050-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017106514-$).did. or (US-20170176691-$ or US-20170176692-$ or WO-2017095928-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$ or US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-				

		20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or WO-2015142551-$ or US-20150260923-$ or CN-104914515-$ or WO-2015126470-$).did. or (WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$ or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$).did. or (WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$ or US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$).did. or (US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$ or EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$			

		or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9723794-$ or WO-9637793-$).did. or (DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-420490-$ or EP-335531-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$ or EP-440447-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$).did. or (EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$ or EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$).did. or (GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$).did.				
S806	1,322	S804 not S805	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 11:59
S807	5,309	(G02B6/3825).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 11:59
S808	55	(US-20140241689-$ or US-20200057205-$ or US-20200070211-$ or US-20190377139-$ or US-20190346644-$ or US-20190331862-$ or US-20190285806-$ or US-20190278028-$ or US-20190101703-$ or US-20180031783-$ or US-20160062050-$ or US-20160035201-$ or US-20150241650-$ or US-	US-PGPUB; USPAT; DERWENT	OR	ON	2020/09/01 11:59

		20150063758-$ or US-20140348481-$ or US-20140348467-$ or US-20140241688-$ or US-20140233893-$ or US-20140219609-$ or US-20130272671-$ or US-20130259429-$ or US-20130051733-$ or US-20130044978-$ or US-20120251051-$ or US-20110038592-$ or US-20100322580-$).did. or (US-20100199447-$ or US-20100111484-$ or US-20100054665-$ or US-20090274432-$ or US-20080273837-$ or US-20050163431-$ or US-20050111810-$ or US-20050111809-$ or US-20030190130-$ or US-20030108301-$).did. or (US-8858089-$ or US-6857900-$ or US-6705765-$ or US-6547585-$ or US-6485189-$ or US-6412986-$ or US-6146023-$ or US-6041155-$ or US-5870515-$ or US-5675682-$ or US-5600747-$).did. or (US-10459172-$ or US-20150063758-$ or US-20140348467-$ or US-20140348481-$ or US-20140241688-$ or US-20140241689-$ or WO-2013155395-$ or US-20130259429-$).did.				
S809	623	(US-20150260936-$ or US-20190324218-$ or US-20150219864-$ or US-20160170154-$ or US-20200150353-$ or US-20180267258-$ or US-20200132941-$ or US-20180335577-$ or US-20200116950-$ or US-20190181586-$ or US-20200088955-$ or US-20200081194-$ or US-20200057204-$ or US-20200057199-$ or US-20200049902-$ or US-20190129104-$ or US-20190377138-$ or US-20190369335-$ or US-20190353865-$ or US-20190346635-$ or US-20190346634-$ or US-20180217339-$ or US-20190331862-$ or US-20190302371-$ or US-20190190199-$ or US-20160195682-$).did. or (US-20190271815-$ or US-20190243084-$ or US-20090238522-$ or US-20190243075-$ or US-20190235174-$ or US-20180292617-$ or US-20190200103-$ or US-20190187383-$ or US-20170227719-$ or US-20190113693-$ or US-20190113692-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 11:59

		$ or US-20190113689-$ or US-20190101706-$ or US-20190101705-$ or US-20190101704-$ or US-20190079252-$ or US-20190072729-$ or US-20190064452-$ or US-20190049678-$ or US-20190041587-$ or US-20190025526-$ or US-20170371109-$ or US-20180356600-$ or US-20180335571-$ or US-20180329154-$ or US-20180314018-$ or US-20140321808-$).did. or (US-20170045702-$ or US-20180306984-$ or US-20180299624-$ or US-20180284357-$ or US-20180267256-$ or US-20130089293-$ or US-20180136416-$ or US-20180100982-$ or US-20180081129-$ or US-20180052287-$ or US-20170293090-$ or US-20170205590-$ or US-20160062050-$ or US-20160320572-$ or US-20160341905-$ or US-20160306125-$ or US-20150162982-$ or US-20160223757-$ or US-20150063815-$ or US-20140363131-$ or US-20140321810-$ or US-20140301701-$ or US-20140241671-$ or US-20120257865-$ or US-20080311781-$ or US-20110274437-$ or US-20120128302-$).did. or (US-20120099819-$ or US-20120057824-$ or US-20110091158-$ or US-20110059642-$ or US-20100310213-$ or US-20100226610-$ or US-20100104355-$ or US-20070077010-$ or US-20080248691-$ or US-20080175543-$ or US-20080131055-$ or US-20070292082-$ or US-20080037934-$ or US-20080032536-$ or US-20070116412-$ or US-20050226567-$ or US-20050164536-$ or US-20050163429-$ or US-20050095899-$ or US-20050018973-$ or US-20040228582-$ or US-20030031448-$ or US-20030031437-$ or US-20030012520-$ or US-20020167793-$).did. or (US-10571641-$ or US-10539745-$ or US-10527803-$ or US-10514518-$ or US-10429592-$ or US-10401574-$ or US-10302874-$ or US-10234635-$ or US-10133009-$ or US-10120140-$ or US-10120138-$ or US-10101570-$ or US-10094768-				

		$ or US-9971103-$ or US-9678294-$ or US-9658405-$ or US-9645323-$ or US-9606300-$ or US-9581767-$ or US-9557508-$ or US-9557491-$ or US-9551835-$ or US-9482840-$ or US-9482823-$ or US-9448368-$ or US-9366829-$).did. or (US-9335488-$ or US-9291785-$ or US-9274300-$ or US-9110249-$ or US-9103990-$ or US-9057845-$ or US-9052475-$ or US-9033588-$ or US-9022666-$ or US-8985862-$ or US-8979388-$ or US-8845206-$ or US-8821036-$ or US-8801297-$ or US-8573854-$ or US-8419291-$ or US-8406588-$ or US-8202009-$ or US-8157455-$ or US-8104973-$ or US-8009959-$ or US-7980769-$ or US-7887243-$ or US-7758255-$ or US-7744285-$ or US-7717625-$ or US-7374347-$).did. or (US-7336884-$ or US-7261471-$ or US-7234876-$ or US-7111990-$ or US-7090407-$ or US-7073953-$ or US-6994478-$ or US-6945702-$ or US-6920255-$ or US-6872006-$ or US-6866424-$ or US-6832858-$ or US-6805493-$ or US-6789950-$ or US-6769814-$ or US-6762941-$ or US-6761488-$ or US-6572276-$ or US-6554486-$ or US-6513989-$ or US-6459843-$ or US-6435728-$ or US-6434316-$ or US-6434315-$ or US-6398422-$ or US-6364539-$ or US-6357928-$).did. or (US-6351590-$ or US-6264374-$ or US-6259856-$ or US-6257917-$ or US-6256448-$ or US-6203208-$ or US-6149313-$ or US-6146023-$ or US-6139194-$ or US-5963698-$ or US-5600747-$ or US-5511138-$ or US-5428702-$ or US-5335301-$ or US-5265181-$ or US-5216732-$ or US-5183408-$ or US-5166995-$ or US-4986769-$ or US-4950048-$ or US-4904199-$ or US-4711511-$ or US-4657338-$ or US-4580868-$ or US-4478485-$ or US-4448467-$ or US-4376565-$).did. or (US-4186997-$).did. or (WO-2019012006-$ or CA-2864886-$ or WO-2020047283-$ or WO-2017147401-$ or WO-2018183496-$ or GB-201311768-$ or GB-				

		201906387-$ or CN-110618492-$ or WO-2018140873-$ or AU-2015318357-$ or WO-2019222189-$ or WO-2016077167-$ or CN-105425341-$ or WO-2012106510-$ or WO-2019200066-$ or WO-2016086881-$ or WO-2019125963-$ or WO-2016053673-$ or FR-3021415-$ or WO-2019089220-$ or WO-2019060293-$ or WO-2017139430-$ or EP-3330758-$ or WO-2019036297-$ or WO-2018169759-$ or WO-2016049208-$).did. or (CA-2869770-$ or WO-2018045232-$ or WO-2015029585-$ or CN-105283786-$ or WO-2017123460-$ or JP-5805344-$ or CN-205992071-$ or WO-2016068966-$ or WO-2015191024-$ or WO-2011019581-$ or EP-2818903-$ or WO-2014116785-$ or WO-2013049082-$ or CA-2546593-$ or WO-2008045560-$ or WO-2011130445-$ or CA-2304082-$ or WO-2010103465-$ or EP-2251724-$ or AU-2002243312-$ or WO-9909442-$ or CN-1231430-$ or CA-2537354-$ or EP-1221630-$ or WO-0008503-$ or CA-2276631-$ or EP-1229366-$).did. or (EP-1879060-$ or CA-2594549-$ or CN-1258011-$ or WO-2005022228-$ or WO-2004008214-$ or WO-2004107001-$ or EP-1334394-$ or WO-2006007120-$ or CA-2276627-$ or EP-1415186-$ or WO-2005047946-$ or EP-1257012-$ or EP-1299758-$ or CA-2283016-$ or WO-9746900-$ or WO-9857208-$ or CA-2339502-$ or CA-2327007-$ or CA-2136212-$ or CN-1231429-$ or EP-0927899-$ or EP-0927898-$ or WO-0075701-$ or AU-1587897-$ or CA-2288247-$ or EP-1273944-$ or CA-2068453-$).did. or (GB-9011424-$ or WO-0182374-$ or EP-0927895-$ or CA-2312241-$ or MX-9202155-$ or CA-2330965-$ or DE-19846731-$ or EP-1039323-$ or FR-2752951-$ or WO-9964917-$ or GB-9622511-$ or EP-0961142-$ or CA-2237481-$ or WO-9931539-$ or EP-0821253-$ or CA-2222237-$ or EP-0323920-$ or EP-0490698-$ or			

		CA-1299407-$ or AU-1019788-$ or WO-9308493-$ or FR-2648240-$ or DE-9108955-$ or GB-8614272-$ or CA-1239820-$ or DE-3633340-$ or IT-7925047-$).did. or (GB-8332694-$ or EP-0109870-$ or DE-2933790-$ or DE-3021001-$ or GB-2058392-$).did. or (JP-2016009081-$ or JP-2016122050-$ or JP-2016085422-$ or JP-10050400-$ or JP-2002048946-$ or JP-08110439-$ or JP-09145959-$ or JP-10311934-$ or JP-09145957-$ or JP-07248434-$ or JP-01177508-$ or JP-59157605-$ or JP-56060409-$).did. or (US-20200174200-$ or US-20200166717-$ or US-20200142140-$ or US-20200124802-$ or US-20190384018-$ or US-20190339464-$ or US-20190339470-$ or US-20190324218-$ or US-20190302376-$ or US-20190285811-$ or US-20190243076-$ or US-20190235174-$ or CN-110031940-$ or US-20190219776-$ or US-20190212504-$ or US-20190200103-$ or US-20190190199-$ or US-20190179089-$ or US-20190179086-$ or US-20190179088-$ or US-20190181586-$ or US-20190154928-$ or US-20190129104-$ or US-20190101704-$ or US-20190101705-$ or WO-2019060293-$).did. or (US-20200088955-$ or US-10234635-$ or US-20190079252-$ or US-10222562-$ or KR-2019006212-$ or WO-2019012006-$ or US-20190025526-$ or US-20190011645-$ or US-20190064452-$ or US-20180356600-$ or KR-2018129442-$ or US-20180329154-$ or US-20180335571-$ or US-20180335577-$ or US-20180335581-$ or US-10107967-$ or US-20180314014-$ or US-20180306997-$ or US-10107972-$ or US-20180299624-$ or US-10101570-$ or US-20180292617-$ or WO-2018183496-$ or US-20180267255-$ or US-20180239093-$ or US-20180217338-$ or US-20180217339-$).did. or (US-20180210155-$ or US-10018787-$ or US-20180188455-$ or CN-108227089-$ or US-				

		20180156988-$ or US-9989712-$ or US-20190113692-$ or US-20180136416-$ or WO-2018085767-$ or US-9933582-$ or US-20180077472-$ or WO-2018045232-$ or WO-2018045234-$ or US-20180011261-$ or US-20170357060-$ or EP-3258301-$ or US-9823428-$ or US-20170299831-$ or US-20170293089-$ or WO-2017172600-$ or US-20170285277-$ or WO-2017160697-$ or WO-2017147401-$ or CN-106918869-$ or US-20170242199-$ or WO-2017136437-$ or US-20170227719-$).did. or (JP-2017134310-$ or US-20170212316-$ or US-20170205591-$ or US-20170192182-$ or WO-2017066139-$ or US-20170045702-$ or US-20170045695-$ or US-20170003456-$ or US-20160349464-$ or US-9482823-$ or US-9482825-$ or US-20160306124-$ or EP-3078999-$ or US-20160282562-$ or US-9448369-$ or WO-2016137934-$ or US-20160238789-$ or WO-2016123128-$ or US-20160223757-$ or US-20160223763-$ or US-20160195682-$ or WO-2016104132-$ or US-20160161681-$ or WO-2016086881-$ or WO-2016082160-$ or US-20160139345-$ or EP-3021144-$).did. or (EP-3021146-$ or WO-2016068966-$ or US-20160109676-$ or WO-2016053852-$ or WO-2016053673-$ or WO-2016049208-$ or US-20160091673-$ or US-20160085045-$ or US-20160077284-$ or WO-2016039383-$ or US-20150370017-$ or WO-2015191024-$ or US-20160370549-$ or US-20150355417-$ or JP-5805344-$ or US-20150309279-$ or WO-2015158564-$ or WO-2015150149-$ or US-20150253518-$ or AU-2014101479-$ or US-20150131946-$ or WO-2015047380-$ or WO-2015029585-$ or WO-2014186436-$ or US-20140314385-$ or US-20140294339-$ or US-20140241667-$).did. or (US-20140219615-$ or US-20140205241-$ or AU-2014100325-$ or CN-103645545-$ or US-				

		20140072265-$ or US-20180100982-$ or US-20130302004-$ or WO-2013126429-$ or US-20130209041-$ or US-20130170796-$ or US-20130170797-$ or WO-2013077969-$ or US-20130089293-$ or WO-2013019622-$ or WO-2013019189-$ or US-20120263423-$ or WO-2012106510-$ or WO-2012106513-$ or WO-2012106518-$ or JP-2012120095-$ or US-20120141070-$ or US-20110243504-$ or US-20110150396-$ or US-20110081798-$ or US-20110044590-$ or WO-2011019581-$ or KR-2011002571-$).did. or (US-20100322554-$ or US-20100310213-$ or WO-2010138446-$ or EP-2251724-$ or US-20100135618-$ or US-20100074616-$ or US-20090290838-$ or US-20090238522-$ or WO-2009023673-$ or EP-1990665-$ or US-20080253719-$ or WO-2008045560-$ or EP-1887395-$ or US-20070160327-$ or US-20050271328-$ or US-20050226567-$ or WO-2005022229-$ or WO-2005022228-$ or WO-2005022227-$ or US-20040223701-$ or US-20040105628-$ or US-20040062486-$ or WO-2004008214-$ or US-20040008494-$ or KR-2003071425-$ or US-20030044127-$ or KR-2003012941-$).did. or (US-20030031448-$ or US-20030031419-$ or EP-1257012-$ or KR-2002019797-$ or WO-0219002-$ or WO-0216989-$ or WO-0216530-$ or WO-0182374-$ or EP-1150149-$ or CA-2339502-$ or WO-0155762-$ or EP-1116974-$ or WO-0137010-$ or WO-0075701-$ or WO-0070381-$ or EP-1054278-$ or EP-1039322-$ or JP-2000199833-$ or EP-1016886-$ or EP-1014126-$ or EP-997753-$ or WO-0008503-$ or EP-969299-$ or EP-969298-$ or WO-9964917-$ or EP-961142-$ or WO-9957786-$).did. or (EP-949522-$ or EP-927899-$ or EP-927898-$ or WO-9931539-$ or US-5915058-$ or WO-9928773-$ or US-5909526-$ or EP-916974-$ or WO-9909442-$ or US-5867621-$ or WO-9859271-$ or US-5778122-$ or				

		EP-821253-$ or US-5666456-$ or JP-09145959-$ or GB-2306696-$ or US-5555332-$ or EP-712015-$ or US-5519799-$ or WO-9323777-$ or EP-514722-$ or US-5134673-$ or EP-323920-$ or EP-277390-$ or GB-2176629-$ or GB-2151040-$ or GB-2058392-$).did. or (EP-8329-$).did.				
S810	736	(US-20180321449-$ or US-20190004252-$ or US-20170059785-$ or US-20190137700-$ or US-20130158512-$ or US-20180364422-$ or US-20150378113-$ or US-20200012052-$ or US-20100054668-$ or US-20060093274-$ or US-20140029900-$ or US-20190004251-$ or US-20190258010-$ or US-20140153878-$ or US-20180128988-$ or US-20190170931-$ or US-20140153879-$ or US-20190137697-$ or US-20190137695-$ or US-20160349458-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20170176691-$ or US-20100322563-$).did. or (US-20190033531-$ or US-20170261696-$ or US-20180364436-$ or US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180217336-$ or US-20110058774-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180120517-$ or US-20170363818-$ or US-20160274314-$ or US-20170205586-$ or US-20140169727-$ or US-20160223774-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170176692-$ or US-20120093462-$ or US-20170068064-$ or US-20170063464-$ or US-20170023746-$).did. or (US-20110299266-$ or US-20140016901-$ or US-20160327756-$ or US-20160306122-$ or US-20150260924-$ or US-20160282565-$ or US-20160202428-$ or US-20140205257-$ or US-20160091674-$ or US-20150277059-$ or US-20150260923-$ or US-20150198774-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 11:59

		20140037253-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20120155803-$ or US-20140168987-$ or US-20140161392-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-$ or US-20110064361-$).did. or (US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20110229092-$ or US-20110229083-$ or US-20080226235-$ or US-20080273840-$ or US-20100178014-$ or US-20100178010-$ or US-20040157499-$ or US-20080013889-$ or US-20100027942-$ or US-20090135429-$ or US-20020126960-$ or US-20060127028-$ or US-20080317415-$ or US-20080090433-$ or US-20060257075-$ or US-20080124033-$ or US-20060083466-$ or US-20070292084-$ or US-20060018603-$ or US-20060204178-$ or US-20070031103-$ or US-20060275007-$ or US-20060257076-$).did. or (US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060063436-$ or US-20060045428-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20020176960-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20020142634-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$ or US-20190219775-$ or US-20200200977-$ or US-20200183092-$).did. or (US-20200150374-$ or US-20200124805-$ or US-20200081193-$ or US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-				

		$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-$).did. or (US-10324264-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$ or US-7857523-$ or US-7572063-$ or US-5971625-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6179476-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$).did. or (US-6364537-$ or US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-5717533-$ or US-5212752-$ or US-6179477-$ or US-6130977-$ or US-5546281-$ or US-6062739-$ or US-5970598-$ or US-5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$).did. or (US-5577146-$ or US-5436994-$ or US-5121454-$ or US-5400428-$ or US-5396572-$ or US-5265182-$ or US-5329604-$ or US-5261019-$ or US-5289554-$ or US-5276755-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$ or US-5067783-$).did. or (US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$				

		or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$ or US-4728171-$).did. or (US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$ or US-10670824-$ or US-10444442-$).did. or (CA-3068131-$ or EP-3180644-$ or WO-2016140710-$ or WO-2018009426-$ or WO-2015070382-$ or EP-3123221-$ or WO-2019246241-$ or EP-3579031-$ or GB-201905648-$ or CN-105683795-$ or WO-2018044728-$ or WO-2019086961-$ or EP-2852856-$ or WO-2017182535-$ or EP-3330757-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$ or CN-107636504-$ or CN-206479676-$ or WO-2016174980-$ or AU-2004274992-$ or CA-2866107-$ or WO-2012015713-$ or FR-2997767-$ or CN-102520489-$).did. or (CN-102445735-$ or CN-103676018-$ or AU-2006295165-$ or WO-2015120031-$ or GB-9525323-$ or GB-201220748-$ or CN-102385113-$ or WO-2014054357-$ or CA-2593676-$ or DE-102010021179-$ or GB-201004720-$ or EP-1762871-$ or DE-112006003952-$ or CA-2441872-$ or DE-60026115-$ or WO-2008033262-$ or KR-20040020797-$ or EP-1783524-$ or KR-100452879-$ or WO-9723794-$ or DE-19601949-$ or CA-2302068-$ or DE-20111078-$ or DE-10031931-$ or DE-19834723-$ or MX-9201992-$ or DE-19525739-$).did. or (DE-29614436-$ or DE-3914978-$ or EP-0339876-$ or EP-0546936-$ or CH-687105-$ or GB-				

		9408857-$ or EP-0324272-$ or FR-2707402-$ or IT-MI913184-$ or WO-9415232-$ or EP-0183820-$ or GB-9025881-$ or EP-0253426-$ or DE-4203966-$ or GB-9103982-$ or CH-676513-$ or DE-9012174-$ or DE-9010357-$ or EP-0154781-$ or DE-8911081-$ or DE-8911080-$ or EP-0292024-$ or KR-870005264-$ or EP-0166636-$ or DE-8901052-$ or DE-8900623-$ or DE-8812341-$).did. or (DE-3737842-$ or FR-2528984-$ or DE-3701421-$ or EP-0249406-$ or EP-0098190-$ or EP-0098205-$ or EP-0153249-$ or DE-2932986-$ or GB-2086602-$ or DE-2832839-$ or EP-0045271-$ or FR-2502798-$ or AU-3682878-$ or WO-8002213-$ or GB-1450760-$ or GB-1526682-$ or FR-2316611-$ or FR-2268370-$ or WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$).did. or (JP-2005258017-$ or JP-2000241670-$ or JP-03059503-$ or JP-61028909-$ or JP-61129605-$ or JP-59036207-$ or JP-58190910-$ or JP-59038707-$ or JP-56062212-$ or JP-2002098860-$ or JP-05215939-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$ or JP-2019184942-$).did. or (US-20190369336-$ or EP-3579031-$ or CN-110376684-$ or US-20190162914-$ or US-20190162917-$ or US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-				

		$ or US-20190004256-$ or US-20190004258-$ or CN-108983368-$ or US-20180372962-$ or US-20180364422-$ or KR-2018131725-$).did. or (US-20180341069-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or CN-207965228-$ or CN-207965231-$ or US-20180292612-$ or CN-108508541-$ or CN-108490551-$ or CN-108279462-$ or JP-6363784-$ or US-20180203196-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or WO-2018057615-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018006987-$ or WO-2018008399-$ or CN-107479141-$).did. or (EP-3249434-$ or WO-2017182535-$ or KR-2017103050-$ or US-20170264045-$ or US-20180231722-$ or US-20170261698-$ or US-20170261696-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017095928-$ or WO-2017106514-$ or US-20170176691-$ or US-20170176692-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$).did. or (US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or CN-104914515-$ or WO-2015142551-$ or US-20150260923-$ or WO-2015126470-$ or WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-				

		20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$).did. or (US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$ or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$ or WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$).did. or (US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$ or US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$).did. or (EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9637793-$ or DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-467631-$ or EP-462907-$ or US-				

		5067783-$ or EP-448162-$).did. or (EP-440447-$ or EP-420490-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or EP-335531-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$ or EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$).did. or (EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$ or GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$ or US-20200209492-$ or US-20200200977-$ or US-20200200979-$ or US-20200183093-$ or US-20200166716-$ or US-20200150374-$ or US-20200142141-$ or US-20200124805-$ or US-20200116949-$ or US-20200116952-$).did. or (US-20200116953-$ or US-20200116954-$ or US-20200110224-$ or US-20200103598-$ or US-20200103599-$ or US-20200096709-$ or US-20200096710-$ or US-20200096708-$ or US-20200081198-$ or US-20200057205-$ or US-20200049899-$ or US-20200033539-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$).did. or (EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190219775-$ or US-20190204513-$ or US-20200081193-$ or US-				

		20200012053-$ or US-20200003961-$ or US-20190227240-$).did.				
S811	2,183	(US-20200225425-$ or US-20200225424-$ or US-20200225422-$ or US-20190056557-$ or US-20190179086-$ or US-20190064447-$ or US-20180217337-$ or US-20200183093-$ or US-20160018593-$ or US-20200166716-$ or US-20110222819-$ or US-20170285282-$ or US-20180246282-$ or US-20160259135-$ or US-20180143384-$ or US-20200142133-$ or US-20190041584-$ or US-20200132934-$ or US-20200116957-$ or US-20200110224-$ or US-20200096708-$ or US-20200088954-$ or US-20160274311-$ or US-20200088949-$ or US-20200073059-$ or US-20200018909-$).did. or (US-20160124160-$ or US-20190146160-$ or US-20140064665-$ or US-20170139158-$ or US-20190377139-$ or US-20160209599-$ or US-20160025942-$ or US-20140072265-$ or US-20180329158-$ or US-20180011254-$ or US-20080175541-$ or US-20190018201-$ or US-20180267255-$ or US-20180081127-$ or US-20170373756-$ or US-20160216454-$ or US-20170219779-$ or US-20090148101-$ or US-20180252872-$ or US-20190187392-$ or US-20190179085-$ or US-20130216186-$ or US-20190170957-$ or US-20180156985-$ or US-20190154924-$ or US-20160327757-$ or US-20190113691-$).did. or (US-20160161680-$ or US-20190101709-$ or US-20190086617-$ or US-20190033533-$ or US-20190025523-$ or US-20190025522-$ or US-20190004261-$ or US-20180364421-$ or US-20180348443-$ or US-20180341072-$ or US-20160018604-$ or US-20180329155-$ or US-20180329153-$ or US-20180292618-$ or US-20180292612-$ or US-20160139346-$ or US-20160349464-$ or US-20180239091-$ or US-20180231730-$ or US-20160209610-$ or US-20180231722-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 11:59

		20170219789-$ or US-20160131857-$ or US-20180217338-$ or US-20180210155-$ or US-20180210154-$ or US-20180210153-$).did. or (US-20180196204-$ or US-20180196202-$ or US-20180188460-$ or US-20180180819-$ or US-20180172942-$ or US-20180164510-$ or US-20180157002-$ or US-20180156988-$ or US-20180149813-$ or US-20180143381-$ or US-20180136410-$ or US-20180128991-$ or US-20150036980-$ or US-20180113268-$ or US-20180113259-$ or US-20180106975-$ or US-20180106973-$ or US-20180095232-$ or US-20180088289-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180081139-$ or US-20180081128-$ or US-20180081125-$ or US-20180081122-$).did. or (US-20180078781-$ or US-20180077472-$ or US-20180074277-$ or US-20180059338-$ or US-20180052288-$ or US-20150362681-$ or US-20180031782-$ or US-20180031775-$ or US-20180031774-$ or US-20180024302-$ or US-20180024301-$ or US-20180024300-$ or US-20180024294-$ or US-20180017740-$ or US-20180013228-$ or US-20180013227-$ or US-20180011261-$ or US-20180011258-$ or US-20180003910-$ or US-20180003903-$ or US-20170371118-$ or US-20170371116-$ or US-20170371107-$ or US-20170363829-$ or US-20170363827-$ or US-20170363815-$ or US-20170363810-$).did. or (US-20170363509-$ or US-20170359091-$ or US-20170357060-$ or US-20170357059-$ or US-20170351038-$ or US-20170351037-$ or US-20170343760-$ or US-20170343742-$ or US-20170343741-$ or US-20170341972-$ or US-20170336577-$ or US-20170336571-$ or US-20170331234-$ or US-20170329090-$ or US-20170315308-$ or US-20170315307-$ or US-20170315305-$ or US-20170315304-$ or US-20170315303-$ or US-20170307832-				

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		$ or US-20110075971-$ or US-20110075969-$ or US-20110058772-$ or US-20090087147-$ or US-20110044589-$ or US-20110044583-$ or US-20110038592-$ or US-20110038590-$ or US-20110038581-$ or US-20090220227-$ or US-20110019964-$ or US-20100329604-$ or US-20100329602-$ or US-20100322580-$ or US-20100322576-$ or US-20100322561-$).did. or (US-20100322554-$ or US-20100303408-$ or US-20100296792-$ or US-20100290745-$ or US-20100284655-$ or US-20100278497-$ or US-20100278488-$ or US-20100272408-$ or US-20100266245-$ or US-20100260457-$ or US-20100247057-$ or US-20100247042-$ or US-20100247040-$ or US-20100239220-$ or US-20100239213-$ or US-20100232757-$ or US-20100226654-$ or US-20100215322-$ or US-20100209063-$ or US-20100209050-$ or US-20100202737-$ or US-20100183276-$ or US-20100183265-$ or US-20090003772-$ or US-20100158444-$ or US-20100146764-$ or US-20100142899-$).did. or (US-20100141934-$ or US-20100135618-$ or US-20100129032-$ or US-20100129028-$ or US-20100111484-$ or US-20100104355-$ or US-20080019642-$ or US-20100092134-$ or US-20100092131-$ or US-20100086258-$ or US-20100081303-$ or US-20100080513-$ or US-20100074616-$ or US-20100067852-$ or US-20100061681-$ or US-20100059901-$ or US-20100054665-$ or US-20100046893-$ or US-20090003771-$ or US-20100029117-$ or US-20100027944-$ or US-20100027943-$ or US-20100021111-$ or US-20100014815-$ or US-20100002999-$ or US-20090305542-$ or US-20090304335-$).did. or (US-20090290839-$ or US-20090290838-$ or US-20090285534-$ or US-20090285530-$ or US-20090274432-$ or US-20090274431-$ or US-20090257722-$ or US-20090257719-$ or US-20090252458-$ or US-				

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		$ or US-20070154135-$ or US-20070140623-$ or US-20070127873-$ or US-20070116414-$ or US-20070116411-$ or US-20040228584-$ or US-20070105452-$ or US-20070098330-$ or US-20070098329-$ or US-20070098327-$ or US-20070058907-$ or US-20050018979-$ or US-20070036487-$ or US-20070019913-$ or US-20060291782-$ or US-20060285807-$ or US-20060280409-$ or US-20060269212-$ or US-20060269206-$).did. or (US-20060269205-$ or US-20050123248-$ or US-20060245711-$ or US-20060204200-$ or US-20060204180-$ or US-20060197943-$ or US-20060193565-$ or US-20060193562-$ or US-20060177182-$ or US-20060169856-$ or US-20060159401-$ or US-20060159399-$ or US-20060154529-$ or US-20060153504-$ or US-20060153503-$ or US-20060147156-$ or US-20060147155-$ or US-20060140542-$ or US-20060133758-$ or US-20060093282-$ or US-20060093275-$ or US-20060088248-$ or US-20060083468-$ or US-20060083467-$ or US-20060072878-$ or US-20060067631-$ or US-20060067628-$).did. or (US-20060056769-$ or US-20060051028-$ or US-20060045430-$ or US-20060029333-$ or US-20060013539-$ or US-20060002662-$ or US-20050286853-$ or US-20050286835-$ or US-20050286833-$ or US-20050281526-$ or US-20050281509-$ or US-20050271328-$ or US-20050260880-$ or US-20050238292-$ or US-20050238289-$ or US-20050232552-$ or US-20050226586-$ or US-20050220423-$ or US-20050220420-$ or US-20050215119-$ or US-20050207708-$ or US-20050196104-$ or US-20050185894-$ or US-20050157985-$ or US-20050135753-$ or US-20050135752-$ or US-20050123246-$).did. or (US-20050118880-$ or US-20050112939-$ or US-20050111796-$ or US-20050111795-$ or US-20050094948-$ or US-20050094943-$ or US-				

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		$ or US-20030174971-$ or US-20030174922-$ or US-20030169992-$ or US-20030169975-$ or US-20030169974-$ or US-20030156796-$ or US-20030147597-$ or US-20030147230-$ or US-20030142923-$ or US-20030142918-$ or US-20030128934-$ or US-20030128933-$ or US-20030113086-$ or US-20030108320-$ or US-20030103730-$ or US-20030095780-$ or US-20030095779-$ or US-20030091297-$ or US-20030091292-$ or US-20030087505-$ or US-20030081905-$ or US-20030072537-$).did. or (US-20030072536-$ or US-20030068135-$ or US-20030063868-$ or US-20030063866-$ or US-20030063862-$ or US-20030053760-$ or US-20030044127-$ or US-20030044125-$ or US-20030044123-$ or US-20030044122-$ or US-20030044115-$ or US-20030031452-$ or US-20030031449-$ or US-20030031422-$ or US-20030012544-$ or US-20030012516-$ or US-20030012512-$ or US-20030007740-$ or US-20030007739-$ or US-20030002816-$ or US-20030002814-$ or US-20030002808-$ or US-20020197018-$ or US-20020191919-$ or US-20020191881-$ or US-20020186934-$ or US-20020186742-$).did. or (US-20020181888-$ or US-20020181884-$ or US-20020177364-$ or US-20020176670-$ or US-20020172469-$ or US-20020172467-$ or US-20020168150-$ or US-20020168149-$ or US-20020166226-$ or US-20020164899-$ or US-20020159745-$ or US-20020159714-$ or US-20020159712-$ or US-20020159710-$ or US-20020150353-$ or US-20020150346-$ or US-20020150345-$ or US-20020150344-$ or US-20020150343-$ or US-20020150342-$ or US-20020146213-$ or US-20020131720-$ or US-20020126961-$ or US-20020122652-$ or US-20020118926-$ or US-20020114589-$ or US-20020114582-$).did. or (US-20020114581-$ or US-20020106167-$ or US-20020106162-$ or US-				

		20020094727-$ or US-20020090177-$ or US-20020081076-$ or US-20020064349-$ or US-20020061171-$ or US-20020031313-$ or US-20020031310-$ or US-20020031309-$ or US-20020028055-$ or US-20020025125-$ or US-20020025121-$ or US-20020025099-$ or US-20020012503-$ or US-20020012502-$ or US-20020012501-$ or US-20020012238-$ or US-20020006253-$ or US-20020003932-$ or US-20010048790-$ or US-20010043776-$ or US-20010041030-$ or US-20010038737-$ or US-20010033730-$ or US-20010016102-$).did. or (US-20010010741-$ or US-20190204513-$ or US-20200064561-$ or US-20200057208-$ or US-20200041730-$ or US-20190235182-$ or US-20190391350-$ or US-20190384017-$ or US-20190353852-$ or US-20190346631-$ or US-20190317281-$ or US-20190310432-$ or US-20190278039-$ or US-20190278025-$ or US-20190271816-$ or US-20190250340-$ or US-20190243083-$ or US-20190235178-$ or US-20190227244-$ or US-20190219772-$).did. or (US-10718914-$ or US-10718911-$ or US-10718909-$ or US-10705306-$ or US-10295760-$ or US-10261275-$ or US-10156683-$ or US-10146014-$ or US-10107967-$ or US-10067302-$ or US-10067300-$ or US-10018787-$ or US-10007069-$ or US-9989710-$ or US-9948017-$ or US-9946038-$ or US-9946037-$ or US-9946036-$ or US-9939600-$ or US-9939590-$ or US-9939589-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9927582-$ or US-9915793-$).did. or (US-9910229-$ or US-9910228-$ or US-9910226-$ or US-9904021-$ or US-9904020-$ or US-9904019-$ or US-9897767-$ or US-9893813-$ or US-9891392-$ or US-9891390-$ or US-9891387-$ or US-9891385-$ or US-9885841-$ or US-9880365-$ or US-9880357-$ or US-9876309-$ or US-9874702-$ or US-9869826-$ or US-			

		9864151-$ or US-9857545-$ or US-9857537-$ or US-9851512-$ or US-9846283-$ or US-9841566-$ or US-9835808-$ or US-9835807-$).did. or (US-9829650-$ or US-9829643-$ or US-9827438-$ or US-9823428-$ or US-9817195-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9798096-$ or US-9798090-$ or US-9797806-$ or US-9784928-$ or US-9778425-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9759874-$ or US-9759869-$ or US-9746625-$ or US-9746368-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9735523-$).did. or (US-9733436-$ or US-9733434-$ or US-9733123-$ or US-9726830-$ or US-9726829-$ or US-9722367-$ or US-9720184-$ or US-9709753-$ or US-9703062-$ or US-9696497-$ or US-9696477-$ or US-9684134-$ or US-9678286-$ or US-9678283-$ or US-9678282-$ or US-9671570-$ or US-9671568-$ or US-9664864-$ or US-9658407-$ or US-9645335-$ or US-9645326-$ or US-9638871-$ or US-9638868-$ or US-9632267-$ or US-9625658-$ or US-9625657-$ or US-9625655-$).did. or (US-9606303-$ or US-9551831-$ or US-9482825-$ or US-9453972-$ or US-9448369-$ or US-9389368-$ or US-9377591-$ or US-9323007-$ or US-9316794-$ or US-9316791-$ or US-9291781-$ or US-9229177-$ or US-9229170-$ or US-9207454-$ or US-9002168-$ or US-8953922-$ or US-8814443-$ or US-8757893-$ or US-8588571-$ or US-8517614-$ or US-8459879-$ or US-8388235-$ or US-8206040-$ or US-8070366-$ or US-7972066-$ or US-7738757-$ or US-7712970-$).did. or (US-7706657-$ or US-7630609-$ or US-7588373-$ or US-7585118-$ or US-7530845-$ or US-7412148-$ or US-7232261-$ or US-7229220-$ or US-7192198-$ or US-7052186-$ or US-7036996-$ or US-6944378-$ or US-6895146-$ or US-6856748-$ or US-6848834-$ or US-6840680-$ or				

		US-6839583-$ or US-6830382-$ or US-6817777-$ or US-6793399-$ or US-6789953-$ or US-6786647-$ or US-6712521-$ or US-6702475-$ or US-6695485-$ or US-6688782-$ or US-6667803-$).did. or (US-6644866-$ or US-6634794-$ or US-6632023-$ or US-6623172-$ or US-6619859-$ or US-6619856-$ or US-6612750-$ or US-6601995-$ or US-6599032-$ or US-6595696-$ or US-6582132-$ or US-6572276-$ or US-6572273-$ or US-6561699-$ or US-6558044-$ or US-6554486-$ or US-6554482-$ or US-6543941-$ or US-6533469-$ or US-6533465-$ or US-6527450-$ or US-6526210-$ or US-6524015-$ or US-6510267-$ or US-6508593-$ or US-6501900-$ or US-6498882-$).did. or (US-6497518-$ or US-6497516-$ or US-6226429-$ or US-6491442-$ or US-6487343-$ or US-6485192-$ or US-6481900-$ or US-6481899-$ or US-6474876-$ or US-6471417-$ or US-6471412-$ or US-6467971-$ or US-6467970-$ or US-6466724-$ or US-6464406-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6457876-$ or US-6456768-$ or US-6450698-$ or US-6447172-$ or US-6445867-$ or US-6437894-$ or US-6435946-$ or US-6431762-$ or US-6425694-$).did. or (US-6425692-$ or US-6422761-$ or US-6422760-$ or US-6422759-$ or US-6419810-$ or US-6412987-$ or US-6412986-$ or US-6409394-$ or US-6409392-$ or US-6409391-$ or US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6389212-$ or US-6386768-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6379052-$ or US-6377840-$ or US-6375363-$ or US-6305849-$ or US-6371659-$ or US-6371657-$ or US-6367986-$ or US-6367984-$ or US-6364536-$).did. or (US-6361218-$ or US-6357932-$ or US-6357931-$ or US-6354746-$ or US-6352372-$ or US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6343950-$ or US-6334715-$ or US-6331079-$ or US-6328481-$ or US-6318904-$				

		or US-6318903-$ or US-6318902-$ or US-6089759-$ or US-6309111-$ or US-6302592-$ or US-6301004-$ or US-6095695-$ or US-6293706-$ or US-6290527-$ or US-6283640-$ or US-6045270-$ or US-6273618-$ or US-6267513-$ or US-6264375-$).did. or (US-6264373-$ or US-6264372-$ or US-6259839-$ or US-6256446-$ or US-6250817-$ or US-6247851-$ or US-6247849-$ or US-6243526-$ or US-6243518-$ or US-6240235-$ or US-6240229-$ or US-6238249-$ or US-6234681-$ or US-6231244-$ or US-6227719-$ or US-6227718-$ or US-6224269-$ or US-6220763-$ or US-6220762-$ or US-6219479-$ or US-6217226-$ or US-6215944-$ or US-6210045-$ or US-6206577-$ or US-6200040-$ or US-6196729-$ or US-6195477-$).did. or (US-6193420-$ or US-6190616-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6179480-$ or US-6179475-$ or US-6173099-$ or US-6164835-$ or US-6164834-$ or US-6154597-$ or US-6149315-$ or US-6149313-$ or US-6142676-$ or US-6139346-$ or US-6132105-$ or US-6116789-$ or US-6116101-$ or US-6108482-$ or US-6104856-$ or US-6102581-$ or US-6095694-$ or US-6088502-$ or US-6081647-$ or US-6079881-$ or US-6076975-$ or US-6064791-$).did. or (US-6059461-$ or US-6053639-$ or US-6048103-$ or US-6048102-$ or US-6045269-$ or US-6041155-$ or US-6027252-$ or US-6024498-$ or US-6022149-$ or US-6017154-$ or US-6012852-$ or US-6007256-$ or US-6004043-$ or US-6004042-$ or US-5993071-$ or US-5987203-$ or US-5984533-$ or US-5980117-$ or US-5971626-$ or US-5969294-$ or US-5963689-$ or US-5960137-$ or US-5956444-$ or US-5953474-$ or US-5953473-$ or US-5949946-$ or US-5862289-$).did. or (US-5940561-$ or US-5940559-$ or US-5937121-$ or US-5930426-$ or US-5930425-$ or US-5923805-$ or US-5921796-$ or US-5920670-$ or US-5920669-$ or US-				

		5915058-$ or US-5909526-$ or US-5909298-$ or US-5742720-$ or US-5737463-$ or US-5896477-$ or US-5892870-$ or US-5887100-$ or US-5887098-$ or US-5881191-$ or US-5870515-$ or US-5867894-$ or US-5867621-$ or US-5862282-$ or US-5845036-$ or US-5727097-$ or US-5838856-$ or US-5838855-$).did. or (US-5832158-$ or US-5825955-$ or US-5818993-$ or US-5815621-$ or US-5815618-$ or US-5809191-$ or US-5799122-$ or US-5796896-$ or US-5781680-$ or US-5778123-$ or US-5778122-$ or US-5774612-$ or US-5774611-$ or US-5768738-$ or US-5548677-$ or US-5764043-$ or US-5761359-$ or US-5751874-$ or US-5748818-$ or US-5737464-$ or US-5734770-$ or US-5732174-$ or US-5732173-$ or US-5727102-$ or US-5721799-$ or US-5701380-$ or US-5694507-$).did. or (US-5694506-$ or US-5692089-$ or US-5692080-$ or US-5687268-$ or US-5682449-$ or US-5680494-$ or US-5673346-$ or US-5671310-$ or US-5668904-$ or US-5666456-$ or US-5666449-$ or US-5664955-$ or US-5661833-$ or US-5581644-$ or US-5651084-$ or US-5647043-$ or US-5645449-$ or US-5642450-$ or US-5633969-$ or US-5620634-$ or US-5619610-$ or US-5386485-$ or US-5611017-$ or US-5611010-$ or US-5607323-$ or US-5603631-$ or US-5602951-$).did. or (US-5600749-$ or US-5600746-$ or US-5325454-$ or US-5592323-$ or US-5588086-$ or US-5588079-$ or US-5579429-$ or US-5574817-$ or US-5574813-$ or US-5570445-$ or US-5563978-$ or US-5563974-$ or US-5563971-$ or US-5555332-$ or US-5550943-$ or US-5548674-$ or US-5542015-$ or US-5537501-$ or US-5530783-$ or US-5528711-$ or US-5521998-$ or US-5521997-$ or US-5519799-$ or US-5506922-$ or US-5499310-$ or US-5497444-$ or US-5485537-$).did. or (US-5483608-$ or US-5473717-$ or US-5452391-$ or US-5450519-$ or US-5446817-$ or US-5444806-$ or				

		US-5420951-$ or US-5418875-$ or US-5339376-$ or US-5414786-$ or US-5408557-$ or US-5367595-$ or US-5384885-$ or US-5379360-$ or US-5372758-$ or US-5367594-$ or US-5366383-$ or US-5363460-$ or US-5359688-$ or US-5339377-$ or US-5335301-$ or US-5333225-$ or US-5333222-$ or US-5333221-$ or US-5329541-$ or US-5323475-$ or US-5317663-$).did. or (US-5315679-$ or US-5315678-$ or US-5305409-$ or US-5297227-$ or US-5293581-$ or US-5282259-$ or US-5280552-$ or US-5274729-$ or US-5267342-$ or US-5265181-$ or US-5259052-$ or US-5239606-$ or US-5233675-$ or US-5233674-$ or US-5231685-$ or US-5228104-$ or US-5222168-$ or US-5214730-$ or US-5210815-$ or US-5199093-$ or US-5179607-$ or US-5177808-$ or US-5166995-$ or US-5159654-$ or US-5157749-$ or US-5155795-$ or US-5134677-$).did. or (US-5134676-$ or US-5134673-$ or US-5133032-$ or US-5129024-$ or US-5127073-$ or US-5124506-$ or US-5119455-$ or US-5115484-$ or US-5109468-$ or US-5109453-$ or US-5101463-$ or US-5091991-$ or US-5091990-$ or US-5082346-$ or US-5082344-$ or US-5077815-$ or US-5076656-$ or US-5073042-$ or US-5064268-$ or US-5058983-$ or US-5052774-$ or US-5048916-$ or US-5042891-$ or US-5018823-$ or US-5016972-$ or US-5016970-$ or US-5015060-$).did. or (US-5013124-$ or US-4998797-$ or US-4998796-$ or US-4995688-$ or US-4993803-$ or US-4991929-$ or US-4986762-$ or US-4986622-$ or US-4976510-$ or US-4973127-$ or US-4973126-$ or US-4964688-$ or US-4960317-$ or US-4955976-$ or US-4953929-$ or US-4944079-$ or US-4921325-$ or US-4915472-$ or US-4900118-$ or US-4898446-$ or US-4892380-$ or US-4886335-$ or US-4877303-$ or US-4856866-$ or US-4854664-$ or US-4852963-$ or US-4850671-$).did. or (US-4850536-$ or US-4848870-$ or US-4846544-$				

		or US-4844570-$ or US-4842361-$ or US-4834486-$ or US-4830456-$ or US-4824196-$ or US-4818058-$ or US-4813760-$ or US-4807957-$ or US-4805980-$ or US-4795231-$ or US-4793683-$ or US-4789216-$ or US-4787700-$ or US-4786135-$ or US-4784456-$ or US-4783137-$ or US-4781429-$ or US-4773725-$ or US-4767178-$ or US-4762389-$ or US-4762387-$ or US-4759600-$ or US-4759599-$ or US-4758719-$).did. or (US-4741590-$ or US-4740052-$ or US-4737009-$ or US-4722081-$ or US-4718744-$ or US-4717234-$ or US-4715674-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4699460-$ or US-4688887-$ or US-4687291-$ or US-4681398-$ or US-4674831-$ or US-4666241-$ or US-4648688-$ or US-4645296-$ or US-4615581-$ or US-4614402-$ or US-4579418-$ or US-4575183-$ or US-4548467-$ or US-4526438-$ or US-4515434-$ or US-4506946-$ or US-4497536-$).did. or (US-4487474-$ or US-4486072-$ or US-4484796-$ or US-4477146-$ or US-4466009-$ or US-4464817-$ or US-4461539-$ or US-4447121-$ or US-4445753-$ or US-4444461-$ or US-4422716-$ or US-4415232-$ or US-4387957-$ or US-4385801-$ or US-4371233-$ or US-4368948-$ or US-4354731-$ or US-4341439-$ or US-4330172-$ or US-4327964-$ or US-4320938-$ or US-4310218-$ or US-4295707-$ or US-4291943-$ or US-4279469-$ or US-4268115-$ or US-4268114-$).did. or (US-4252407-$ or US-4240695-$ or US-4223976-$ or US-4218113-$ or US-4214812-$ or US-4201445-$ or US-4201444-$ or US-4186997-$ or US-4186996-$ or US-4168109-$ or US-4167304-$ or US-4160580-$ or US-4140365-$ or US-4101198-$ or US-4087158-$ or US-4080044-$ or US-3999837-$ or US-3933409-$ or US-10545295-$ or US-10502903-$ or US-10401575-$ or US-10353155-$).did. or (EP-3258301-$ or EP-3054333-$ or CA-2885821-$ or EP-2444827-$ or WO-				

		2018004847-$ or JP-6173629-$ or WO-2015043158-$ or CN-206584076-$ or WO-2016161341-$ or DE-202016103178-$ or WO-2016082160-$ or EP-3021145-$ or JP-5905950-$ or CA-2689768-$ or CA-2928026-$ or CA-2762411-$ or CA-2859345-$ or DE-202013012295-$ or WO-2016004347-$ or WO-2015190211-$ or EP-2942653-$ or CN-204595258-$ or WO-2015116589-$ or WO-2015103783-$ or GB-201507758-$ or CA-2932688-$).did. or (WO-2015068103-$ or EP-2843452-$ or WO-2014143748-$ or JP-5433802-$ or CN-102870023-$ or WO-2012151175-$ or WO-2014049469-$ or WO-2014009463-$ or CA-2912155-$ or WO-2013126068-$ or WO-2013115791-$ or WO-2013115789-$ or CA-2662854-$ or WO-2011152874-$ or GB-201218194-$ or CN-102456976-$ or WO-2011139938-$ or WO-2011044724-$ or CN-101122658-$ or CN-101931134-$ or WO-2010068896-$ or WO-2010025180-$ or EP-2138880-$ or WO-2009110421-$ or CA-2503690-$ or WO-2008006402-$ or CN-1331421-$).did. or (EP-1168016-$ or EP-1172672-$ or EP-1530068-$ or CA-2321428-$ or AU-2003291687-$ or JP-3106420-$ or EP-1168018-$ or CA-2191600-$ or WO-03093883-$ or CA-2484569-$ or DE-10114144-$ or CN-1118443-$ or WO-03016975-$ or NL-1018440-$ or CA-2284331-$ or EP-0690319-$ or CA-2030897-$ or WO-0155762-$ or CA-2418331-$ or DE-20118858-$ or EP-1124147-$ or EP-1172673-$ or WO-0137010-$ or CA-2198522-$ or WO-0161397-$ or EP-1039324-$ or EP-1039322-$).did. or (EP-1033595-$ or EP-1033594-$ or GB-0007281-$ or EP-0992819-$ or GB-9919699-$ or CA-2262351-$ or CA-2294930-$ or EP-0696748-$ or WO-9734176-$ or CA-2171494-$ or WO-9627811-$ or EP-0633485-$ or EP-0249237-$ or EP-0262847-$ or CA-2082276-$ or GB-9106183-$ or DE-9107960-$ or GB-9103604-$ or				

		WO-9015350-$ or DE-8626183-$ or EP-0262631-$ or EP-0061243-$ or WO-8600147-$ or DE-3112078-$ or GB-2081468-$ or IT-8323399-$ or IT-8323399-$).did. or (GB-2057158-$ or GB-8306227-$ or DK-208682-$ or FR-2487528-$ or FR-2435053-$ or BE-871785-$ or CA-1097111-$ or IT-7925110-$ or FR-2363124-$ or BE-871785-$ or CA-1043604-$ or WO-2019190616-$ or CN-110068899-$).did. or (JP-09033756-$ or JP-04214510-$ or JP-11072659-$ or JP-04220604-$ or JP-56074211-$ or JP-2017138535-$ or JP-05313040-$ or JP-62111222-$ or JP-59140411-$ or JP-59075218-$ or JP-57044113-$ or JP-56066811-$ or JP-55101904-$ or JP-54034251-$).did. or (US-20190107679-$ or US-20180224615-$ or WO-2018125706-$ or US-20180156985-$ or US-20180128988-$ or US-20180120519-$ or US-20180106973-$ or US-20180081128-$ or US-20180052288-$ or US-20180011258-$ or US-20180003903-$ or US-20180364421-$ or US-20170371109-$ or CN-107450131-$ or US-20170336577-$ or US-20170343760-$ or US-9804340-$ or US-20170307830-$ or FR-3050286-$ or US-20170299820-$ or US-20170293088-$ or US-20170261699-$ or US-20170254967-$ or US-20170254966-$ or US-20170227720-$ or US-9726830-$).did. or (US-20170219779-$ or JP-6173629-$ or US-20170205587-$ or US-9709753-$ or US-20170184790-$ or US-9678283-$ or US-20170153398-$ or US-20170139150-$ or US-20170139156-$ or US-20170102504-$ or US-20170115457-$ or WO-2017065999-$ or US-20170090127-$ or WO-2017038704-$ or US-20170059784-$ or US-20170031106-$ or US-20160377819-$ or US-20160349466-$ or US-20160341908-$ or US-20160341911-$ or WO-2016182556-$ or US-20160327757-$ or US-9482820-$ or WO-2016161341-$ or US-20160282566-$ or CN-105978629-$				

		or US-20160259135-$).did. or (US-20170329090-$ or EP-3054333-$ or US-9389368-$ or WO-2016105567-$ or US-9377591-$ or US-20160178852-$ or US-20160178859-$ or US-20160161680-$ or EP-3021145-$ or US-20160131854-$ or US-20160124158-$ or JP-5905950-$ or WO-2016053853-$ or WO-2016043922-$ or WO-2016033577-$ or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016024014-$ or JP-5860948-$ or CA-2859345-$ or US-20160025937-$ or US-20160004016-$ or US-20160004018-$ or US-20150378110-$ or WO-2015190211-$ or EP-2947485-$).did. or (US-20150331201-$ or CN-104950402-$ or DE-102015106225-$ or US-20160306125-$ or US-20150286012-$ or WO-2015144883-$ or US-20150241644-$ or US-20150226926-$ or US-20150226925-$ or WO-2015116589-$ or US-20150219864-$ or WO-2015103783-$ or CN-104570229-$ or CN-104516061-$ or US-20150177463-$ or US-20150162982-$ or WO-2015070382-$ or WO-2015068103-$ or WO-2015028433-$ or US-20150049989-$ or WO-2015009435-$ or US-20150023637-$ or EP-2818903-$ or US-20140363131-$ or WO-2014197701-$ or US-20140321808-$ or WO-2014165175-$).did. or (WO-2014143748-$ or US-20140219624-$ or EP-2759860-$ or WO-2014113753-$ or US-20140205247-$ or US-20140199034-$ or US-20140153879-$ or US-20140147081-$ or ES-1110405-$ or WO-2014049469-$ or TW-474924-$ or US-20140064688-$ or JP-5433802-$ or EP-2700992-$ or WO-2014011898-$ or US-20140016901-$ or WO-2014011283-$ or WO-2013177234-$ or WO-2013155395-$ or US-20130259429-$ or US-20130230283-$ or WO-2013126068-$ or WO-2013122865-$ or WO-2013117598-$ or WO-2013115789-$ or WO-2013115791-$ or US-				

		20130121645-$).did. or (CN-103091793-$ or WO-2013036843-$ or US-20130051749-$ or TW-201309089-$ or CN-102870023-$ or US-20120308183-$ or WO-2012151175-$ or US-20120263419-$ or US-20120251051-$ or US-20120251054-$ or TW-201233549-$ or US-20120099822-$ or EP-2444827-$ or US-20120082416-$ or US-20120057824-$ or KR-2012000895-$ or US-20120027355-$ or KR-2012000895-$ or WO-2011152874-$ or US-20110274437-$ or US-20110249942-$ or EP-2302431-$ or WO-2010137426-$ or EP-2206458-$ or WO-2010068896-$ or US-7712970-$ or WO-2010025180-$).did. or (US-20100040330-$ or WO-2009110421-$ or US-20090060423-$ or US-20090041411-$ or US-7435009-$ or US-20070098327-$ or US-20070077010-$ or US-20070058907-$ or EP-1752805-$ or US-20060193562-$ or US-20060165352-$ or US-20060153503-$ or WO-2006022840-$ or US-20050053342-$ or US-20040228589-$ or US-20040223699-$ or US-20040062498-$ or EP-1394584-$ or WO-03094297-$ or WO-03093883-$ or US-20030044125-$ or US-20030031437-$ or WO-02061481-$ or US-6422760-$ or WO-02056060-$ or DE-20118858-$ or EP-1172673-$).did. or (EP-1172672-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or US-20010041030-$ or WO-0181965-$ or EP-1124147-$ or EP-1107031-$ or WO-0140839-$ or EP-1092995-$ or EP-1091225-$ or EP-1041416-$ or EP-1041414-$ or EP-1020745-$ or EP-1016885-$ or EP-1010999-$ or GB-2341455-$ or WO-9947958-$ or US-5940561-$ or WO-9928774-$ or WO-9857208-$ or DE-19626036-$ or WO-9746900-$ or US-5692080-$ or EP-803750-$ or WO-9734176-$ or WO-9723794-$).did. or (EP-758099-$ or WO-9634176-$ or WO-9627811-$ or JP-08201656-$ or WO-9616080-$ or				

		EP-697608-$ or EP-696748-$ or WO-9600917-$ or EP-663602-$ or EP-663601-$ or EP-660145-$ or EP-660144-$ or EP-505197-$ or EP-490698-$ or US-5101463-$ or EP-458608-$ or WO-9117540-$ or US-5064268-$ or GB-2241794-$ or EP-430107-$ or WO-9015350-$ or US-4953929-$ or EP-262631-$ or EP-249237-$ or WO-8600147-$ or US-4496213-$ or EP-125398-$).did. or (DE-3208797-$ or GB-2098354-$ or EP-61243-$ or GB-2081468-$ or GB-2057158-$ or DE-2932986-$ or BE-871785-$ or DE-2805949-$ or DE-2558445-$ or US-10502903-$).did.				
S812	1,872	(G02B6/3879).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 11:59
S813	6,060	(G02B6/3885).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 11:59
S814	1,322	S812 not (S808 S809 S810 S811)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 11:59
S815	696	(US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-$ or US-20190219775-$ or US-20190170931-$ or US-20190137700-$ or US-20190137697-$ or US-20190137695-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20190033531-$ or US-20190004252-$ or US-20190004251-$ or US-20180364422-$ or US-20180364436-$).did. or (US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180321449-$ or US-20180217336-$ or US-20180136417-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 11:59

		$ or US-20180136414-$ or US-20180136412-$ or US-20180128988-$ or US-20170363818-$ or US-20170261696-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170205586-$ or US-20170176691-$ or US-20170176692-$ or US-20170068064-$ or US-20170059785-$ or US-20170063464-$ or US-20170023746-$ or US-20160349458-$ or US-20160327756-$ or US-20160306122-$ or US-20160282565-$).did. or (US-20160274314-$ or US-20160223774-$ or US-20160202428-$ or US-20160091674-$ or US-20150378113-$ or US-20150277059-$ or US-20150260924-$ or US-20150260923-$ or US-20150198774-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20140205257-$ or US-20140169727-$ or US-20140168987-$ or US-20140161392-$ or US-20140153878-$ or US-20140153879-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140037253-$ or US-20140029900-$ or US-20140022627-$ or US-20140016901-$ or US-20140003771-$).did. or (US-20130322825-$ or US-20130158512-$ or US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20120155803-$ or US-20120093462-$ or US-20110299266-$ or US-20110229092-$ or US-20110229083-$ or US-20110064361-$ or US-20110058774-$ or US-20100322563-$ or US-20100178014-$ or US-20100178010-$ or US-20100054668-$ or US-20100027942-$ or US-20090135429-$ or US-20080317415-$ or US-20080273840-$ or US-20080226235-$ or US-20080124033-$ or US-20080090433-$ or US-20080013889-$ or US-20070292084-$ or US-20070031103-$).did. or (US-20060275007-$ or US-20060257075-$ or US-20060257076-$ or US-20060204178-$ or US-20060171640-$ or US-20060171639-$ or US-				

		20060140543-$ or US-20060127028-$ or US-20060093274-$ or US-20060083466-$ or US-20060063436-$ or US-20060045428-$ or US-20060018603-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20040157499-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020176960-$ or US-20020142634-$).did. or (US-20020126960-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$).did. or (US-10444442-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9977197-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$ or US-7857523-$ or US-7572063-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$ or US-6364537-$).did. or (US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-6179476-$ or US-6179477-$ or US-6130977-$ or US-6062739-$ or US-5971625-$ or US-5970598-$ or US-5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717533-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$ or US-5577146-$).did. or (US-5546281-$ or US-5436994-$ or US-5400428-$ or US-5396572-$ or US-5329604-$ or US-5289554-$ or US-5276755-$ or US-5265182-$ or US-5261019-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212752-$ or				

		US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5121454-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$).did. or (US-5067783-$ or US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$).did. or (US-4728171-$ or US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$).did. or (WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$ or WO-2019086961-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$ or EP-3330757-$ or WO-2018044728-$ or EP-3278153-$ or CN-107636504-$ or WO-2018009426-$ or WO-2017182535-$ or CN-206479676-$ or EP-3180644-$ or EP-3123221-$ or WO-2016174980-$ or WO-2016140710-$ or CN-105683795-$ or WO-2015120031-$ or WO-2015070382-$ or EP-2852856-$ or WO-2015009435-$ or FR-2997767-$ or WO-2014054357-$ or CN-103676018-$).did. or (CA-2866107-$ or GB-201220748-$ or CN-102520489-$ or CN-102445735-$ or				

		CN-102385113-$ or WO-2012015713-$ or DE-102010021179-$ or GB-201004720-$ or DE-112006003952-$ or CA-2593676-$ or WO-2008033262-$ or EP-1783524-$ or AU-2006295165-$ or EP-1762871-$ or DE-60026115-$ or KR-100452879-$ or AU-2004274992-$ or CA-2441872-$ or KR-20040020797-$ or CN-1334472-$ or DE-20111078-$ or DE-10031931-$ or CA-2302068-$ or DE-19834723-$ or WO-9723794-$ or DE-29614436-$ or DE-19525739-$).did. or (CH-687105-$ or DE-19601949-$ or GB-9525323-$ or FR-2707402-$ or WO-9415232-$ or GB-9408857-$ or EP-0546936-$ or MX-9201992-$ or DE-4203966-$ or IT-MI913184-$ or GB-9103982-$ or CH-676513-$ or GB-9025881-$ or DE-3914978-$ or DE-9012174-$ or DE-9010357-$ or DE-8911081-$ or DE-8911080-$ or EP-0339876-$ or EP-0324272-$ or DE-8901052-$ or DE-8900623-$ or EP-0292024-$ or DE-8812341-$ or DE-3737842-$ or DE-3701421-$ or EP-0253426-$).did. or (EP-0249406-$ or KR-870005264-$ or EP-0183820-$ or EP-0166636-$ or EP-0154781-$ or EP-0153249-$ or EP-0098190-$ or EP-0098205-$ or FR-2528984-$ or FR-2502798-$ or GB-2086602-$ or EP-0045271-$ or WO-8002213-$ or DE-2932986-$ or DE-2832839-$ or AU-3682878-$ or GB-1526682-$ or FR-2316611-$ or GB-1450760-$ or FR-2268370-$).did. or (JP-2019184942-$ or JP-2005258017-$ or JP-2000241670-$ or JP-05215939-$ or JP-03059503-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-61129605-$ or JP-61028909-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-59038707-$ or JP-59036207-$ or JP-58190910-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56062212-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$				

		or JP-53113562-$).did. or (US-20200033539-$ or US-20200012053-$ or US-20200003961-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$ or EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190227240-$ or US-20190219775-$ or US-20190204513-$ or US-20190162914-$ or US-20190162917-$).did. or (US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or US-20180372962-$ or US-20180364422-$ or CN-108983368-$ or KR-2018131725-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or US-20180292612-$ or CN-108490551-$).did. or (US-20180231722-$ or JP-6363784-$ or US-20180203196-$ or CN-108279462-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018008399-$ or CN-107479141-$ or EP-3249434-$ or WO-2017182535-$ or US-20170264045-$ or US-20170261698-$ or US-20170261696-$ or KR-2017103050-$ or US-20170242210-$ or WO-2017131717-$ or US-				

		20170199339-$ or CN-106908906-$ or WO-2017106514-$).did. or (US-20170176691-$ or US-20170176692-$ or WO-2017095928-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$ or US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or WO-2015142551-$ or US-20150260923-$ or CN-104914515-$ or WO-2015126470-$).did. or (WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$ or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$).did. or (WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$ or US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-				

		$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$).did. or (US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$ or EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9723794-$ or WO-9637793-$).did. or (DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-420490-$ or EP-335531-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$ or EP-440447-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$).did. or (EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$ or EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$).did. or (GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$).did.				
S816	1,322	S814 not S815	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 11:59

S817	5,309	(G02B6/3825).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 11:59
S818	2,727	S817 not (S808 S809 S810 S811 S816)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 11:59
S819	3,186	S813 not (S808 S809 S810 S811 S816 S818)	US-PGPUB; USPAT; EPO; JPO	OR	ON	2020/09/01 11:59
S820	55	(US-20140241689-$ or US-20200057205-$ or US-20200070211-$ or US-20190377139-$ or US-20190346644-$ or US-20190331862-$ or US-20190285806-$ or US-20190278028-$ or US-20190101703-$ or US-20180031783-$ or US-20160062050-$ or US-20160035201-$ or US-20150241650-$ or US-20150063758-$ or US-20140348481-$ or US-20140348467-$ or US-20140241688-$ or US-20140233893-$ or US-20140219609-$ or US-20130272671-$ or US-20130259429-$ or US-20130051733-$ or US-20130044978-$ or US-20120251051-$ or US-20110038592-$ or US-20100322580-$).did. or (US-20100199447-$ or US-20100111484-$ or US-20100054665-$ or US-20090274432-$ or US-20080273837-$ or US-20050163431-$ or US-20050111810-$ or US-20050111809-$ or US-20030190130-$ or US-20030108301-$).did. or (US-8858089-$ or US-6857900-$ or US-6705765-$ or US-6547585-$ or US-6485189-$ or US-6412986-$ or US-6146023-$ or US-6041155-$ or US-5870515-$ or US-5675682-$ or US-5600747-$).did. or (US-10459172-$ or US-20150063758-$ or US-20140348467-$ or US-20140348481-$ or US-20140241688-$ or US-20140241689-$ or WO-2013155395-$ or US-20130259429-$).did.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/09/01 13:06
S821	623	(US-20150260936-$ or US-20190324218-$ or US-20150219864-$ or US-20160170154-$ or US-20200150353-$ or US-20180267258-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:06

		$ or US-20200132941-$ or US-20180335577-$ or US-20200116950-$ or US-20190181586-$ or US-20200088955-$ or US-20200081194-$ or US-20200057204-$ or US-20200057199-$ or US-20200049902-$ or US-20190129104-$ or US-20190377138-$ or US-20190369335-$ or US-20190353865-$ or US-20190346635-$ or US-20190346634-$ or US-20180217339-$ or US-20190331862-$ or US-20190302371-$ or US-20190190199-$ or US-20160195682-$).did. or (US-20190271815-$ or US-20190243084-$ or US-20090238522-$ or US-20190243075-$ or US-20190235174-$ or US-20180292617-$ or US-20190200103-$ or US-20190187383-$ or US-20170227719-$ or US-20190113693-$ or US-20190113692-$ or US-20190113689-$ or US-20190101706-$ or US-20190101705-$ or US-20190101704-$ or US-20190079252-$ or US-20190072729-$ or US-20190064452-$ or US-20190049678-$ or US-20190041587-$ or US-20190025526-$ or US-20170371109-$ or US-20180356600-$ or US-20180335571-$ or US-20180329154-$ or US-20180314018-$ or US-20140321808-$).did. or (US-20170045702-$ or US-20180306984-$ or US-20180299624-$ or US-20180284357-$ or US-20180267256-$ or US-20130089293-$ or US-20180136416-$ or US-20180100982-$ or US-20180081129-$ or US-20180052287-$ or US-20170293090-$ or US-20170205590-$ or US-20160062050-$ or US-20160320572-$ or US-20160341905-$ or US-20160306125-$ or US-20150162982-$ or US-20160223757-$ or US-20150063815-$ or US-20140363131-$ or US-20140321810-$ or US-20140301701-$ or US-20140241671-$ or US-20120257865-$ or US-20080311781-$ or US-20110274437-$ or US-20120128302-$).did. or (US-20120099819-$ or US-20120057824-$ or US-20110091158-$ or US-20110059642-$ or US-20100310213-				

		$ or US-20100226610-$ or US-20100104355-$ or US-20070077010-$ or US-20080248691-$ or US-20080175543-$ or US-20080131055-$ or US-20070292082-$ or US-20080037934-$ or US-20080032536-$ or US-20070116412-$ or US-20050226567-$ or US-20050164536-$ or US-20050163429-$ or US-20050095899-$ or US-20050018973-$ or US-20040228582-$ or US-20030031448-$ or US-20030031437-$ or US-20030012520-$ or US-20020167793-$).did. or (US-10571641-$ or US-10539745-$ or US-10527803-$ or US-10514518-$ or US-10429592-$ or US-10401574-$ or US-10302874-$ or US-10234635-$ or US-10133009-$ or US-10120140-$ or US-10120138-$ or US-10101570-$ or US-10094768-$ or US-9971103-$ or US-9678294-$ or US-9658405-$ or US-9645323-$ or US-9606300-$ or US-9581767-$ or US-9557508-$ or US-9557491-$ or US-9551835-$ or US-9482840-$ or US-9482823-$ or US-9448368-$ or US-9366829-$).did. or (US-9335488-$ or US-9291785-$ or US-9274300-$ or US-9110249-$ or US-9103990-$ or US-9057845-$ or US-9052475-$ or US-9033588-$ or US-9022666-$ or US-8985862-$ or US-8979388-$ or US-8845206-$ or US-8821036-$ or US-8801297-$ or US-8573854-$ or US-8419291-$ or US-8406588-$ or US-8202009-$ or US-8157455-$ or US-8104973-$ or US-8009959-$ or US-7980769-$ or US-7887243-$ or US-7758255-$ or US-7744285-$ or US-7717625-$ or US-7374347-$).did. or (US-7336884-$ or US-7261471-$ or US-7234876-$ or US-7111990-$ or US-7090407-$ or US-7073953-$ or US-6994478-$ or US-6945702-$ or US-6920255-$ or US-6872006-$ or US-6866424-$ or US-6832858-$ or US-6805493-$ or US-6789950-$ or US-6769814-$ or US-6762941-$ or US-6761488-$ or US-6572276-$ or US-6554486-$ or US-6513989-$ or US-6459843-$ or US-6435728-$ or US-6434316-$				

		or US-6434315-$ or US-6398422-$ or US-6364539-$ or US-6357928-$).did. or (US-6351590-$ or US-6264374-$ or US-6259856-$ or US-6257917-$ or US-6256448-$ or US-6203208-$ or US-6149313-$ or US-6146023-$ or US-6139194-$ or US-5963698-$ or US-5600747-$ or US-5511138-$ or US-5428702-$ or US-5335301-$ or US-5265181-$ or US-5216732-$ or US-5183408-$ or US-5166995-$ or US-4986769-$ or US-4950048-$ or US-4904199-$ or US-4711511-$ or US-4657338-$ or US-4580868-$ or US-4478485-$ or US-4448467-$ or US-4376565-$).did. or (US-4186997-$).did. or (WO-2019012006-$ or CA-2864886-$ or WO-2020047283-$ or WO-2017147401-$ or WO-2018183496-$ or GB-201311768-$ or GB-201906387-$ or CN-110618492-$ or WO-2018140873-$ or AU-2015318357-$ or WO-2019222189-$ or WO-2016077167-$ or CN-105425341-$ or WO-2012106510-$ or WO-2019200066-$ or WO-2016086881-$ or WO-2019125963-$ or WO-2016053673-$ or FR-3021415-$ or WO-2019089220-$ or WO-2019060293-$ or WO-2017139430-$ or EP-3330758-$ or WO-2019036297-$ or WO-2018169759-$ or WO-2016049208-$).did. or (CA-2869770-$ or WO-2018045232-$ or WO-2015029585-$ or CN-105283786-$ or WO-2017123460-$ or JP-5805344-$ or CN-205992071-$ or WO-2016068966-$ or WO-2015191024-$ or WO-2011019581-$ or EP-2818903-$ or WO-2014116785-$ or WO-2013049082-$ or CA-2546593-$ or WO-2008045560-$ or WO-2011130445-$ or CA-2304082-$ or WO-2010103465-$ or EP-2251724-$ or AU-2002243312-$ or WO-9909442-$ or CN-1231430-$ or CA-2537354-$ or EP-1221630-$ or WO-0008503-$ or CA-2276631-$ or EP-1229366-$).did. or (EP-1879060-$ or CA-2594549-$ or CN-1258011-$ or WO-2005022228-$ or WO-				

		2004008214-$ or WO-2004107001-$ or EP-1334394-$ or WO-2006007120-$ or CA-2276627-$ or EP-1415186-$ or WO-2005047946-$ or EP-1257012-$ or EP-1299758-$ or CA-2283016-$ or WO-9746900-$ or WO-9857208-$ or CA-2339502-$ or CA-2327007-$ or CA-2136212-$ or CN-1231429-$ or EP-0927899-$ or EP-0927898-$ or WO-0075701-$ or AU-1587897-$ or CA-2288247-$ or EP-1273944-$ or CA-2068453-$).did. or (GB-9011424-$ or WO-0182374-$ or EP-0927895-$ or CA-2312241-$ or MX-9202155-$ or CA-2330965-$ or DE-19846731-$ or EP-1039323-$ or FR-2752951-$ or WO-9964917-$ or GB-9622511-$ or EP-0961142-$ or CA-2237481-$ or WO-9931539-$ or EP-0821253-$ or CA-2222237-$ or EP-0323920-$ or EP-0490698-$ or CA-1299407-$ or AU-1019788-$ or WO-9308493-$ or FR-2648240-$ or DE-9108955-$ or GB-8614272-$ or CA-1239820-$ or DE-3633340-$ or IT-7925047-$).did. or (GB-8332694-$ or EP-0109870-$ or DE-2933790-$ or DE-3021001-$ or GB-2058392-$).did. or (JP-2016009081-$ or JP-2016122050-$ or JP-2016085422-$ or JP-10050400-$ or JP-2002048946-$ or JP-08110439-$ or JP-09145959-$ or JP-10311934-$ or JP-09145957-$ or JP-07248434-$ or JP-01177508-$ or JP-59157605-$ or JP-56060409-$).did. or (US-20200174200-$ or US-20200166717-$ or US-20200142140-$ or US-20200124802-$ or US-20190384018-$ or US-20190339464-$ or US-20190339470-$ or US-20190324218-$ or US-20190302376-$ or US-20190285811-$ or US-20190243076-$ or US-20190235174-$ or CN-110031940-$ or US-20190219776-$ or US-20190212504-$ or US-20190200103-$ or US-20190190199-$ or US-20190179089-$ or US-20190179086-$ or US-20190179088-$ or US-20190181586-$ or US-20190154928-$ or US-20190129104-$ or US-20190101704-$ or US-20190101705-$ or WO-2019060293-				

		$).did. or (US-20200088955-$ or US-10234635-$ or US-20190079252-$ or US-10222562-$ or KR-2019006212-$ or WO-2019012006-$ or US-20190025526-$ or US-20190011645-$ or US-20190064452-$ or US-20180356600-$ or KR-2018129442-$ or US-20180329154-$ or US-20180335571-$ or US-20180335577-$ or US-20180335581-$ or US-10107967-$ or US-20180314014-$ or US-20180306997-$ or US-10107972-$ or US-20180299624-$ or US-10101570-$ or US-20180292617-$ or WO-2018183496-$ or US-20180267255-$ or US-20180239093-$ or US-20180217338-$ or US-20180217339-$).did. or (US-20180210155-$ or US-10018787-$ or US-20180188455-$ or CN-108227089-$ or US-20180156988-$ or US-9989712-$ or US-20190113692-$ or US-20180136416-$ or WO-2018085767-$ or US-9933582-$ or US-20180077472-$ or WO-2018045232-$ or WO-2018045234-$ or US-20180011261-$ or US-20170357060-$ or EP-3258301-$ or US-9823428-$ or US-20170299831-$ or US-20170293089-$ or WO-2017172600-$ or US-20170285277-$ or WO-2017160697-$ or WO-2017147401-$ or CN-106918869-$ or US-20170242199-$ or WO-2017136437-$ or US-20170227719-$).did. or (JP-2017134310-$ or US-20170212316-$ or US-20170205591-$ or US-20170192182-$ or WO-2017066139-$ or US-20170045702-$ or US-20170045695-$ or US-20170003456-$ or US-20160349464-$ or US-9482823-$ or US-9482825-$ or US-20160306124-$ or EP-3078999-$ or US-20160282562-$ or US-9448369-$ or WO-2016137934-$ or US-20160238789-$ or WO-2016123128-$ or US-20160223757-$ or US-20160223763-$ or US-20160195682-$ or WO-2016104132-$ or US-20160161681-$ or WO-2016086881-$ or WO-2016082160-$ or US-20160139345-$ or EP-3021144-				

		$).did. or (EP-3021146-$ or WO-2016068966-$ or US-20160109676-$ or WO-2016053852-$ or WO-2016053673-$ or WO-2016049208-$ or US-20160091673-$ or US-20160085045-$ or US-20160077284-$ or WO-2016039383-$ or US-20150370017-$ or WO-2015191024-$ or US-20160370549-$ or US-20150355417-$ or JP-5805344-$ or US-20150309279-$ or WO-2015158564-$ or WO-2015150149-$ or US-20150253518-$ or AU-2014101479-$ or US-20150131946-$ or WO-2015047380-$ or WO-2015029585-$ or WO-2014186436-$ or US-20140314385-$ or US-20140294339-$ or US-20140241667-$).did. or (US-20140219615-$ or US-20140205241-$ or AU-2014100325-$ or CN-103645545-$ or US-20140072265-$ or US-20180100982-$ or US-20130302004-$ or WO-2013126429-$ or US-20130209041-$ or US-20130170796-$ or US-20130170797-$ or WO-2013077969-$ or US-20130089293-$ or WO-2013019622-$ or WO-2013019189-$ or US-20120263423-$ or WO-2012106510-$ or WO-2012106513-$ or WO-2012106518-$ or JP-2012120095-$ or US-20120141070-$ or US-20110243504-$ or US-20110150396-$ or US-20110081798-$ or US-20110044590-$ or WO-2011019581-$ or KR-2011002571-$).did. or (US-20100322554-$ or US-20100310213-$ or WO-2010138446-$ or EP-2251724-$ or US-20100135618-$ or US-20100074616-$ or US-20090290838-$ or US-20090238522-$ or WO-2009023673-$ or EP-1990665-$ or US-20080253719-$ or WO-2008045560-$ or EP-1887395-$ or US-20070160327-$ or US-20050271328-$ or US-20050226567-$ or WO-2005022229-$ or WO-2005022228-$ or WO-2005022227-$ or US-20040223701-$ or US-20040105628-$ or US-20040062486-$ or WO-2004008214-$ or US-20040008494-$ or KR-2003071425-$ or US-				

		20030044127-$ or KR-2003012941-$).did. or (US-20030031448-$ or US-20030031419-$ or EP-1257012-$ or KR-2002019797-$ or WO-0219002-$ or WO-0216989-$ or WO-0216530-$ or WO-0182374-$ or EP-1150149-$ or CA-2339502-$ or WO-0155762-$ or EP-1116974-$ or WO-0137010-$ or WO-0075701-$ or WO-0070381-$ or EP-1054278-$ or EP-1039322-$ or JP-2000199833-$ or EP-1016886-$ or EP-1014126-$ or EP-997753-$ or WO-0008503-$ or EP-969299-$ or EP-969298-$ or WO-9964917-$ or EP-961142-$ or WO-9957786-$).did. or (EP-949522-$ or EP-927899-$ or EP-927898-$ or WO-9931539-$ or US-5915058-$ or WO-9928773-$ or US-5909526-$ or EP-916974-$ or WO-9909442-$ or US-5867621-$ or WO-9859271-$ or US-5778122-$ or EP-821253-$ or US-5666456-$ or JP-09145959-$ or GB-2306696-$ or US-5555332-$ or EP-712015-$ or US-5519799-$ or WO-9323777-$ or EP-514722-$ or US-5134673-$ or EP-323920-$ or EP-277390-$ or GB-2176629-$ or GB-2151040-$ or GB-2058392-$).did. or (EP-8329-$).did.				
S822	736	(US-20180321449-$ or US-20190004252-$ or US-20170059785-$ or US-20190137700-$ or US-20130158512-$ or US-20180364422-$ or US-20150378113-$ or US-20200012052-$ or US-20100054668-$ or US-20060093274-$ or US-20140029900-$ or US-20190004251-$ or US-20190258010-$ or US-20140153878-$ or US-20180128988-$ or US-20190170931-$ or US-20140153879-$ or US-20190137697-$ or US-20190137695-$ or US-20160349458-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20170176691-$ or US-20100322563-$).did. or (US-20190033531-$ or US-20170261696-$ or US-20180364436-$ or US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:06

		$ or US-20180217336-$ or US-20110058774-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180120517-$ or US-20170363818-$ or US-20160274314-$ or US-20170205586-$ or US-20140169727-$ or US-20160223774-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170176692-$ or US-20120093462-$ or US-20170068064-$ or US-20170063464-$ or US-20170023746-$).did. or (US-20110299266-$ or US-20140016901-$ or US-20160327756-$ or US-20160306122-$ or US-20150260924-$ or US-20160282565-$ or US-20160202428-$ or US-20140205257-$ or US-20160091674-$ or US-20150277059-$ or US-20150260923-$ or US-20150198774-$ or US-20140037253-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20120155803-$ or US-20140168987-$ or US-20140161392-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-$ or US-20110064361-$).did. or (US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20110229092-$ or US-20110229083-$ or US-20080226235-$ or US-20080273840-$ or US-20100178014-$ or US-20100178010-$ or US-20040157499-$ or US-20080013889-$ or US-20100027942-$ or US-20090135429-$ or US-20020126960-$ or US-20060127028-$ or US-20080317415-$ or US-20080090433-$ or US-20060257075-$ or US-20080124033-$ or US-20060083466-$ or US-20070292084-$ or US-20060018603-$ or US-20060204178-$ or US-20070031103-$ or US-20060275007-$ or US-20060257076-$).did. or (US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060063436-$ or US-20060045428-$ or US-20050271338-$ or US-				

		20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20020176960-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20020142634-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$ or US-20190219775-$ or US-20200200977-$ or US-20200183092-$).did. or (US-20200150374-$ or US-20200124805-$ or US-20200081193-$ or US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-$).did. or (US-10324264-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$ or US-7857523-$ or US-7572063-$ or US-5971625-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6179476-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$).did. or (US-6364537-$ or US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-5717533-$ or US-5212752-$ or US-6179477-$ or US-6130977-$ or US-5546281-$ or US-6062739-$ or US-5970598-$ or US-5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$).did. or (US-5577146-$ or US-5436994-$ or US-5121454-$ or US-5400428-$ or				

		US-5396572-$ or US-5265182-$ or US-5329604-$ or US-5261019-$ or US-5289554-$ or US-5276755-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$ or US-5067783-$).did. or (US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$ or US-4728171-$).did. or (US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$ or US-10670824-$ or US-10444442-$).did. or (CA-3068131-$ or EP-3180644-$ or WO-2016140710-$ or WO-2018009426-$ or WO-2015070382-$ or EP-3123221-$ or WO-2019246241-$ or EP-3579031-$ or GB-201905648-$ or CN-105683795-$ or WO-2018044728-$ or WO-2019086961-$ or EP-2852856-$ or WO-2017182535-$ or EP-3330757-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$ or CN-107636504-$ or CN-206479676-$ or WO-2016174980-$ or AU-2004274992-$ or CA-				

		2866107-$ or WO-2012015713-$ or FR-2997767-$ or CN-102520489-$).did. or (CN-102445735-$ or CN-103676018-$ or AU-2006295165-$ or WO-2015120031-$ or GB-9525323-$ or GB-201220748-$ or CN-102385113-$ or WO-2014054357-$ or CA-2593676-$ or DE-102010021179-$ or GB-201004720-$ or EP-1762871-$ or DE-112006003952-$ or CA-2441872-$ or DE-60026115-$ or WO-2008033262-$ or KR-20040020797-$ or EP-1783524-$ or KR-100452879-$ or WO-9723794-$ or DE-19601949-$ or CA-2302068-$ or DE-20111078-$ or DE-10031931-$ or DE-19834723-$ or MX-9201992-$ or DE-19525739-$).did. or (DE-29614436-$ or DE-3914978-$ or EP-0339876-$ or EP-0546936-$ or CH-687105-$ or GB-9408857-$ or EP-0324272-$ or FR-2707402-$ or IT-MI913184-$ or WO-9415232-$ or EP-0183820-$ or GB-9025881-$ or EP-0253426-$ or DE-4203966-$ or GB-9103982-$ or CH-676513-$ or DE-9012174-$ or DE-9010357-$ or EP-0154781-$ or DE-8911081-$ or DE-8911080-$ or EP-0292024-$ or KR-870005264-$ or EP-0166636-$ or DE-8901052-$ or DE-8900623-$ or DE-8812341-$).did. or (DE-3737842-$ or FR-2528984-$ or DE-3701421-$ or EP-0249406-$ or EP-0098190-$ or EP-0098205-$ or EP-0153249-$ or DE-2932986-$ or GB-2086602-$ or DE-2832839-$ or EP-0045271-$ or FR-2502798-$ or AU-3682878-$ or WO-8002213-$ or GB-1450760-$ or GB-1526682-$ or FR-2316611-$ or FR-2268370-$ or WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$).did. or (JP-2005258017-$ or JP-2000241670-$ or JP-03059503-$ or JP-61028909-$ or JP-61129605-$ or JP-59036207-$ or JP-58190910-$ or JP-59038707-$ or JP-56062212-$ or JP-2002098860-$ or JP-05215939-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or				

		JP-59136709-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$ or JP-2019184942-$).did. or (US-20190369336-$ or EP-3579031-$ or CN-110376684-$ or US-20190162914-$ or US-20190162917-$ or US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or CN-108983368-$ or US-20180372962-$ or US-20180364422-$ or KR-2018131725-$).did. or (US-20180341069-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or CN-207965228-$ or CN-207965231-$ or US-20180292612-$ or CN-108508541-$ or CN-108490551-$ or CN-108279462-$ or JP-6363784-$ or US-20180203196-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or WO-2018057615-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018006987-$ or WO-2018008399-$ or CN-107479141-$).did. or (EP-3249434-$ or WO-2017182535-$ or KR-2017103050-$ or US-20170264045-$ or US-20180231722-$ or US-20170261698-$ or US-20170261696-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017095928-$ or WO-2017106514-$ or US-20170176691-$ or US-20170176692-			

		$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$).did. or (US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or CN-104914515-$ or WO-2015142551-$ or US-20150260923-$ or WO-2015126470-$ or WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$).did. or (US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$ or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$ or WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$).did. or (US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$ or US-				

		20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$).did. or (EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9637793-$ or DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$).did. or (EP-440447-$ or EP-420490-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or EP-335531-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$ or EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$).did. or (EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$ or GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$ or US-20200209492-$ or US-20200200977-$ or US-20200200979-$ or US-20200183093-$ or US-20200166716-$ or US-20200150374-$ or US-20200142141-$ or US-20200124805-$ or US-20200116949-$ or US-20200116952-$).did. or (US-20200116953-$ or US-20200116954-$ or US-20200110224-$ or US-				

		20200103598-$ or US-20200103599-$ or US-20200096709-$ or US-20200096710-$ or US-20200096708-$ or US-20200081198-$ or US-20200057205-$ or US-20200049899-$ or US-20200033539-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$).did. or (EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190219775-$ or US-20190204513-$ or US-20200081193-$ or US-20200012053-$ or US-20200003961-$ or US-20190227240-$).did.				
S823	2,183	(US-20200225425-$ or US-20200225424-$ or US-20200225422-$ or US-20190056557-$ or US-20190179086-$ or US-20190064447-$ or US-20180217337-$ or US-20200183093-$ or US-20160018593-$ or US-20200166716-$ or US-20110222819-$ or US-20170285282-$ or US-20180246282-$ or US-20160259135-$ or US-20180143384-$ or US-20200142133-$ or US-20190041584-$ or US-20200132934-$ or US-20200116957-$ or US-20200110224-$ or US-20200096708-$ or US-20200088954-$ or US-20160274311-$ or US-20200088949-$ or US-20200073059-$ or US-20200018909-$).did. or (US-20160124160-$ or US-20190146160-$ or US-20140064665-$ or US-20170139158-$ or US-20190377139-$ or US-20160209599-$ or US-20160025942-$ or US-20140072265-$ or US-20180329158-$ or US-20180011254-$ or US-20080175541-$ or US-20190018201-$ or US-20180267255-$ or US-20180081127-$ or US-20170373756-$ or US-20160216454-$ or US-20170219779-$ or US-20090148101-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:06

		20180252872-$ or US-20190187392-$ or US-20190179085-$ or US-20130216186-$ or US-20190170957-$ or US-20180156985-$ or US-20190154924-$ or US-20160327757-$ or US-20190113691-$).did. or (US-20160161680-$ or US-20190101709-$ or US-20190086617-$ or US-20190033533-$ or US-20190025523-$ or US-20190025522-$ or US-20190004261-$ or US-20180364421-$ or US-20180348443-$ or US-20180341072-$ or US-20160018604-$ or US-20180329155-$ or US-20180329153-$ or US-20180292618-$ or US-20180292612-$ or US-20160139346-$ or US-20160349464-$ or US-20180239091-$ or US-20180231730-$ or US-20160209610-$ or US-20180231722-$ or US-20170219789-$ or US-20160131857-$ or US-20180217338-$ or US-20180210155-$ or US-20180210154-$ or US-20180210153-$).did. or (US-20180196204-$ or US-20180196202-$ or US-20180188460-$ or US-20180180819-$ or US-20180172942-$ or US-20180164510-$ or US-20180157002-$ or US-20180156988-$ or US-20180149813-$ or US-20180143381-$ or US-20180136410-$ or US-20180128991-$ or US-20150036980-$ or US-20180113268-$ or US-20180113259-$ or US-20180106975-$ or US-20180106973-$ or US-20180095232-$ or US-20180088289-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180081139-$ or US-20180081128-$ or US-20180081125-$ or US-20180081122-$).did. or (US-20180078781-$ or US-20180077472-$ or US-20180074277-$ or US-20180059338-$ or US-20180052288-$ or US-20150362681-$ or US-20180031782-$ or US-20180031775-$ or US-20180031774-$ or US-20180024302-$ or US-20180024301-$ or US-20180024300-$ or US-20180024294-$ or US-20180017740-$ or US-20180013228-$ or US-20180013227-$ or US-20180011261-				

		$ or US-20180011258-$ or US-20180003910-$ or US-20180003903-$ or US-20170371118-$ or US-20170371116-$ or US-20170371107-$ or US-20170363829-$ or US-20170363827-$ or US-20170363815-$ or US-20170363810-$).did. or (US-20170363509-$ or US-20170359091-$ or US-20170357060-$ or US-20170357059-$ or US-20170351038-$ or US-20170351037-$ or US-20170343760-$ or US-20170343742-$ or US-20170343741-$ or US-20170341972-$ or US-20170336577-$ or US-20170336571-$ or US-20170331234-$ or US-20170329090-$ or US-20170315308-$ or US-20170315307-$ or US-20170315305-$ or US-20170315304-$ or US-20170315303-$ or US-20170307832-$ or US-20170307831-$ or US-20170307829-$ or US-20170303772-$ or US-20170299821-$ or US-20170299818-$ or US-20170299817-$ or US-20170299816-$).did. or (US-20170293091-$ or US-20170293089-$ or US-20170293088-$ or US-20170293087-$ or US-20140133808-$ or US-20170285272-$ or US-20170276887-$ or US-20170276886-$ or US-20170276883-$ or US-20170276881-$ or US-20170269312-$ or US-20170269309-$ or US-20170261699-$ or US-20170261698-$ or US-20170254967-$ or US-20170254966-$ or US-20170254962-$ or US-20170254961-$ or US-20170254960-$ or US-20170248762-$ or US-20170242200-$ or US-20170242199-$ or US-20170242198-$ or US-20170242196-$ or US-20170235077-$ or US-20170235060-$ or US-20170227727-$).did. or (US-20170227720-$ or US-20170227718-$ or US-20170222347-$ or US-20170212310-$ or US-20170212309-$ or US-20170205591-$ or US-20170205588-$ or US-20170205587-$ or US-20170199338-$ or US-20170199336-$ or US-20170192182-$ or US-20170184800-$ or US-20170184798-$ or US-20170184790-$ or US-20170176252-$ or US-				

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		$ or US-20160178860-$ or US-20160178859-$ or US-20160178855-$ or US-20160170152-$ or US-20160161679-$ or US-20160154190-$ or US-20160147022-$ or US-20120294572-$ or US-20140205241-$ or US-20160139342-$ or US-20160139339-$ or US-20160131854-$ or US-20160131849-$).did. or (US-20130094827-$ or US-20160116685-$ or US-20160116683-$ or US-20160116681-$ or US-20160111808-$ or US-20160109676-$ or US-20160109661-$ or US-20160091673-$ or US-20160091672-$ or US-20160085035-$ or US-20160085034-$ or US-20160085031-$ or US-20160077287-$ or US-20160077284-$ or US-20160070081-$ or US-20160062051-$ or US-20160047998-$ or US-20160047996-$ or US-20160047994-$ or US-20160041356-$ or US-20160033723-$ or US-20160025937-$ or US-20160018606-$ or US-20160011383-$ or US-20160011381-$ or US-20160011376-$ or US-20160004018-$).did. or (US-20160004016-$ or US-20150378117-$ or US-20150378112-$ or US-20150378111-$ or US-20150376956-$ or US-20150370017-$ or US-20150362682-$ or US-20150362678-$ or US-20150355417-$ or US-20150355414-$ or US-20150346452-$ or US-20150346449-$ or US-20150346434-$ or US-20150338583-$ or US-20150323752-$ or US-20150309279-$ or US-20150301293-$ or US-20150301290-$ or US-20150301288-$ or US-20150301286-$ or US-20150277066-$ or US-20150288449-$ or US-20150288447-$ or US-20150286014-$ or US-20150286013-$ or US-20150286011-$ or US-20150285999-$).did. or (US-20150280355-$ or US-20150277062-$ or US-20150277061-$ or US-20150277058-$ or US-20150277057-$ or US-20150268424-$ or US-20150260927-$ or US-20150260926-$ or US-20130183001-$ or US-20130156379-$ or US-20150253183-$ or US-20150247977-$ or US-				

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		$ or US-20140161407-$ or US-20140161400-$ or US-20140161394-$ or US-20140147082-$ or US-20140147081-$ or US-20140144468-$ or US-20140141649-$ or US-20140133821-$ or US-20140133803-$ or US-20140126875-$ or US-20140126874-$ or US-20140124140-$ or US-20140105552-$ or US-20120281951-$ or US-20140105542-$ or US-20140104808-$).did. or (US-20140093210-$ or US-20140086545-$ or US-20140082913-$ or US-20140072297-$ or US-20140072263-$ or US-20140064690-$ or US-20140064688-$ or US-20140064674-$ or US-20140064664-$ or US-20140056562-$ or US-20140056560-$ or US-20140050443-$ or US-20140044394-$ or US-20140038462-$ or US-20130308908-$ or US-20140023326-$ or US-20140023325-$ or US-20140023322-$ or US-20140016902-$ or US-20140016900-$ or US-20140010499-$ or US-20130343764-$ or US-20130343707-$ or US-20130330957-$ or US-20130323940-$ or US-20130322834-$ or US-20130322828-$).did. or (US-20130322826-$ or US-20130315539-$ or US-20070286554-$ or US-20130302004-$ or US-20130287358-$ or US-20130284844-$ or US-20130272671-$ or US-20130259429-$ or US-20130230283-$ or US-20130216189-$ or US-20130216188-$ or US-20130209052-$ or US-20130209051-$ or US-20130209050-$ or US-20130209049-$ or US-20130209041-$ or US-20130209040-$ or US-20130202253-$ or US-20130195418-$ or US-20130195405-$ or US-20130183018-$ or US-20130170797-$ or US-20130170796-$ or US-20130163937-$ or US-20130163934-$ or US-20130163933-$ or US-20130163931-$).did. or (US-20130156382-$ or US-20130136401-$ or US-20130129285-$ or US-20130129280-$ or US-20130121645-$ or US-20130121643-$ or US-20130108231-$ or US-20130101257-$ or US-20130094815-$ or US-				

		20130094811-$ or US-20130084041-$ or US-20130077914-$ or US-20130071070-$ or US-20130071068-$ or US-20130071067-$ or US-20130064517-$ or US-20130064508-$ or US-20130051749-$ or US-20130051732-$ or US-20130028560-$ or US-20130011099-$ or US-20120328245-$ or US-20120321269-$ or US-20120321266-$ or US-20120321254-$ or US-20120308183-$ or US-20120301088-$).did. or (US-20120301086-$ or US-20120301080-$ or US-20120294570-$ or US-20120263426-$ or US-20120263423-$ or US-20120263419-$ or US-20120257860-$ or US-20120257859-$ or US-20120252244-$ or US-20120251067-$ or US-20120251054-$ or US-20120251051-$ or US-20120251050-$ or US-20120243834-$ or US-20120243831-$ or US-20120243829-$ or US-20120237223-$ or US-20120237171-$ or US-20120224823-$ or US-20120219253-$ or US-20120195555-$ or US-20120177326-$ or US-20120170895-$ or US-20120163757-$ or US-20120155808-$ or US-20120141084-$ or US-20120141070-$).did. or (US-20120128307-$ or US-20120114295-$ or US-20120106901-$ or US-20120106899-$ or US-20120099870-$ or US-20120099822-$ or US-20120082416-$ or US-20120076459-$ or US-20120069348-$ or US-20120063735-$ or US-20120057831-$ or US-20120057830-$ or US-20120057827-$ or US-20120057824-$ or US-20120039569-$ or US-20120033918-$ or US-20120027355-$ or US-20120014649-$ or US-20120014648-$ or US-20120002928-$ or US-20120002925-$ or US-20110317976-$ or US-20110311186-$ or US-20110299814-$ or US-20110293223-$ or US-20110268391-$ or US-20110262079-$).did. or (US-20110103797-$ or US-20110249942-$ or US-20110243508-$ or US-20110243505-$ or US-20110243504-$ or US-20110229094-$ or US-20090103878-$ or US-20110222821-				

		$ or US-20100080517-$ or US-20110211792-$ or US-20110206335-$ or US-20110206325-$ or US-20110206324-$ or US-20110200294-$ or US-20110200286-$ or US-20110198324-$ or US-20110194828-$ or US-20110188809-$ or US-20110188000-$ or US-20110176777-$ or US-20110170830-$ or US-20110158593-$ or US-20110158586-$ or US-20100329613-$ or US-20110150396-$ or US-20110142398-$ or US-20110129186-$).did. or (US-20110123156-$ or US-20110116748-$ or US-20110103747-$ or US-20110091166-$ or US-20110091159-$ or US-20110091154-$ or US-20110085774-$ or US-20110085765-$ or US-20110081798-$ or US-20110081116-$ or US-20110075974-$ or US-20110075971-$ or US-20110075969-$ or US-20110058772-$ or US-20090087147-$ or US-20110044589-$ or US-20110044583-$ or US-20110038592-$ or US-20110038590-$ or US-20110038581-$ or US-20090220227-$ or US-20110019964-$ or US-20100329604-$ or US-20100329602-$ or US-20100322580-$ or US-20100322576-$ or US-20100322561-$).did. or (US-20100322554-$ or US-20100303408-$ or US-20100296792-$ or US-20100290745-$ or US-20100284655-$ or US-20100278497-$ or US-20100278488-$ or US-20100272408-$ or US-20100266245-$ or US-20100260457-$ or US-20100247057-$ or US-20100247042-$ or US-20100247040-$ or US-20100239220-$ or US-20100239213-$ or US-20100232757-$ or US-20100226654-$ or US-20100215322-$ or US-20100209063-$ or US-20100209050-$ or US-20100202737-$ or US-20100183276-$ or US-20100183265-$ or US-20090003772-$ or US-20100158444-$ or US-20100146764-$ or US-20100142899-$).did. or (US-20100141934-$ or US-20100135618-$ or US-20100129032-$ or US-20100129028-$ or US-20100111484-$ or US-20100104355-$ or US-				

		20080019642-$ or US-20100092134-$ or US-20100092131-$ or US-20100086258-$ or US-20100081303-$ or US-20100080513-$ or US-20100074616-$ or US-20100067852-$ or US-20100061681-$ or US-20100059901-$ or US-20100054665-$ or US-20100046893-$ or US-20090003771-$ or US-20100029117-$ or US-20100027944-$ or US-20100027943-$ or US-20100021111-$ or US-20100014815-$ or US-20100002999-$ or US-20090305542-$ or US-20090304335-$).did. or (US-20090290839-$ or US-20090290838-$ or US-20090285534-$ or US-20090285530-$ or US-20090274432-$ or US-20090274431-$ or US-20090257722-$ or US-20090257719-$ or US-20090252458-$ or US-20080124031-$ or US-20090232455-$ or US-20090232454-$ or US-20090226141-$ or US-20090226137-$ or US-20090220200-$ or US-20090214164-$ or US-20090202214-$ or US-20090185778-$ or US-20060263011-$ or US-20090156043-$ or US-20090116791-$ or US-20090080850-$ or US-20050141817-$ or US-20090074359-$ or US-20090060422-$ or US-20090060418-$ or US-20090047800-$).did. or (US-20090046981-$ or US-20090034912-$ or US-20090028507-$ or US-20090010600-$ or US-20070280599-$ or US-20080317411-$ or US-20080310800-$ or US-20080310796-$ or US-20080310795-$ or US-20080304792-$ or US-20080298764-$ or US-20080279503-$ or US-20080273837-$ or US-20080269845-$ or US-20080267566-$ or US-20080253719-$ or US-20080240658-$ or US-20080205825-$ or US-20080193086-$ or US-20080175550-$ or US-20080175546-$ or US-20080175545-$ or US-20080175542-$ or US-20080175532-$ or US-20080170827-$ or US-20080159696-$ or US-20080131055-$).did. or (US-20080112672-$ or US-20080100456-$ or US-20080095502-$ or US-20080095501-$ or US-20080085082-				

		$ or US-20080069501-$ or US-20080050072-$ or US-20080050070-$ or US-20070217751-$ or US-20080044139-$ or US-20050135755-$ or US-20080034519-$ or US-20080019656-$ or US-20040264873-$ or US-20080013897-$ or US-20080013891-$ or US-20080013148-$ or US-20080008425-$ or US-20070297725-$ or US-20070285194-$ or US-20070274657-$ or US-20070263959-$ or US-20070230874-$ or US-20070223862-$ or US-20070217745-$ or US-20070212002-$ or US-20070201808-$).did. or (US-20070201798-$ or US-20070196053-$ or US-20070196052-$ or US-20070190834-$ or US-20070183780-$ or US-20060098914-$ or US-20070165984-$ or US-20070160327-$ or US-20070154135-$ or US-20070140623-$ or US-20070127873-$ or US-20070116414-$ or US-20070116411-$ or US-20040228584-$ or US-20070105452-$ or US-20070098330-$ or US-20070098329-$ or US-20070098327-$ or US-20070058907-$ or US-20050018979-$ or US-20070036487-$ or US-20070019913-$ or US-20060291782-$ or US-20060285807-$ or US-20060280409-$ or US-20060269212-$ or US-20060269206-$).did. or (US-20060269205-$ or US-20050123248-$ or US-20060245711-$ or US-20060204200-$ or US-20060204180-$ or US-20060197943-$ or US-20060193565-$ or US-20060193562-$ or US-20060177182-$ or US-20060169856-$ or US-20060159401-$ or US-20060159399-$ or US-20060154529-$ or US-20060153504-$ or US-20060153503-$ or US-20060147156-$ or US-20060147155-$ or US-20060140542-$ or US-20060133758-$ or US-20060093282-$ or US-20060093275-$ or US-20060088248-$ or US-20060083468-$ or US-20060083467-$ or US-20060072878-$ or US-20060067631-$ or US-20060067628-$).did. or (US-20060056769-$ or US-20060051028-$ or US-20060045430-$ or US-				

		20060029333-$ or US-20060013539-$ or US-20060002662-$ or US-20050286853-$ or US-20050286835-$ or US-20050286833-$ or US-20050281526-$ or US-20050281509-$ or US-20050271328-$ or US-20050260880-$ or US-20050238292-$ or US-20050238289-$ or US-20050232552-$ or US-20050226586-$ or US-20050220423-$ or US-20050220420-$ or US-20050215119-$ or US-20050207708-$ or US-20050196104-$ or US-20050185894-$ or US-20050157985-$ or US-20050135753-$ or US-20050135752-$ or US-20050123246-$).did. or (US-20050118880-$ or US-20050112939-$ or US-20050111796-$ or US-20050111795-$ or US-20050094948-$ or US-20050094943-$ or US-20050089278-$ or US-20050074211-$ or US-20050069263-$ or US-20050053342-$ or US-20050041928-$ or US-20050036744-$ or US-20050036740-$ or US-20050013547-$ or US-20050008300-$ or US-20040266257-$ or US-20040264908-$ or US-20040264876-$ or US-20040247257-$ or US-20040247255-$ or US-20040240793-$ or US-20040228589-$ or US-20040223701-$ or US-20040223699-$ or US-20040208459-$ or US-20040202431-$ or US-20020176671-$).did. or (US-20040197053-$ or US-20040184740-$ or US-20040182971-$ or US-20040179787-$ or US-20040171283-$ or US-20040165830-$ or US-20040161204-$ or US-20040156592-$ or US-20040151464-$ or US-20040151438-$ or US-20040141693-$ or US-20040141692-$ or US-20040136656-$ or US-20040131317-$ or US-20040131315-$ or US-20040126118-$ or US-20040120652-$ or US-20040105628-$ or US-20040105325-$ or US-20040105278-$ or US-20040101253-$ or US-20040101250-$ or US-20040091228-$ or US-20040081418-$ or US-20040076377-$ or US-20040074852-$ or US-20040072454-$).did. or (US-20040071438-$ or US-20040071407-				

		$ or US-20040062498-$ or US-20040062488-$ or US-20040062486-$ or US-20040054761-$ or US-20040052472-$ or US-20040052471-$ or US-20040042710-$ or US-20040038558-$ or US-20040036987-$ or US-20040033050-$ or US-20040033028-$ or US-20040033027-$ or US-20040028344-$ or US-20040028340-$ or US-20040017983-$ or US-20040017981-$ or US-20020197017-$ or US-20040013388-$ or US-20040013369-$ or US-20040008494-$ or US-20030231838-$ or US-20030223703-$ or US-20030198029-$ or US-20030194188-$ or US-20030189214-$).did. or (US-20030185520-$ or US-20030180005-$ or US-20030180004-$ or US-20030174996-$ or US-20030174972-$ or US-20030174971-$ or US-20030174922-$ or US-20030169992-$ or US-20030169975-$ or US-20030169974-$ or US-20030156796-$ or US-20030147597-$ or US-20030147230-$ or US-20030142923-$ or US-20030142918-$ or US-20030128934-$ or US-20030128933-$ or US-20030113086-$ or US-20030108320-$ or US-20030103730-$ or US-20030095780-$ or US-20030095779-$ or US-20030091297-$ or US-20030091292-$ or US-20030087505-$ or US-20030081905-$ or US-20030072537-$).did. or (US-20030072536-$ or US-20030068135-$ or US-20030063868-$ or US-20030063866-$ or US-20030063862-$ or US-20030053760-$ or US-20030044127-$ or US-20030044125-$ or US-20030044123-$ or US-20030044122-$ or US-20030044115-$ or US-20030031452-$ or US-20030031449-$ or US-20030031422-$ or US-20030012544-$ or US-20030012516-$ or US-20030012512-$ or US-20030007740-$ or US-20030007739-$ or US-20030002816-$ or US-20030002814-$ or US-20030002808-$ or US-20020197018-$ or US-20020191919-$ or US-20020191881-$ or US-20020186934-$ or US-20020186742-$).did. or (US-				

		20020181888-$ or US-20020181884-$ or US-20020177364-$ or US-20020176670-$ or US-20020172469-$ or US-20020172467-$ or US-20020168150-$ or US-20020168149-$ or US-20020166226-$ or US-20020164899-$ or US-20020159745-$ or US-20020159714-$ or US-20020159712-$ or US-20020159710-$ or US-20020150353-$ or US-20020150346-$ or US-20020150345-$ or US-20020150344-$ or US-20020150343-$ or US-20020150342-$ or US-20020146213-$ or US-20020131720-$ or US-20020126961-$ or US-20020122652-$ or US-20020118926-$ or US-20020114589-$ or US-20020114582-$).did. or (US-20020114581-$ or US-20020106167-$ or US-20020106162-$ or US-20020094727-$ or US-20020090177-$ or US-20020081076-$ or US-20020064349-$ or US-20020061171-$ or US-20020031313-$ or US-20020031310-$ or US-20020031309-$ or US-20020028055-$ or US-20020025125-$ or US-20020025121-$ or US-20020025099-$ or US-20020012503-$ or US-20020012502-$ or US-20020012501-$ or US-20020012238-$ or US-20020006253-$ or US-20020003932-$ or US-20010048790-$ or US-20010043776-$ or US-20010041030-$ or US-20010038737-$ or US-20010033730-$ or US-20010016102-$).did. or (US-20010010741-$ or US-20190204513-$ or US-20200064561-$ or US-20200057208-$ or US-20200041730-$ or US-20190235182-$ or US-20190391350-$ or US-20190384017-$ or US-20190353852-$ or US-20190346631-$ or US-20190317281-$ or US-20190310432-$ or US-20190278039-$ or US-20190278025-$ or US-20190271816-$ or US-20190250340-$ or US-20190243083-$ or US-20190235178-$ or US-20190227244-$ or US-20190219772-$).did. or (US-10718914-$ or US-10718911-$ or US-10718909-$ or US-10705306-$ or US-10295760-$ or US-10261275-$ or US-10156683-				

		$ or US-10146014-$ or US-10107967-$ or US-10067302-$ or US-10067300-$ or US-10018787-$ or US-10007069-$ or US-9989710-$ or US-9948017-$ or US-9946038-$ or US-9946037-$ or US-9946036-$ or US-9939600-$ or US-9939590-$ or US-9939589-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9927582-$ or US-9915793-$).did. or (US-9910229-$ or US-9910228-$ or US-9910226-$ or US-9904021-$ or US-9904020-$ or US-9904019-$ or US-9897767-$ or US-9893813-$ or US-9891392-$ or US-9891390-$ or US-9891387-$ or US-9891385-$ or US-9885841-$ or US-9880365-$ or US-9880357-$ or US-9876309-$ or US-9874702-$ or US-9869826-$ or US-9869824-$ or US-9864151-$ or US-9857545-$ or US-9857537-$ or US-9851512-$ or US-9846283-$ or US-9841566-$ or US-9835808-$ or US-9835807-$).did. or (US-9829650-$ or US-9829643-$ or US-9827438-$ or US-9823428-$ or US-9817195-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9798096-$ or US-9798090-$ or US-9797806-$ or US-9784928-$ or US-9778425-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9759874-$ or US-9759869-$ or US-9746625-$ or US-9746368-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9735523-$).did. or (US-9733436-$ or US-9733434-$ or US-9733123-$ or US-9726830-$ or US-9726829-$ or US-9722367-$ or US-9720184-$ or US-9709753-$ or US-9703062-$ or US-9696497-$ or US-9696477-$ or US-9684134-$ or US-9678286-$ or US-9678283-$ or US-9678282-$ or US-9671570-$ or US-9671568-$ or US-9664864-$ or US-9658407-$ or US-9645335-$ or US-9645326-$ or US-9638871-$ or US-9638868-$ or US-9632267-$ or US-9625658-$ or US-9625657-$ or US-9625655-$).did. or (US-9606303-$ or US-9551831-$ or US-9482825-$ or US-				

		9453972-$ or US-9448369-$ or US-9389368-$ or US-9377591-$ or US-9323007-$ or US-9316794-$ or US-9316791-$ or US-9291781-$ or US-9229177-$ or US-9229170-$ or US-9207454-$ or US-9002168-$ or US-8953922-$ or US-8814443-$ or US-8757893-$ or US-8588571-$ or US-8517614-$ or US-8459879-$ or US-8388235-$ or US-8206040-$ or US-8070366-$ or US-7972066-$ or US-7738757-$ or US-7712970-$).did. or (US-7706657-$ or US-7630609-$ or US-7588373-$ or US-7585118-$ or US-7530845-$ or US-7412148-$ or US-7232261-$ or US-7229220-$ or US-7192198-$ or US-7052186-$ or US-7036996-$ or US-6944378-$ or US-6895146-$ or US-6856748-$ or US-6848834-$ or US-6840680-$ or US-6839583-$ or US-6830382-$ or US-6817777-$ or US-6793399-$ or US-6789953-$ or US-6786647-$ or US-6712521-$ or US-6702475-$ or US-6695485-$ or US-6688782-$ or US-6667803-$).did. or (US-6644866-$ or US-6634794-$ or US-6632023-$ or US-6623172-$ or US-6619859-$ or US-6619856-$ or US-6612750-$ or US-6601995-$ or US-6599032-$ or US-6595696-$ or US-6582132-$ or US-6572276-$ or US-6572273-$ or US-6561699-$ or US-6558044-$ or US-6554486-$ or US-6554482-$ or US-6543941-$ or US-6533469-$ or US-6533465-$ or US-6527450-$ or US-6526210-$ or US-6524015-$ or US-6510267-$ or US-6508593-$ or US-6501900-$ or US-6498882-$).did. or (US-6497518-$ or US-6497516-$ or US-6226429-$ or US-6491442-$ or US-6487343-$ or US-6485192-$ or US-6481900-$ or US-6481899-$ or US-6474876-$ or US-6471417-$ or US-6471412-$ or US-6467971-$ or US-6467970-$ or US-6466724-$ or US-6464406-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6457876-$ or US-6456768-$ or US-6450698-$ or US-6447172-$ or US-6445867-$ or US-6437894-$ or US-6435946-$ or US-6431762-$ or US-6425694-$).did. or			

		(US-6425692-$ or US-6422761-$ or US-6422760-$ or US-6422759-$ or US-6419810-$ or US-6412987-$ or US-6412986-$ or US-6409394-$ or US-6409392-$ or US-6409391-$ or US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6389212-$ or US-6386768-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6379052-$ or US-6377840-$ or US-6375363-$ or US-6305849-$ or US-6371659-$ or US-6371657-$ or US-6367986-$ or US-6367984-$ or US-6364536-$).did. or (US-6361218-$ or US-6357932-$ or US-6357931-$ or US-6354746-$ or US-6352372-$ or US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6343950-$ or US-6334715-$ or US-6331079-$ or US-6328481-$ or US-6318904-$ or US-6318903-$ or US-6318902-$ or US-6089759-$ or US-6309111-$ or US-6302592-$ or US-6301004-$ or US-6095695-$ or US-6293706-$ or US-6290527-$ or US-6283640-$ or US-6045270-$ or US-6273618-$ or US-6267513-$ or US-6264375-$).did. or (US-6264373-$ or US-6264372-$ or US-6259839-$ or US-6256446-$ or US-6250817-$ or US-6247851-$ or US-6247849-$ or US-6243526-$ or US-6243518-$ or US-6240235-$ or US-6240229-$ or US-6238249-$ or US-6234681-$ or US-6231244-$ or US-6227719-$ or US-6227718-$ or US-6224269-$ or US-6220763-$ or US-6220762-$ or US-6219479-$ or US-6217226-$ or US-6215944-$ or US-6210045-$ or US-6206577-$ or US-6200040-$ or US-6196729-$ or US-6195477-$).did. or (US-6193420-$ or US-6190616-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6179480-$ or US-6179475-$ or US-6173099-$ or US-6164835-$ or US-6164834-$ or US-6154597-$ or US-6149315-$ or US-6149313-$ or US-6142676-$ or US-6139346-$ or US-6132105-$ or US-6116789-$ or US-6116101-$ or US-6108482-$ or US-6104856-$ or US-6102581-$ or US-6095694-$ or US-6088502-$ or US-6081647-$ or				

		US-6079881-$ or US-6076975-$ or US-6064791-$).did. or (US-6059461-$ or US-6053639-$ or US-6048103-$ or US-6048102-$ or US-6045269-$ or US-6041155-$ or US-6027252-$ or US-6024498-$ or US-6022149-$ or US-6017154-$ or US-6012852-$ or US-6007256-$ or US-6004043-$ or US-6004042-$ or US-5993071-$ or US-5987203-$ or US-5984533-$ or US-5980117-$ or US-5971626-$ or US-5969294-$ or US-5963689-$ or US-5960137-$ or US-5956444-$ or US-5953474-$ or US-5953473-$ or US-5949946-$ or US-5862289-$).did. or (US-5940561-$ or US-5940559-$ or US-5937121-$ or US-5930426-$ or US-5930425-$ or US-5923805-$ or US-5921796-$ or US-5920670-$ or US-5920669-$ or US-5915058-$ or US-5909526-$ or US-5909298-$ or US-5742720-$ or US-5737463-$ or US-5896477-$ or US-5892870-$ or US-5887100-$ or US-5887098-$ or US-5881191-$ or US-5870515-$ or US-5867894-$ or US-5867621-$ or US-5862282-$ or US-5845036-$ or US-5727097-$ or US-5838856-$ or US-5838855-$).did. or (US-5832158-$ or US-5825955-$ or US-5818993-$ or US-5815621-$ or US-5815618-$ or US-5809191-$ or US-5799122-$ or US-5796896-$ or US-5781680-$ or US-5778123-$ or US-5778122-$ or US-5774612-$ or US-5774611-$ or US-5768738-$ or US-5548677-$ or US-5764043-$ or US-5761359-$ or US-5751874-$ or US-5748818-$ or US-5737464-$ or US-5734770-$ or US-5732174-$ or US-5732173-$ or US-5727102-$ or US-5721799-$ or US-5701380-$ or US-5694507-$).did. or (US-5694506-$ or US-5692089-$ or US-5692080-$ or US-5687268-$ or US-5682449-$ or US-5680494-$ or US-5673346-$ or US-5671310-$ or US-5668904-$ or US-5666456-$ or US-5666449-$ or US-5664955-$ or US-5661833-$ or US-5581644-$ or US-5651084-$ or US-5647043-$ or US-5645449-$ or US-5642450-$ or US-5633969-$ or US-5620634-$ or US-5619610-$				

		or US-5386485-$ or US-5611017-$ or US-5611010-$ or US-5607323-$ or US-5603631-$ or US-5602951-$).did. or (US-5600749-$ or US-5600746-$ or US-5325454-$ or US-5592323-$ or US-5588086-$ or US-5588079-$ or US-5579429-$ or US-5574817-$ or US-5574813-$ or US-5570445-$ or US-5563978-$ or US-5563974-$ or US-5563971-$ or US-5555332-$ or US-5550943-$ or US-5548674-$ or US-5542015-$ or US-5537501-$ or US-5530783-$ or US-5528711-$ or US-5521998-$ or US-5521997-$ or US-5519799-$ or US-5506922-$ or US-5499310-$ or US-5497444-$ or US-5485537-$).did. or (US-5483608-$ or US-5473717-$ or US-5452391-$ or US-5450519-$ or US-5446817-$ or US-5444806-$ or US-5420951-$ or US-5418875-$ or US-5339376-$ or US-5414786-$ or US-5408557-$ or US-5367595-$ or US-5384885-$ or US-5379360-$ or US-5372758-$ or US-5367594-$ or US-5366383-$ or US-5363460-$ or US-5359688-$ or US-5339377-$ or US-5335301-$ or US-5333225-$ or US-5333222-$ or US-5333221-$ or US-5329541-$ or US-5323475-$ or US-5317663-$).did. or (US-5315679-$ or US-5315678-$ or US-5305409-$ or US-5297227-$ or US-5293581-$ or US-5282259-$ or US-5280552-$ or US-5274729-$ or US-5267342-$ or US-5265181-$ or US-5259052-$ or US-5239606-$ or US-5233675-$ or US-5233674-$ or US-5231685-$ or US-5228104-$ or US-5222168-$ or US-5214730-$ or US-5210815-$ or US-5199093-$ or US-5179607-$ or US-5177808-$ or US-5166995-$ or US-5159654-$ or US-5157749-$ or US-5155795-$ or US-5134677-$).did. or (US-5134676-$ or US-5134673-$ or US-5133032-$ or US-5129024-$ or US-5127073-$ or US-5124506-$ or US-5119455-$ or US-5115484-$ or US-5109468-$ or US-5109453-$ or US-5101463-$ or US-5091991-$ or US-5091990-$ or US-5082346-$ or US-5082344-$ or US-5077815-$ or US-5076656-$ or US-				

		5073042-$ or US-5064268-$ or US-5058983-$ or US-5052774-$ or US-5048916-$ or US-5042891-$ or US-5018823-$ or US-5016972-$ or US-5016970-$ or US-5015060-$).did. or (US-5013124-$ or US-4998797-$ or US-4998796-$ or US-4995688-$ or US-4993803-$ or US-4991929-$ or US-4986762-$ or US-4986622-$ or US-4976510-$ or US-4973127-$ or US-4973126-$ or US-4964688-$ or US-4960317-$ or US-4955976-$ or US-4953929-$ or US-4944079-$ or US-4921325-$ or US-4915472-$ or US-4900118-$ or US-4898446-$ or US-4892380-$ or US-4886335-$ or US-4877303-$ or US-4856866-$ or US-4854664-$ or US-4852963-$ or US-4850671-$).did. or (US-4850536-$ or US-4848870-$ or US-4846544-$ or US-4844570-$ or US-4842361-$ or US-4834486-$ or US-4830456-$ or US-4824196-$ or US-4818058-$ or US-4813760-$ or US-4807957-$ or US-4805980-$ or US-4795231-$ or US-4793683-$ or US-4789216-$ or US-4787700-$ or US-4786135-$ or US-4784456-$ or US-4783137-$ or US-4781429-$ or US-4773725-$ or US-4767178-$ or US-4762389-$ or US-4762387-$ or US-4759600-$ or US-4759599-$ or US-4758719-$).did. or (US-4741590-$ or US-4740052-$ or US-4737009-$ or US-4722081-$ or US-4718744-$ or US-4717234-$ or US-4715674-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4699460-$ or US-4688887-$ or US-4687291-$ or US-4681398-$ or US-4674831-$ or US-4666241-$ or US-4648688-$ or US-4645296-$ or US-4615581-$ or US-4614402-$ or US-4579418-$ or US-4575183-$ or US-4548467-$ or US-4526438-$ or US-4515434-$ or US-4506946-$ or US-4497536-$).did. or (US-4487474-$ or US-4486072-$ or US-4484796-$ or US-4477146-$ or US-4466009-$ or US-4464817-$ or US-4461539-$ or US-4447121-$ or US-4445753-$ or US-4444461-$ or US-4422716-$ or US-4415232-$ or US-4387957-$ or US-4385801-$ or				

		US-4371233-$ or US-4368948-$ or US-4354731-$ or US-4341439-$ or US-4330172-$ or US-4327964-$ or US-4320938-$ or US-4310218-$ or US-4295707-$ or US-4291943-$ or US-4279469-$ or US-4268115-$ or US-4268114-$).did. or (US-4252407-$ or US-4240695-$ or US-4223976-$ or US-4218113-$ or US-4214812-$ or US-4201445-$ or US-4201444-$ or US-4186997-$ or US-4186996-$ or US-4168109-$ or US-4167304-$ or US-4160580-$ or US-4140365-$ or US-4101198-$ or US-4087158-$ or US-4080044-$ or US-3999837-$ or US-3933409-$ or US-10545295-$ or US-10502903-$ or US-10401575-$ or US-10353155-$).did. or (EP-3258301-$ or EP-3054333-$ or CA-2885821-$ or EP-2444827-$ or WO-2018004847-$ or JP-6173629-$ or WO-2015043158-$ or CN-206584076-$ or WO-2016161341-$ or DE-202016103178-$ or WO-2016082160-$ or EP-3021145-$ or JP-5905950-$ or CA-2689768-$ or CA-2928026-$ or CA-2762411-$ or CA-2859345-$ or DE-202013012295-$ or WO-2016004347-$ or WO-2015190211-$ or EP-2942653-$ or CN-204595258-$ or WO-2015116589-$ or WO-2015103783-$ or GB-201507758-$ or CA-2932688-$).did. or (WO-2015068103-$ or EP-2843452-$ or WO-2014143748-$ or JP-5433802-$ or CN-102870023-$ or WO-2012151175-$ or WO-2014049469-$ or WO-2014009463-$ or CA-2912155-$ or WO-2013126068-$ or WO-2013115791-$ or WO-2013115789-$ or CA-2662854-$ or WO-2011152874-$ or GB-201218194-$ or CN-102456976-$ or WO-2011139938-$ or WO-2011044724-$ or CN-101122658-$ or CN-101931134-$ or WO-2010068896-$ or WO-2010025180-$ or EP-2138880-$ or WO-2009110421-$ or CA-2503690-$ or WO-2008006402-$ or CN-1331421-$).did. or (EP-1168016-$ or EP-1172672-$ or EP-1530068-$ or CA-2321428-$ or AU-2003291687-$ or				

		JP-3106420-$ or EP-1168018-$ or CA-2191600-$ or WO-03093883-$ or CA-2484569-$ or DE-10114144-$ or CN-1118443-$ or WO-03016975-$ or NL-1018440-$ or CA-2284331-$ or EP-0690319-$ or CA-2030897-$ or WO-0155762-$ or CA-2418331-$ or DE-20118858-$ or EP-1124147-$ or EP-1172673-$ or WO-0137010-$ or CA-2198522-$ or WO-0161397-$ or EP-1039324-$ or EP-1039322-$).did. or (EP-1033595-$ or EP-1033594-$ or GB-0007281-$ or EP-0992819-$ or GB-9919699-$ or CA-2262351-$ or CA-2294930-$ or EP-0696748-$ or WO-9734176-$ or CA-2171494-$ or WO-9627811-$ or EP-0633485-$ or EP-0249237-$ or EP-0262847-$ or CA-2082276-$ or GB-9106183-$ or DE-9107960-$ or GB-9103604-$ or WO-9015350-$ or DE-8626183-$ or EP-0262631-$ or EP-0061243-$ or WO-8600147-$ or DE-3112078-$ or GB-2081468-$ or IT-8323399-$ or IT-8323399-$).did. or (GB-2057158-$ or GB-8306227-$ or DK-208682-$ or FR-2487528-$ or FR-2435053-$ or BE-871785-$ or CA-1097111-$ or IT-7925110-$ or FR-2363124-$ or BE-871785-$ or CA-1043604-$ or WO-2019190616-$ or CN-110068899-$).did. or (JP-09033756-$ or JP-04214510-$ or JP-11072659-$ or JP-04220604-$ or JP-56074211-$ or JP-2017138535-$ or JP-05313040-$ or JP-62111222-$ or JP-59140411-$ or JP-59075218-$ or JP-57044113-$ or JP-56066811-$ or JP-55101904-$ or JP-54034251-$).did. or (US-20190107679-$ or US-20180224615-$ or WO-2018125706-$ or US-20180156985-$ or US-20180128988-$ or US-20180120519-$ or US-20180106973-$ or US-20180081128-$ or US-20180052288-$ or US-20180011258-$ or US-20180003903-$ or US-20180364421-$ or US-20170371109-$ or CN-107450131-$ or US-20170336577-$ or US-20170343760-$ or US-9804340-$ or US-20170307830-$ or FR-3050286-$ or US-20170299820-$ or US-20170293088-$ or US-				

		20170261699-$ or US-20170254967-$ or US-20170254966-$ or US-20170227720-$ or US-9726830-$).did. or (US-20170219779-$ or JP-6173629-$ or US-20170205587-$ or US-9709753-$ or US-20170184790-$ or US-9678283-$ or US-20170153398-$ or US-20170139150-$ or US-20170139156-$ or US-20170102504-$ or US-20170115457-$ or WO-2017065999-$ or US-20170090127-$ or WO-2017038704-$ or US-20170059784-$ or US-20170031106-$ or US-20160377819-$ or US-20160349466-$ or US-20160341908-$ or US-20160341911-$ or WO-2016182556-$ or US-20160327757-$ or US-9482820-$ or WO-2016161341-$ or US-20160282566-$ or CN-105978629-$ or US-20160259135-$).did. or (US-20170329090-$ or EP-3054333-$ or US-9389368-$ or WO-2016105567-$ or US-9377591-$ or US-20160178852-$ or US-20160178859-$ or US-20160161680-$ or EP-3021145-$ or US-20160131854-$ or US-20160124158-$ or JP-5905950-$ or WO-2016053853-$ or WO-2016043922-$ or WO-2016033577-$ or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016024014-$ or JP-5860948-$ or CA-2859345-$ or US-20160025937-$ or US-20160004016-$ or US-20160004018-$ or US-20150378110-$ or WO-2015190211-$ or EP-2947485-$).did. or (US-20150331201-$ or CN-104950402-$ or DE-102015106225-$ or US-20160306125-$ or US-20150286012-$ or WO-2015144883-$ or US-20150241644-$ or US-20150226926-$ or US-20150226925-$ or WO-2015116589-$ or US-20150219864-$ or WO-2015103783-$ or CN-104570229-$ or CN-104516061-$ or US-20150177463-$ or US-20150162982-$ or WO-2015070382-$ or WO-2015068103-$ or WO-2015028433-$ or US-20150049989-$ or WO-2015009435-$ or US-20150023637-$ or EP-2818903-$ or				

		US-20140363131-$ or WO-2014197701-$ or US-20140321808-$ or WO-2014165175-$).did. or (WO-2014143748-$ or US-20140219624-$ or EP-2759860-$ or WO-2014113753-$ or US-20140205247-$ or US-20140199034-$ or US-20140153879-$ or US-20140147081-$ or ES-1110405-$ or WO-2014049469-$ or TW-474924-$ or US-20140064688-$ or JP-5433802-$ or EP-2700992-$ or WO-2014011898-$ or US-20140016901-$ or WO-2014011283-$ or WO-2013177234-$ or WO-2013155395-$ or US-20130259429-$ or US-20130230283-$ or WO-2013126068-$ or WO-2013122865-$ or WO-2013117598-$ or WO-2013115789-$ or WO-2013115791-$ or US-20130121645-$).did. or (CN-103091793-$ or WO-2013036843-$ or US-20130051749-$ or TW-201309089-$ or CN-102870023-$ or US-20120308183-$ or WO-2012151175-$ or US-20120263419-$ or US-20120251051-$ or US-20120251054-$ or TW-201233549-$ or US-20120099822-$ or EP-2444827-$ or US-20120082416-$ or US-20120057824-$ or KR-2012000895-$ or US-20120027355-$ or KR-2012000895-$ or WO-2011152874-$ or US-20110274437-$ or US-20110249942-$ or EP-2302431-$ or WO-2010137426-$ or EP-2206458-$ or WO-2010068896-$ or US-7712970-$ or WO-2010025180-$).did. or (US-20100040330-$ or WO-2009110421-$ or US-20090060423-$ or US-20090041411-$ or US-7435009-$ or US-20070098327-$ or US-20070077010-$ or US-20070058907-$ or EP-1752805-$ or US-20060193562-$ or US-20060165352-$ or US-20060153503-$ or WO-2006022840-$ or US-20050053342-$ or US-20040228589-$ or US-20040223699-$ or US-20040062498-$ or EP-1394584-$ or WO-03094297-$ or WO-03093883-$ or US-20030044125-$ or US-				

		20030031437-$ or WO-02061481-$ or US-6422760-$ or WO-02056060-$ or DE-20118858-$ or EP-1172673-$).did. or (EP-1172672-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or US-20010041030-$ or WO-0181965-$ or EP-1124147-$ or EP-1107031-$ or WO-0140839-$ or EP-1092995-$ or EP-1091225-$ or EP-1041416-$ or EP-1041414-$ or EP-1020745-$ or EP-1016885-$ or EP-1010999-$ or GB-2341455-$ or WO-9947958-$ or US-5940561-$ or WO-9928774-$ or WO-9857208-$ or DE-19626036-$ or WO-9746900-$ or US-5692080-$ or EP-803750-$ or WO-9734176-$ or WO-9723794-$).did. or (EP-758099-$ or WO-9634176-$ or WO-9627811-$ or JP-08201656-$ or WO-9616080-$ or EP-697608-$ or EP-696748-$ or WO-9600917-$ or EP-663602-$ or EP-663601-$ or EP-660145-$ or EP-660144-$ or EP-505197-$ or EP-490698-$ or US-5101463-$ or EP-458608-$ or WO-9117540-$ or US-5064268-$ or GB-2241794-$ or EP-430107-$ or WO-9015350-$ or US-4953929-$ or EP-262631-$ or EP-249237-$ or WO-8600147-$ or US-4496213-$ or EP-125398-$).did. or (DE-3208797-$ or GB-2098354-$ or EP-61243-$ or GB-2081468-$ or GB-2057158-$ or DE-2932986-$ or BE-871785-$ or DE-2805949-$ or DE-2558445-$ or US-10502903-$).did.				
S824	1,872	(G02B6/3879).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 13:06
S825	1,322	S824 not (S820 S821 S822 S823)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 13:06
S826	696	(US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:06

		20190227240-$ or US-20190227237-$ or US-20190219775-$ or US-20190170931-$ or US-20190137700-$ or US-20190137697-$ or US-20190137695-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20190033531-$ or US-20190004252-$ or US-20190004251-$ or US-20180364422-$ or US-20180364436-$).did. or (US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180321449-$ or US-20180217336-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180128988-$ or US-20170363818-$ or US-20170261696-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170205586-$ or US-20170176691-$ or US-20170176692-$ or US-20170068064-$ or US-20170059785-$ or US-20170063464-$ or US-20170023746-$ or US-20160349458-$ or US-20160327756-$ or US-20160306122-$ or US-20160282565-$).did. or (US-20160274314-$ or US-20160223774-$ or US-20160202428-$ or US-20160091674-$ or US-20150378113-$ or US-20150277059-$ or US-20150260924-$ or US-20150260923-$ or US-20150198774-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20140205257-$ or US-20140169727-$ or US-20140168987-$ or US-20140161392-$ or US-20140153878-$ or US-20140153879-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140037253-$ or US-20140029900-$ or US-20140022627-$ or US-20140016901-$ or US-20140003771-$).did. or (US-20130322825-$ or US-20130158512-$ or US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20120155803-$ or US-20120093462-$ or US-20110299266-$ or US-				

		20110229092-$ or US-20110229083-$ or US-20110064361-$ or US-20110058774-$ or US-20100322563-$ or US-20100178014-$ or US-20100178010-$ or US-20100054668-$ or US-20100027942-$ or US-20090135429-$ or US-20080317415-$ or US-20080273840-$ or US-20080226235-$ or US-20080124033-$ or US-20080090433-$ or US-20080013889-$ or US-20070292084-$ or US-20070031103-$).did. or (US-20060275007-$ or US-20060257075-$ or US-20060257076-$ or US-20060204178-$ or US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060127028-$ or US-20060093274-$ or US-20060083466-$ or US-20060063436-$ or US-20060045428-$ or US-20060018603-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20040157499-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020176960-$ or US-20020142634-$).did. or (US-20020126960-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$).did. or (US-10444442-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9977197-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$ or US-7857523-$ or US-7572063-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$ or US-6364537-$).did. or (US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-6179476-$ or US-6179477-$ or US-6130977-$ or US-6062739-$ or US-				

		5971625-$ or US-5970598-$ or US-5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717533-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$ or US-5577146-$).did. or (US-5546281-$ or US-5436994-$ or US-5400428-$ or US-5396572-$ or US-5329604-$ or US-5289554-$ or US-5276755-$ or US-5265182-$ or US-5261019-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212752-$ or US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5121454-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$).did. or (US-5067783-$ or US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$).did. or (US-4728171-$ or US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$).did. or (WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$ or WO-2019086961-$ or WO-2019006195-$ or WO-				

		2019006176-$ or CN-108693606-$ or EP-3330757-$ or WO-2018044728-$ or EP-3278153-$ or CN-107636504-$ or WO-2018009426-$ or WO-2017182535-$ or CN-206479676-$ or EP-3180644-$ or EP-3123221-$ or WO-2016174980-$ or WO-2016140710-$ or CN-105683795-$ or WO-2015120031-$ or WO-2015070382-$ or EP-2852856-$ or WO-2015009435-$ or FR-2997767-$ or WO-2014054357-$ or CN-103676018-$).did. or (CA-2866107-$ or GB-201220748-$ or CN-102520489-$ or CN-102445735-$ or CN-102385113-$ or WO-2012015713-$ or DE-102010021179-$ or GB-201004720-$ or DE-112006003952-$ or CA-2593676-$ or WO-2008033262-$ or EP-1783524-$ or AU-2006295165-$ or EP-1762871-$ or DE-60026115-$ or KR-100452879-$ or AU-2004274992-$ or CA-2441872-$ or KR-20040020797-$ or CN-1334472-$ or DE-20111078-$ or DE-10031931-$ or CA-2302068-$ or DE-19834723-$ or WO-9723794-$ or DE-29614436-$ or DE-19525739-$).did. or (CH-687105-$ or DE-19601949-$ or GB-9525323-$ or FR-2707402-$ or WO-9415232-$ or GB-9408857-$ or EP-0546936-$ or MX-9201992-$ or DE-4203966-$ or IT-MI913184-$ or GB-9103982-$ or CH-676513-$ or GB-9025881-$ or DE-3914978-$ or DE-9012174-$ or DE-9010357-$ or DE-8911081-$ or DE-8911080-$ or EP-0339876-$ or EP-0324272-$ or DE-8901052-$ or DE-8900623-$ or EP-0292024-$ or DE-8812341-$ or DE-3737842-$ or DE-3701421-$ or EP-0253426-$).did. or (EP-0249406-$ or KR-870005264-$ or EP-0183820-$ or EP-0166636-$ or EP-0154781-$ or EP-0153249-$ or EP-0098190-$ or EP-0098205-$ or FR-2528984-$ or FR-2502798-$ or GB-2086602-$ or EP-0045271-$ or WO-8002213-$ or DE-2932986-$ or DE-2832839-$ or AU-3682878-$ or GB-1526682-$ or FR-2316611-$ or GB-1450760-$ or				

		FR-2268370-$).did. or (JP-2019184942-$ or JP-2005258017-$ or JP-2000241670-$ or JP-05215939-$ or JP-03059503-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-61129605-$ or JP-61028909-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-59038707-$ or JP-59036207-$ or JP-58190910-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56062212-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$).did. or (US-20200033539-$ or US-20200012053-$ or US-20200003961-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$ or EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190227240-$ or US-20190219775-$ or US-20190204513-$ or US-20190162914-$ or US-20190162917-$).did. or (US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or US-20180372962-$ or US-20180364422-$ or CN-108983368-$ or KR-2018131725-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or US-20180292612-$ or CN-108490551-$).did. or (US-				

		20180231722-$ or JP-6363784-$ or US-20180203196-$ or CN-108279462-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018008399-$ or CN-107479141-$ or EP-3249434-$ or WO-2017182535-$ or US-20170264045-$ or US-20170261698-$ or US-20170261696-$ or KR-2017103050-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017106514-$).did. or (US-20170176691-$ or US-20170176692-$ or WO-2017095928-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$ or US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or WO-2015142551-$ or US-20150260923-$ or CN-104914515-$ or WO-2015126470-$).did. or (WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$ or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$				

		or WO-2012029013-$).did. or (WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$ or US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$).did. or (US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$ or EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9723794-$ or WO-9637793-$).did. or (DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-420490-$ or EP-335531-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$ or EP-440447-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$).did. or (EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-				

		156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$ or EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$).did. or (GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$).did.				
S827	1,322	S825 not S826	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 13:06
S828	5,309	(G02B6/3825).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 13:06
S829	55	(US-20140241689-$ or US-20200057205-$ or US-20200070211-$ or US-20190377139-$ or US-20190346644-$ or US-20190331862-$ or US-20190285806-$ or US-20190278028-$ or US-20190101703-$ or US-20180031783-$ or US-20160062050-$ or US-20160035201-$ or US-20150241650-$ or US-20150063758-$ or US-20140348481-$ or US-20140348467-$ or US-20140241688-$ or US-20140233893-$ or US-20140219609-$ or US-20130272671-$ or US-20130259429-$ or US-20130051733-$ or US-20130044978-$ or US-20120251051-$ or US-20110038592-$ or US-20100322580-$).did. or (US-20100199447-$ or US-20100111484-$ or US-20100054665-$ or US-20090274432-$ or US-20080273837-$ or US-20050163431-$ or US-20050111810-$ or US-20050111809-$ or US-20030190130-$ or US-20030108301-$).did. or (US-8858089-$ or US-6857900-$ or US-6705765-$ or US-6547585-$ or US-6485189-$ or US-6412986-$ or US-6146023-$ or US-6041155-$ or US-5870515-$ or US-5675682-$ or US-5600747-$).did. or (US-10459172-$ or US-20150063758-$ or US-	US-PGPUB; USPAT; DERWENT	OR	ON	2020/09/01 13:06

		20140348467-$ or US-20140348481-$ or US-20140241688-$ or US-20140241689-$ or WO-2013155395-$ or US-20130259429-$).did.				
S830	623	(US-20150260936-$ or US-20190324218-$ or US-20150219864-$ or US-20160170154-$ or US-20200150353-$ or US-20180267258-$ or US-20200132941-$ or US-20180335577-$ or US-20200116950-$ or US-20190181586-$ or US-20200088955-$ or US-20200081194-$ or US-20200057204-$ or US-20200057199-$ or US-20200049902-$ or US-20190129104-$ or US-20190377138-$ or US-20190369335-$ or US-20190353865-$ or US-20190346635-$ or US-20190346634-$ or US-20180217339-$ or US-20190331862-$ or US-20190302371-$ or US-20190190199-$ or US-20160195682-$).did. or (US-20190271815-$ or US-20190243084-$ or US-20090238522-$ or US-20190243075-$ or US-20190235174-$ or US-20180292617-$ or US-20190200103-$ or US-20190187383-$ or US-20170227719-$ or US-20190113693-$ or US-20190113692-$ or US-20190113689-$ or US-20190101706-$ or US-20190101705-$ or US-20190101704-$ or US-20190079252-$ or US-20190072729-$ or US-20190064452-$ or US-20190049678-$ or US-20190041587-$ or US-20190025526-$ or US-20170371109-$ or US-20180356600-$ or US-20180335571-$ or US-20180329154-$ or US-20180314018-$ or US-20140321808-$).did. or (US-20170045702-$ or US-20180306984-$ or US-20180299624-$ or US-20180284357-$ or US-20180267256-$ or US-20130089293-$ or US-20180136416-$ or US-20180100982-$ or US-20180081129-$ or US-20180052287-$ or US-20170293090-$ or US-20170205590-$ or US-20160062050-$ or US-20160320572-$ or US-20160341905-$ or US-20160306125-$ or US-20150162982-$ or US-20160223757-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:06

		20150063815-$ or US-20140363131-$ or US-20140321810-$ or US-20140301701-$ or US-20140241671-$ or US-20120257865-$ or US-20080311781-$ or US-20110274437-$ or US-20120128302-$).did. or (US-20120099819-$ or US-20120057824-$ or US-20110091158-$ or US-20110059642-$ or US-20100310213-$ or US-20100226610-$ or US-20100104355-$ or US-20070077010-$ or US-20080248691-$ or US-20080175543-$ or US-20080131055-$ or US-20070292082-$ or US-20080037934-$ or US-20080032536-$ or US-20070116412-$ or US-20050226567-$ or US-20050164536-$ or US-20050163429-$ or US-20050095899-$ or US-20050018973-$ or US-20040228582-$ or US-20030031448-$ or US-20030031437-$ or US-20030012520-$ or US-20020167793-$).did. or (US-10571641-$ or US-10539745-$ or US-10527803-$ or US-10514518-$ or US-10429592-$ or US-10401574-$ or US-10302874-$ or US-10234635-$ or US-10133009-$ or US-10120140-$ or US-10120138-$ or US-10101570-$ or US-10094768-$ or US-9971103-$ or US-9678294-$ or US-9658405-$ or US-9645323-$ or US-9606300-$ or US-9581767-$ or US-9557508-$ or US-9557491-$ or US-9551835-$ or US-9482840-$ or US-9482823-$ or US-9448368-$ or US-9366829-$).did. or (US-9335488-$ or US-9291785-$ or US-9274300-$ or US-9110249-$ or US-9103990-$ or US-9057845-$ or US-9052475-$ or US-9033588-$ or US-9022666-$ or US-8985862-$ or US-8979388-$ or US-8845206-$ or US-8821036-$ or US-8801297-$ or US-8573854-$ or US-8419291-$ or US-8406588-$ or US-8202009-$ or US-8157455-$ or US-8104973-$ or US-8009959-$ or US-7980769-$ or US-7887243-$ or US-7758255-$ or US-7744285-$ or US-7717625-$ or US-7374347-$).did. or (US-7336884-$ or US-7261471-$ or US-7234876-$ or US-7111990-$ or US-7090407-$				

		or US-7073953-$ or US-6994478-$ or US-6945702-$ or US-6920255-$ or US-6872006-$ or US-6866424-$ or US-6832858-$ or US-6805493-$ or US-6789950-$ or US-6769814-$ or US-6762941-$ or US-6761488-$ or US-6572276-$ or US-6554486-$ or US-6513989-$ or US-6459843-$ or US-6435728-$ or US-6434316-$ or US-6434315-$ or US-6398422-$ or US-6364539-$ or US-6357928-$).did. or (US-6351590-$ or US-6264374-$ or US-6259856-$ or US-6257917-$ or US-6256448-$ or US-6203208-$ or US-6149313-$ or US-6146023-$ or US-6139194-$ or US-5963698-$ or US-5600747-$ or US-5511138-$ or US-5428702-$ or US-5335301-$ or US-5265181-$ or US-5216732-$ or US-5183408-$ or US-5166995-$ or US-4986769-$ or US-4950048-$ or US-4904199-$ or US-4711511-$ or US-4657338-$ or US-4580868-$ or US-4478485-$ or US-4448467-$ or US-4376565-$).did. or (US-4186997-$).did. or (WO-2019012006-$ or CA-2864886-$ or WO-2020047283-$ or WO-2017147401-$ or WO-2018183496-$ or GB-201311768-$ or GB-201906387-$ or CN-110618492-$ or WO-2018140873-$ or AU-2015318357-$ or WO-2019222189-$ or WO-2016077167-$ or CN-105425341-$ or WO-2012106510-$ or WO-2019200066-$ or WO-2016086881-$ or WO-2019125963-$ or WO-2016053673-$ or FR-3021415-$ or WO-2019089220-$ or WO-2019060293-$ or WO-2017139430-$ or EP-3330758-$ or WO-2019036297-$ or WO-2018169759-$ or WO-2016049208-$).did. or (CA-2869770-$ or WO-2018045232-$ or WO-2015029585-$ or CN-105283786-$ or WO-2017123460-$ or JP-5805344-$ or CN-205992071-$ or WO-2016068966-$ or WO-2015191024-$ or WO-2011019581-$ or EP-2818903-$ or WO-2014116785-$ or WO-2013049082-$ or CA-2546593-$ or WO-2008045560-$ or WO-				

		2011130445-$ or CA-2304082-$ or WO-2010103465-$ or EP-2251724-$ or AU-2002243312-$ or WO-9909442-$ or CN-1231430-$ or CA-2537354-$ or EP-1221630-$ or WO-0008503-$ or CA-2276631-$ or EP-1229366-$).did. or (EP-1879060-$ or CA-2594549-$ or CN-1258011-$ or WO-2005022228-$ or WO-2004008214-$ or WO-2004107001-$ or EP-1334394-$ or WO-2006007120-$ or CA-2276627-$ or EP-1415186-$ or WO-2005047946-$ or EP-1257012-$ or EP-1299758-$ or CA-2283016-$ or WO-9746900-$ or WO-9857208-$ or CA-2339502-$ or CA-2327007-$ or CA-2136212-$ or CN-1231429-$ or EP-0927899-$ or EP-0927898-$ or WO-0075701-$ or AU-1587897-$ or CA-2288247-$ or EP-1273944-$ or CA-2068453-$).did. or (GB-9011424-$ or WO-0182374-$ or EP-0927895-$ or CA-2312241-$ or MX-9202155-$ or CA-2330965-$ or DE-19846731-$ or EP-1039323-$ or FR-2752951-$ or WO-9964917-$ or GB-9622511-$ or EP-0961142-$ or CA-2237481-$ or WO-9931539-$ or EP-0821253-$ or CA-2222237-$ or EP-0323920-$ or EP-0490698-$ or CA-1299407-$ or AU-1019788-$ or WO-9308493-$ or FR-2648240-$ or DE-9108955-$ or GB-8614272-$ or CA-1239820-$ or DE-3633340-$ or IT-7925047-$).did. or (GB-8332694-$ or EP-0109870-$ or DE-2933790-$ or DE-3021001-$ or GB-2058392-$).did. or (JP-2016009081-$ or JP-2016122050-$ or JP-2016085422-$ or JP-10050400-$ or JP-2002048946-$ or JP-08110439-$ or JP-09145959-$ or JP-10311934-$ or JP-09145957-$ or JP-07248434-$ or JP-01177508-$ or JP-59157605-$ or JP-56060409-$).did. or (US-20200174200-$ or US-20200166717-$ or US-20200142140-$ or US-20200124802-$ or US-20190384018-$ or US-20190339464-$ or US-20190339470-$ or US-20190324218-$ or US-20190302376-$ or US-20190285811-$ or US-20190243076-$ or US-20190235174-$ or CN-				

		110031940-$ or US-20190219776-$ or US-20190212504-$ or US-20190200103-$ or US-20190190199-$ or US-20190179089-$ or US-20190179086-$ or US-20190179088-$ or US-20190181586-$ or US-20190154928-$ or US-20190129104-$ or US-20190101704-$ or US-20190101705-$ or WO-2019060293-$).did. or (US-20200088955-$ or US-10234635-$ or US-20190079252-$ or US-10222562-$ or KR-2019006212-$ or WO-2019012006-$ or US-20190025526-$ or US-20190011645-$ or US-20190064452-$ or US-20180356600-$ or KR-2018129442-$ or US-20180329154-$ or US-20180335571-$ or US-20180335577-$ or US-20180335581-$ or US-10107967-$ or US-20180314014-$ or US-20180306997-$ or US-10107972-$ or US-20180299624-$ or US-10101570-$ or US-20180292617-$ or WO-2018183496-$ or US-20180267255-$ or US-20180239093-$ or US-20180217338-$ or US-20180217339-$).did. or (US-20180210155-$ or US-10018787-$ or US-20180188455-$ or CN-108227089-$ or US-20180156988-$ or US-9989712-$ or US-20190113692-$ or US-20180136416-$ or WO-2018085767-$ or US-9933582-$ or US-20180077472-$ or WO-2018045232-$ or WO-2018045234-$ or US-20180011261-$ or US-20170357060-$ or EP-3258301-$ or US-9823428-$ or US-20170299831-$ or US-20170293089-$ or WO-2017172600-$ or US-20170285277-$ or WO-2017160697-$ or WO-2017147401-$ or CN-106918869-$ or US-20170242199-$ or WO-2017136437-$ or US-20170227719-$).did. or (JP-2017134310-$ or US-20170212316-$ or US-20170205591-$ or US-20170192182-$ or WO-2017066139-$ or US-20170045702-$ or US-20170045695-$ or US-20170003456-$ or US-20160349464-$ or US-9482823-$ or US-9482825-$ or US-20160306124-$ or EP-3078999-$ or				

		US-20160282562-$ or US-9448369-$ or WO-2016137934-$ or US-20160238789-$ or WO-2016123128-$ or US-20160223757-$ or US-20160223763-$ or US-20160195682-$ or WO-2016104132-$ or US-20160161681-$ or WO-2016086881-$ or WO-2016082160-$ or US-20160139345-$ or EP-3021144-$).did. or (EP-3021146-$ or WO-2016068966-$ or US-20160109676-$ or WO-2016053852-$ or WO-2016053673-$ or WO-2016049208-$ or US-20160091673-$ or US-20160085045-$ or US-20160077284-$ or WO-2016039383-$ or US-20150370017-$ or WO-2015191024-$ or US-20160370549-$ or US-20150355417-$ or JP-5805344-$ or US-20150309279-$ or WO-2015158564-$ or WO-2015150149-$ or US-20150253518-$ or AU-2014101479-$ or US-20150131946-$ or WO-2015047380-$ or WO-2015029585-$ or WO-2014186436-$ or US-20140314385-$ or US-20140294339-$ or US-20140241667-$).did. or (US-20140219615-$ or US-20140205241-$ or AU-2014100325-$ or CN-103645545-$ or US-20140072265-$ or US-20180100982-$ or US-20130302004-$ or WO-2013126429-$ or US-20130209041-$ or US-20130170796-$ or US-20130170797-$ or WO-2013077969-$ or US-20130089293-$ or WO-2013019622-$ or WO-2013019189-$ or US-20120263423-$ or WO-2012106510-$ or WO-2012106513-$ or WO-2012106518-$ or JP-2012120095-$ or US-20120141070-$ or US-20110243504-$ or US-20110150396-$ or US-20110081798-$ or US-20110044590-$ or WO-2011019581-$ or KR-2011002571-$).did. or (US-20100322554-$ or US-20100310213-$ or WO-2010138446-$ or EP-2251724-$ or US-20100135618-$ or US-20100074616-$ or US-20090290838-$ or US-20090238522-$ or WO-2009023673-$ or EP-1990665-$ or US-20080253719-$ or WO-2008045560-				

		$ or EP-1887395-$ or US-20070160327-$ or US-20050271328-$ or US-20050226567-$ or WO-2005022229-$ or WO-2005022228-$ or WO-2005022227-$ or US-20040223701-$ or US-20040105628-$ or US-20040062486-$ or WO-2004008214-$ or US-20040008494-$ or KR-2003071425-$ or US-20030044127-$ or KR-2003012941-$).did. or (US-20030031448-$ or US-20030031419-$ or EP-1257012-$ or KR-2002019797-$ or WO-0219002-$ or WO-0216989-$ or WO-0216530-$ or WO-0182374-$ or EP-1150149-$ or CA-2339502-$ or WO-0155762-$ or EP-1116974-$ or WO-0137010-$ or WO-0075701-$ or WO-0070381-$ or EP-1054278-$ or EP-1039322-$ or JP-2000199833-$ or EP-1016886-$ or EP-1014126-$ or EP-997753-$ or WO-0008503-$ or EP-969299-$ or EP-969298-$ or WO-9964917-$ or EP-961142-$ or WO-9957786-$).did. or (EP-949522-$ or EP-927899-$ or EP-927898-$ or WO-9931539-$ or US-5915058-$ or WO-9928773-$ or US-5909526-$ or EP-916974-$ or WO-9909442-$ or US-5867621-$ or WO-9859271-$ or US-5778122-$ or EP-821253-$ or US-5666456-$ or JP-09145959-$ or GB-2306696-$ or US-5555332-$ or EP-712015-$ or US-5519799-$ or WO-9323777-$ or EP-514722-$ or US-5134673-$ or EP-323920-$ or EP-277390-$ or GB-2176629-$ or GB-2151040-$ or GB-2058392-$).did. or (EP-8329-$).did.				
S831	736	(US-20180321449-$ or US-20190004252-$ or US-20170059785-$ or US-20190137700-$ or US-20130158512-$ or US-20180364422-$ or US-20150378113-$ or US-20200012052-$ or US-20100054668-$ or US-20060093274-$ or US-20140029900-$ or US-20190004251-$ or US-20190258010-$ or US-20140153878-$ or US-20180128988-$ or US-20190170931-$ or US-20140153879-$ or US-20190137697-$ or US-20190137695-$ or US-20160349458-$ or US-20190121032-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:06

		$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20170176691-$ or US-20100322563-$).did. or (US-20190033531-$ or US-20170261696-$ or US-20180364436-$ or US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180217336-$ or US-20110058774-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180120517-$ or US-20170363818-$ or US-20160274314-$ or US-20170205586-$ or US-20140169727-$ or US-20160223774-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170176692-$ or US-20120093462-$ or US-20170068064-$ or US-20170063464-$ or US-20170023746-$).did. or (US-20110299266-$ or US-20140016901-$ or US-20160327756-$ or US-20160306122-$ or US-20150260924-$ or US-20160282565-$ or US-20160202428-$ or US-20140205257-$ or US-20160091674-$ or US-20150277059-$ or US-20150260923-$ or US-20150198774-$ or US-20140037253-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20120155803-$ or US-20140168987-$ or US-20140161392-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-$ or US-20110064361-$).did. or (US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20110229092-$ or US-20110229083-$ or US-20080226235-$ or US-20080273840-$ or US-20100178014-$ or US-20100178010-$ or US-20040157499-$ or US-20080013889-$ or US-20100027942-$ or US-20090135429-$ or US-20020126960-$ or US-20060127028-$ or US-20080317415-$ or US-20080090433-$ or US-20060257075-$ or US-20080124033-				

		$ or US-20060083466-$ or US-20070292084-$ or US-20060018603-$ or US-20060204178-$ or US-20070031103-$ or US-20060275007-$ or US-20060257076-$).did. or (US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060063436-$ or US-20060045428-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20020176960-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20020142634-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$ or US-20190219775-$ or US-20200200977-$ or US-20200183092-$).did. or (US-20200150374-$ or US-20200124805-$ or US-20200081193-$ or US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-$).did. or (US-10324264-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$ or US-7857523-$ or US-7572063-$ or US-5971625-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6179476-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$).did. or (US-6364537-$ or US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-5717533-$ or US-5212752-$ or US-6179477-$ or US-6130977-$ or US-5546281-$ or US-6062739-$ or US-5970598-$ or US-			

		5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$).did. or (US-5577146-$ or US-5436994-$ or US-5121454-$ or US-5400428-$ or US-5396572-$ or US-5265182-$ or US-5329604-$ or US-5261019-$ or US-5289554-$ or US-5276755-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$ or US-5067783-$).did. or (US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$ or US-4728171-$).did. or (US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$ or US-10670824-$ or US-10444442-$).did. or (CA-3068131-$ or EP-3180644-$ or WO-2016140710-$ or WO-2018009426-$ or WO-2015070382-$ or EP-3123221-$ or WO-2019246241-$ or EP-3579031-$ or GB-201905648-$ or				

		CN-105683795-$ or WO-2018044728-$ or WO-2019086961-$ or EP-2852856-$ or WO-2017182535-$ or EP-3330757-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$ or CN-107636504-$ or CN-206479676-$ or WO-2016174980-$ or AU-2004274992-$ or CA-2866107-$ or WO-2012015713-$ or FR-2997767-$ or CN-102520489-$).did. or (CN-102445735-$ or CN-103676018-$ or AU-2006295165-$ or WO-2015120031-$ or GB-9525323-$ or GB-201220748-$ or CN-102385113-$ or WO-2014054357-$ or CA-2593676-$ or DE-102010021179-$ or GB-201004720-$ or EP-1762871-$ or DE-112006003952-$ or CA-2441872-$ or DE-60026115-$ or WO-2008033262-$ or KR-20040020797-$ or EP-1783524-$ or KR-100452879-$ or WO-9723794-$ or DE-19601949-$ or CA-2302068-$ or DE-20111078-$ or DE-10031931-$ or DE-19834723-$ or MX-9201992-$ or DE-19525739-$).did. or (DE-29614436-$ or DE-3914978-$ or EP-0339876-$ or EP-0546936-$ or CH-687105-$ or GB-9408857-$ or EP-0324272-$ or FR-2707402-$ or IT-MI913184-$ or WO-9415232-$ or EP-0183820-$ or GB-9025881-$ or EP-0253426-$ or DE-4203966-$ or GB-9103982-$ or CH-676513-$ or DE-9012174-$ or DE-9010357-$ or EP-0154781-$ or DE-8911081-$ or DE-8911080-$ or EP-0292024-$ or KR-870005264-$ or EP-0166636-$ or DE-8901052-$ or DE-8900623-$ or DE-8812341-$).did. or (DE-3737842-$ or FR-2528984-$ or DE-3701421-$ or EP-0249406-$ or EP-0098190-$ or EP-0098205-$ or EP-0153249-$ or DE-2932986-$ or GB-2086602-$ or DE-2832839-$ or EP-0045271-$ or FR-2502798-$ or AU-3682878-$ or WO-8002213-$ or GB-1450760-$ or GB-1526682-$ or FR-2316611-$ or FR-2268370-$ or WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$).did. or (JP-				

		2005258017-$ or JP-2000241670-$ or JP-03059503-$ or JP-61028909-$ or JP-61129605-$ or JP-59036207-$ or JP-58190910-$ or JP-59038707-$ or JP-56062212-$ or JP-2002098860-$ or JP-05215939-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$ or JP-2019184942-$).did. or (US-20190369336-$ or EP-3579031-$ or CN-110376684-$ or US-20190162914-$ or US-20190162917-$ or US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or CN-108983368-$ or US-20180372962-$ or US-20180364422-$ or KR-2018131725-$).did. or (US-20180341069-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or CN-207965228-$ or CN-207965231-$ or US-20180292612-$ or CN-108508541-$ or CN-108490551-$ or CN-108279462-$ or JP-6363784-$ or US-20180203196-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or WO-2018057615-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018006987-$ or WO-2018008399-$ or CN-107479141-$).did. or (EP-3249434-$ or WO-				

		2017182535-$ or KR-2017103050-$ or US-20170264045-$ or US-20180231722-$ or US-20170261698-$ or US-20170261696-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017095928-$ or WO-2017106514-$ or US-20170176691-$ or US-20170176692-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$).did. or (US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or CN-104914515-$ or WO-2015142551-$ or US-20150260923-$ or WO-2015126470-$ or WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$).did. or (US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$ or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$ or WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or				

		US-20060257075-$).did. or (US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$ or US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$).did. or (EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9637793-$ or DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$).did. or (EP-440447-$ or EP-420490-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or EP-335531-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$ or EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$).did. or (EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$ or GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$ or US-				

		20200209492-$ or US-20200200977-$ or US-20200200979-$ or US-20200183093-$ or US-20200166716-$ or US-20200150374-$ or US-20200142141-$ or US-20200124805-$ or US-20200116949-$ or US-20200116952-$).did. or (US-20200116953-$ or US-20200116954-$ or US-20200110224-$ or US-20200103598-$ or US-20200103599-$ or US-20200096709-$ or US-20200096710-$ or US-20200096708-$ or US-20200081198-$ or US-20200057205-$ or US-20200049899-$ or US-20200033539-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$).did. or (EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190219775-$ or US-20190204513-$ or US-20200081193-$ or US-20200012053-$ or US-20200003961-$ or US-20190227240-$).did.				
S832	2,183	(US-20200225425-$ or US-20200225424-$ or US-20200225422-$ or US-20190056557-$ or US-20190179086-$ or US-20190064447-$ or US-20180217337-$ or US-20200183093-$ or US-20160018593-$ or US-20200166716-$ or US-20110222819-$ or US-20170285282-$ or US-20180246282-$ or US-20160259135-$ or US-20180143384-$ or US-20200142133-$ or US-20190041584-$ or US-20200132934-$ or US-20200116957-$ or US-20200110224-$ or US-20200096708-$ or US-20200088954-$ or US-20160274311-$ or US-20200088949-$ or US-20200073059-$ or US-20200018909-$).did. or (US-20160124160-$ or US-20190146160-$ or US-20140064665-$ or US-20170139158-$ or US-20190377139-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:06

		$ or US-20160209599-$ or US-20160025942-$ or US-20140072265-$ or US-20180329158-$ or US-20180011254-$ or US-20080175541-$ or US-20190018201-$ or US-20180267255-$ or US-20180081127-$ or US-20170373756-$ or US-20160216454-$ or US-20170219779-$ or US-20090148101-$ or US-20180252872-$ or US-20190187392-$ or US-20190179085-$ or US-20130216186-$ or US-20190170957-$ or US-20180156985-$ or US-20190154924-$ or US-20160327757-$ or US-20190113691-$).did. or (US-20160161680-$ or US-20190101709-$ or US-20190086617-$ or US-20190033533-$ or US-20190025523-$ or US-20190025522-$ or US-20190004261-$ or US-20180364421-$ or US-20180348443-$ or US-20180341072-$ or US-20160018604-$ or US-20180329155-$ or US-20180329153-$ or US-20180292618-$ or US-20180292612-$ or US-20160139346-$ or US-20160349464-$ or US-20180239091-$ or US-20180231730-$ or US-20160209610-$ or US-20180231722-$ or US-20170219789-$ or US-20160131857-$ or US-20180217338-$ or US-20180210155-$ or US-20180210154-$ or US-20180210153-$).did. or (US-20180196204-$ or US-20180196202-$ or US-20180188460-$ or US-20180180819-$ or US-20180172942-$ or US-20180164510-$ or US-20180157002-$ or US-20180156988-$ or US-20180149813-$ or US-20180143381-$ or US-20180136410-$ or US-20180128991-$ or US-20150036980-$ or US-20180113268-$ or US-20180113259-$ or US-20180106975-$ or US-20180106973-$ or US-20180095232-$ or US-20180088289-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180081139-$ or US-20180081128-$ or US-20180081125-$ or US-20180081122-$).did. or (US-20180078781-$ or US-20180077472-$ or US-20180074277-$ or US-				

		20180059338-$ or US-20180052288-$ or US-20150362681-$ or US-20180031782-$ or US-20180031775-$ or US-20180031774-$ or US-20180024302-$ or US-20180024301-$ or US-20180024300-$ or US-20180024294-$ or US-20180017740-$ or US-20180013228-$ or US-20180013227-$ or US-20180011261-$ or US-20180011258-$ or US-20180003910-$ or US-20180003903-$ or US-20170371118-$ or US-20170371116-$ or US-20170371107-$ or US-20170363829-$ or US-20170363827-$ or US-20170363815-$ or US-20170363810-$).did. or (US-20170363509-$ or US-20170359091-$ or US-20170357060-$ or US-20170357059-$ or US-20170351038-$ or US-20170351037-$ or US-20170343760-$ or US-20170343742-$ or US-20170343741-$ or US-20170341972-$ or US-20170336577-$ or US-20170336571-$ or US-20170331234-$ or US-20170329090-$ or US-20170315308-$ or US-20170315307-$ or US-20170315305-$ or US-20170315304-$ or US-20170315303-$ or US-20170307832-$ or US-20170307831-$ or US-20170307829-$ or US-20170303772-$ or US-20170299821-$ or US-20170299818-$ or US-20170299817-$ or US-20170299816-$).did. or (US-20170293091-$ or US-20170293089-$ or US-20170293088-$ or US-20170293087-$ or US-20140133808-$ or US-20170285272-$ or US-20170276887-$ or US-20170276886-$ or US-20170276883-$ or US-20170276881-$ or US-20170269312-$ or US-20170269309-$ or US-20170261699-$ or US-20170261698-$ or US-20170254967-$ or US-20170254966-$ or US-20170254962-$ or US-20170254961-$ or US-20170254960-$ or US-20170248762-$ or US-20170242200-$ or US-20170242199-$ or US-20170242198-$ or US-20170242196-$ or US-20170235077-$ or US-20170235060-$ or US-20170227727-$).did. or (US-20170227720-$ or US-20170227718-			

		$ or US-20170222347-$ or US-20170212310-$ or US-20170212309-$ or US-20170205591-$ or US-20170205588-$ or US-20170205587-$ or US-20170199338-$ or US-20170199336-$ or US-20170192182-$ or US-20170184800-$ or US-20170184798-$ or US-20170184790-$ or US-20170176252-$ or US-20130266268-$ or US-20170168244-$ or US-20170163573-$ or US-20170162978-$ or US-20170160500-$ or US-20170160496-$ or US-20170160494-$ or US-20170160486-$ or US-20170160478-$ or US-20170160477-$ or US-20170160476-$ or US-20170153398-$).did. or (US-20170153394-$ or US-20170146749-$ or US-20170139157-$ or US-20170139150-$ or US-20170138131-$ or US-20170131481-$ or US-20170123171-$ or US-20170123163-$ or US-20170115457-$ or US-20170108659-$ or US-20160004017-$ or US-20170108653-$ or US-20170108430-$ or US-20170102507-$ or US-20170102506-$ or US-20170102504-$ or US-20170097485-$ or US-20140219624-$ or US-20170097471-$ or US-20170090128-$ or US-20170090127-$ or US-20170082806-$ or US-20170068063-$ or US-20170059784-$ or US-20170059782-$ or US-20170045701-$ or US-20170045698-$).did. or (US-20170045691-$ or US-20170035275-$ or US-20150331201-$ or US-20170003459-$ or US-20160370549-$ or US-20160370548-$ or US-20160370544-$ or US-20160365685-$ or US-20160356966-$ or US-20160356965-$ or US-20160334586-$ or US-20160324402-$ or US-20160320571-$ or US-20160320570-$ or US-20160320567-$ or US-20160320566-$ or US-20160313513-$ or US-20160085045-$ or US-20160306123-$ or US-20160306121-$ or US-20160291263-$ or US-20160291259-$ or US-20160282566-$ or US-20160282562-$ or US-20160266330-$ or US-20160266329-$ or US-20160266327-$).did. or (US-				

		20160252687-$ or US-20160252685-$ or US-20160246011-$ or US-20160238804-$ or US-20160238798-$ or US-20160238794-$ or US-20160238789-$ or US-20160223763-$ or US-20160216460-$ or US-20160209605-$ or US-20160202429-$ or US-20160195683-$ or US-20160195681-$ or US-20160187589-$ or US-20160178860-$ or US-20160178859-$ or US-20160178855-$ or US-20160170152-$ or US-20160161679-$ or US-20160154190-$ or US-20160147022-$ or US-20120294572-$ or US-20140205241-$ or US-20160139342-$ or US-20160139339-$ or US-20160131854-$ or US-20160131849-$).did. or (US-20130094827-$ or US-20160116685-$ or US-20160116683-$ or US-20160116681-$ or US-20160111808-$ or US-20160109676-$ or US-20160109661-$ or US-20160091673-$ or US-20160091672-$ or US-20160085035-$ or US-20160085034-$ or US-20160085031-$ or US-20160077287-$ or US-20160077284-$ or US-20160070081-$ or US-20160062051-$ or US-20160047998-$ or US-20160047996-$ or US-20160047994-$ or US-20160041356-$ or US-20160033723-$ or US-20160025937-$ or US-20160018606-$ or US-20160011383-$ or US-20160011381-$ or US-20160011376-$ or US-20160004018-$).did. or (US-20160004016-$ or US-20150378117-$ or US-20150378112-$ or US-20150378111-$ or US-20150376956-$ or US-20150370017-$ or US-20150362682-$ or US-20150362678-$ or US-20150355417-$ or US-20150355414-$ or US-20150346452-$ or US-20150346449-$ or US-20150346434-$ or US-20150338583-$ or US-20150323752-$ or US-20150309279-$ or US-20150301293-$ or US-20150301290-$ or US-20150301288-$ or US-20150301286-$ or US-20150277066-$ or US-20150288449-$ or US-20150288447-$ or US-20150286014-$ or US-20150286013-$ or US-20150286011-				

		$ or US-20150285999-$).did. or (US-20150280355-$ or US-20150277062-$ or US-20150277061-$ or US-20150277058-$ or US-20150277057-$ or US-20150268424-$ or US-20150260927-$ or US-20150260926-$ or US-20130183001-$ or US-20130156379-$ or US-20150253183-$ or US-20150247977-$ or US-20150241650-$ or US-20150241644-$ or US-20150241642-$ or US-20150241635-$ or US-20150234131-$ or US-20150234128-$ or US-20150226926-$ or US-20150226923-$ or US-20150219857-$ or US-20150219856-$ or US-20150212284-$ or US-20150212279-$ or US-20150205060-$ or US-20150205053-$ or US-20010043777-$).did. or (US-20150198766-$ or US-20150192744-$ or US-20150185423-$ or US-20150177467-$ or US-20140270652-$ or US-20150177463-$ or US-20150160420-$ or US-20150153516-$ or US-20150147036-$ or US-20150147033-$ or US-20150147031-$ or US-20150139589-$ or US-20150139588-$ or US-20100202730-$ or US-20150093077-$ or US-20150078710-$ or US-20150071591-$ or US-20150063761-$ or US-20150063758-$ or US-20150060539-$ or US-20150055928-$ or US-20150055917-$ or US-20150050002-$ or US-20150049989-$ or US-20150030323-$ or US-20150023637-$ or US-20150023634-$).did. or (US-20150016781-$ or US-20150012072-$ or US-20100069721-$ or US-20150003785-$ or US-20150003774-$ or US-20140376870-$ or US-20140355936-$ or US-20140348481-$ or US-20140348467-$ or US-20140341510-$ or US-20100215318-$ or US-20140334790-$ or US-20140334780-$ or US-20140334778-$ or US-20140328063-$ or US-20140321814-$ or US-20140321813-$ or US-20140321809-$ or US-20140314385-$ or US-20140308011-$ or US-20140308010-$ or US-20140308008-$ or US-20140294339-$ or US-20140286609-$ or US-				

		20140273584-$ or US-20140270646-$ or US-20140241690-$).did. or (US-20140241689-$ or US-20140241688-$ or US-20140241667-$ or US-20140220794-$ or US-20140219619-$ or US-20140219615-$ or US-20140219614-$ or US-20140205253-$ or US-20140205247-$ or US-20140178007-$ or US-20140169732-$ or US-20140161407-$ or US-20140161400-$ or US-20140161394-$ or US-20140147082-$ or US-20140147081-$ or US-20140144468-$ or US-20140141649-$ or US-20140133821-$ or US-20140133803-$ or US-20140126875-$ or US-20140126874-$ or US-20140124140-$ or US-20140105552-$ or US-20120281951-$ or US-20140105542-$ or US-20140104808-$).did. or (US-20140093210-$ or US-20140086545-$ or US-20140082913-$ or US-20140072297-$ or US-20140072263-$ or US-20140064690-$ or US-20140064688-$ or US-20140064674-$ or US-20140064664-$ or US-20140056562-$ or US-20140056560-$ or US-20140050443-$ or US-20140044394-$ or US-20140038462-$ or US-20130308908-$ or US-20140023326-$ or US-20140023325-$ or US-20140023322-$ or US-20140016902-$ or US-20140016900-$ or US-20140010499-$ or US-20130343764-$ or US-20130343707-$ or US-20130330957-$ or US-20130323940-$ or US-20130322834-$ or US-20130322828-$).did. or (US-20130322826-$ or US-20130315539-$ or US-20070286554-$ or US-20130302004-$ or US-20130287358-$ or US-20130284844-$ or US-20130272671-$ or US-20130259429-$ or US-20130230283-$ or US-20130216189-$ or US-20130216188-$ or US-20130209052-$ or US-20130209051-$ or US-20130209050-$ or US-20130209049-$ or US-20130209041-$ or US-20130209040-$ or US-20130202253-$ or US-20130195418-$ or US-20130195405-$ or US-20130183018-$ or US-20130170797-$ or US-20130170796-				

		$ or US-20130163937-$ or US-20130163934-$ or US-20130163933-$ or US-20130163931-$).did. or (US-20130156382-$ or US-20130136401-$ or US-20130129285-$ or US-20130129280-$ or US-20130121645-$ or US-20130121643-$ or US-20130108231-$ or US-20130101257-$ or US-20130094815-$ or US-20130094811-$ or US-20130084041-$ or US-20130077914-$ or US-20130071070-$ or US-20130071068-$ or US-20130071067-$ or US-20130064517-$ or US-20130064508-$ or US-20130051749-$ or US-20130051732-$ or US-20130028560-$ or US-20130011099-$ or US-20120328245-$ or US-20120321269-$ or US-20120321266-$ or US-20120321254-$ or US-20120308183-$ or US-20120301088-$).did. or (US-20120301086-$ or US-20120301080-$ or US-20120294570-$ or US-20120263426-$ or US-20120263423-$ or US-20120263419-$ or US-20120257860-$ or US-20120257859-$ or US-20120252244-$ or US-20120251067-$ or US-20120251054-$ or US-20120251051-$ or US-20120251050-$ or US-20120243834-$ or US-20120243831-$ or US-20120243829-$ or US-20120237223-$ or US-20120237171-$ or US-20120224823-$ or US-20120219253-$ or US-20120195555-$ or US-20120177326-$ or US-20120170895-$ or US-20120163757-$ or US-20120155808-$ or US-20120141084-$ or US-20120141070-$).did. or (US-20120128307-$ or US-20120114295-$ or US-20120106901-$ or US-20120106899-$ or US-20120099870-$ or US-20120099822-$ or US-20120082416-$ or US-20120076459-$ or US-20120069348-$ or US-20120063735-$ or US-20120057831-$ or US-20120057830-$ or US-20120057827-$ or US-20120057824-$ or US-20120039569-$ or US-20120033918-$ or US-20120027355-$ or US-20120014649-$ or US-20120014648-$ or US-20120002928-$ or US-20120002925-$ or US-				

		20110317976-$ or US-20110311186-$ or US-20110299814-$ or US-20110293223-$ or US-20110268391-$ or US-20110262079-$).did. or (US-20110103797-$ or US-20110249942-$ or US-20110243508-$ or US-20110243505-$ or US-20110243504-$ or US-20110229094-$ or US-20090103878-$ or US-20110222821-$ or US-20100080517-$ or US-20110211792-$ or US-20110206335-$ or US-20110206325-$ or US-20110206324-$ or US-20110200294-$ or US-20110200286-$ or US-20110198324-$ or US-20110194828-$ or US-20110188809-$ or US-20110188000-$ or US-20110176777-$ or US-20110170830-$ or US-20110158593-$ or US-20110158586-$ or US-20100329613-$ or US-20110150396-$ or US-20110142398-$ or US-20110129186-$).did. or (US-20110123156-$ or US-20110116748-$ or US-20110103747-$ or US-20110091166-$ or US-20110091159-$ or US-20110091154-$ or US-20110085774-$ or US-20110085765-$ or US-20110081798-$ or US-20110081116-$ or US-20110075974-$ or US-20110075971-$ or US-20110075969-$ or US-20110058772-$ or US-20090087147-$ or US-20110044589-$ or US-20110044583-$ or US-20110038592-$ or US-20110038590-$ or US-20110038581-$ or US-20090220227-$ or US-20110019964-$ or US-20100329604-$ or US-20100329602-$ or US-20100322580-$ or US-20100322576-$ or US-20100322561-$).did. or (US-20100322554-$ or US-20100303408-$ or US-20100296792-$ or US-20100290745-$ or US-20100284655-$ or US-20100278497-$ or US-20100278488-$ or US-20100272408-$ or US-20100266245-$ or US-20100260457-$ or US-20100247057-$ or US-20100247042-$ or US-20100247040-$ or US-20100239220-$ or US-20100239213-$ or US-20100232757-$ or US-20100226654-$ or US-20100215322-$ or US-20100209063-$ or US-20100209050-				

		$ or US-20100202737-$ or US-20100183276-$ or US-20100183265-$ or US-20090003772-$ or US-20100158444-$ or US-20100146764-$ or US-20100142899-$).did. or (US-20100141934-$ or US-20100135618-$ or US-20100129032-$ or US-20100129028-$ or US-20100111484-$ or US-20100104355-$ or US-20080019642-$ or US-20100092134-$ or US-20100092131-$ or US-20100086258-$ or US-20100081303-$ or US-20100080513-$ or US-20100074616-$ or US-20100067852-$ or US-20100061681-$ or US-20100059901-$ or US-20100054665-$ or US-20100046893-$ or US-20090003771-$ or US-20100029117-$ or US-20100027944-$ or US-20100027943-$ or US-20100021111-$ or US-20100014815-$ or US-20100002999-$ or US-20090305542-$ or US-20090304335-$).did. or (US-20090290839-$ or US-20090290838-$ or US-20090285534-$ or US-20090285530-$ or US-20090274432-$ or US-20090274431-$ or US-20090257722-$ or US-20090257719-$ or US-20090252458-$ or US-20080124031-$ or US-20090232455-$ or US-20090232454-$ or US-20090226141-$ or US-20090226137-$ or US-20090220200-$ or US-20090214164-$ or US-20090202214-$ or US-20090185778-$ or US-20060263011-$ or US-20090156043-$ or US-20090116791-$ or US-20090080850-$ or US-20050141817-$ or US-20090074359-$ or US-20090060422-$ or US-20090060418-$ or US-20090047800-$).did. or (US-20090046981-$ or US-20090034912-$ or US-20090028507-$ or US-20090010600-$ or US-20070280599-$ or US-20080317411-$ or US-20080310800-$ or US-20080310796-$ or US-20080310795-$ or US-20080304792-$ or US-20080298764-$ or US-20080279503-$ or US-20080273837-$ or US-20080269845-$ or US-20080267566-$ or US-20080253719-$ or US-20080240658-$ or US-20080205825-$ or US-				

		20080193086-$ or US-20080175550-$ or US-20080175546-$ or US-20080175545-$ or US-20080175542-$ or US-20080175532-$ or US-20080170827-$ or US-20080159696-$ or US-20080131055-$).did. or (US-20080112672-$ or US-20080100456-$ or US-20080095502-$ or US-20080095501-$ or US-20080085082-$ or US-20080069501-$ or US-20080050072-$ or US-20080050070-$ or US-20070217751-$ or US-20080044139-$ or US-20050135755-$ or US-20080034519-$ or US-20080019656-$ or US-20040264873-$ or US-20080013897-$ or US-20080013891-$ or US-20080013148-$ or US-20080008425-$ or US-20070297725-$ or US-20070285194-$ or US-20070274657-$ or US-20070263959-$ or US-20070230874-$ or US-20070223862-$ or US-20070217745-$ or US-20070212002-$ or US-20070201808-$).did. or (US-20070201798-$ or US-20070196053-$ or US-20070196052-$ or US-20070190834-$ or US-20070183780-$ or US-20060098914-$ or US-20070165984-$ or US-20070160327-$ or US-20070154135-$ or US-20070140623-$ or US-20070127873-$ or US-20070116414-$ or US-20070116411-$ or US-20040228584-$ or US-20070105452-$ or US-20070098330-$ or US-20070098329-$ or US-20070098327-$ or US-20070058907-$ or US-20050018979-$ or US-20070036487-$ or US-20070019913-$ or US-20060291782-$ or US-20060285807-$ or US-20060280409-$ or US-20060269212-$ or US-20060269206-$).did. or (US-20060269205-$ or US-20050123248-$ or US-20060245711-$ or US-20060204200-$ or US-20060204180-$ or US-20060197943-$ or US-20060193565-$ or US-20060193562-$ or US-20060177182-$ or US-20060169856-$ or US-20060159401-$ or US-20060159399-$ or US-20060154529-$ or US-20060153504-$ or US-20060153503-$ or US-20060147156-$ or US-20060147155-				

		$ or US-20060140542-$ or US-20060133758-$ or US-20060093282-$ or US-20060093275-$ or US-20060088248-$ or US-20060083468-$ or US-20060083467-$ or US-20060072878-$ or US-20060067631-$ or US-20060067628-$).did. or (US-20060056769-$ or US-20060051028-$ or US-20060045430-$ or US-20060029333-$ or US-20060013539-$ or US-20060002662-$ or US-20050286853-$ or US-20050286835-$ or US-20050286833-$ or US-20050281526-$ or US-20050281509-$ or US-20050271328-$ or US-20050260880-$ or US-20050238292-$ or US-20050238289-$ or US-20050232552-$ or US-20050226586-$ or US-20050220423-$ or US-20050220420-$ or US-20050215119-$ or US-20050207708-$ or US-20050196104-$ or US-20050185894-$ or US-20050157985-$ or US-20050135753-$ or US-20050135752-$ or US-20050123246-$).did. or (US-20050118880-$ or US-20050112939-$ or US-20050111796-$ or US-20050111795-$ or US-20050094948-$ or US-20050094943-$ or US-20050089278-$ or US-20050074211-$ or US-20050069263-$ or US-20050053342-$ or US-20050041928-$ or US-20050036744-$ or US-20050036740-$ or US-20050013547-$ or US-20050008300-$ or US-20040266257-$ or US-20040264908-$ or US-20040264876-$ or US-20040247257-$ or US-20040247255-$ or US-20040240793-$ or US-20040228589-$ or US-20040223701-$ or US-20040223699-$ or US-20040208459-$ or US-20040202431-$ or US-20020176671-$).did. or (US-20040197053-$ or US-20040184740-$ or US-20040182971-$ or US-20040179787-$ or US-20040171283-$ or US-20040165830-$ or US-20040161204-$ or US-20040156592-$ or US-20040151464-$ or US-20040151438-$ or US-20040141693-$ or US-20040141692-$ or US-20040136656-$ or US-20040131317-$ or US-20040131315-$ or US-				

		20040126118-$ or US-20040120652-$ or US-20040105628-$ or US-20040105325-$ or US-20040105278-$ or US-20040101253-$ or US-20040101250-$ or US-20040091228-$ or US-20040081418-$ or US-20040076377-$ or US-20040074852-$ or US-20040072454-$).did. or (US-20040071438-$ or US-20040071407-$ or US-20040062498-$ or US-20040062488-$ or US-20040062486-$ or US-20040054761-$ or US-20040052472-$ or US-20040052471-$ or US-20040042710-$ or US-20040038558-$ or US-20040036987-$ or US-20040033050-$ or US-20040033028-$ or US-20040033027-$ or US-20040028344-$ or US-20040028340-$ or US-20040017983-$ or US-20040017981-$ or US-20020197017-$ or US-20040013388-$ or US-20040013369-$ or US-20040008494-$ or US-20030231838-$ or US-20030223703-$ or US-20030198029-$ or US-20030194188-$ or US-20030189214-$).did. or (US-20030185520-$ or US-20030180005-$ or US-20030180004-$ or US-20030174996-$ or US-20030174972-$ or US-20030174971-$ or US-20030174922-$ or US-20030169992-$ or US-20030169975-$ or US-20030169974-$ or US-20030156796-$ or US-20030147597-$ or US-20030147230-$ or US-20030142923-$ or US-20030142918-$ or US-20030128934-$ or US-20030128933-$ or US-20030113086-$ or US-20030108320-$ or US-20030103730-$ or US-20030095780-$ or US-20030095779-$ or US-20030091297-$ or US-20030091292-$ or US-20030087505-$ or US-20030081905-$ or US-20030072537-$).did. or (US-20030072536-$ or US-20030068135-$ or US-20030063868-$ or US-20030063866-$ or US-20030063862-$ or US-20030053760-$ or US-20030044127-$ or US-20030044125-$ or US-20030044123-$ or US-20030044122-$ or US-20030044115-$ or US-20030031452-$ or US-20030031449-$ or US-20030031422-				

		$ or US-20030012544-$ or US-20030012516-$ or US-20030012512-$ or US-20030007740-$ or US-20030007739-$ or US-20030002816-$ or US-20030002814-$ or US-20030002808-$ or US-20020197018-$ or US-20020191919-$ or US-20020191881-$ or US-20020186934-$ or US-20020186742-$).did. or (US-20020181888-$ or US-20020181884-$ or US-20020177364-$ or US-20020176670-$ or US-20020172469-$ or US-20020172467-$ or US-20020168150-$ or US-20020168149-$ or US-20020166226-$ or US-20020164899-$ or US-20020159745-$ or US-20020159714-$ or US-20020159712-$ or US-20020159710-$ or US-20020150353-$ or US-20020150346-$ or US-20020150345-$ or US-20020150344-$ or US-20020150343-$ or US-20020150342-$ or US-20020146213-$ or US-20020131720-$ or US-20020126961-$ or US-20020122652-$ or US-20020118926-$ or US-20020114589-$ or US-20020114582-$).did. or (US-20020114581-$ or US-20020106167-$ or US-20020106162-$ or US-20020094727-$ or US-20020090177-$ or US-20020081076-$ or US-20020064349-$ or US-20020061171-$ or US-20020031313-$ or US-20020031310-$ or US-20020031309-$ or US-20020028055-$ or US-20020025125-$ or US-20020025121-$ or US-20020025099-$ or US-20020012503-$ or US-20020012502-$ or US-20020012501-$ or US-20020012238-$ or US-20020006253-$ or US-20020003932-$ or US-20010048790-$ or US-20010043776-$ or US-20010041030-$ or US-20010038737-$ or US-20010033730-$ or US-20010016102-$).did. or (US-20010010741-$ or US-20190204513-$ or US-20200064561-$ or US-20200057208-$ or US-20200041730-$ or US-20190235182-$ or US-20190391350-$ or US-20190384017-$ or US-20190353852-$ or US-20190346631-$ or US-20190317281-$ or US-20190310432-$ or US-				

		20190278039-$ or US-20190278025-$ or US-20190271816-$ or US-20190250340-$ or US-20190243083-$ or US-20190235178-$ or US-20190227244-$ or US-20190219772-$).did. or (US-10718914-$ or US-10718911-$ or US-10718909-$ or US-10705306-$ or US-10295760-$ or US-10261275-$ or US-10156683-$ or US-10146014-$ or US-10107967-$ or US-10067302-$ or US-10067300-$ or US-10018787-$ or US-10007069-$ or US-9989710-$ or US-9948017-$ or US-9946038-$ or US-9946037-$ or US-9946036-$ or US-9939600-$ or US-9939590-$ or US-9939589-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9927582-$ or US-9915793-$).did. or (US-9910229-$ or US-9910228-$ or US-9910226-$ or US-9904021-$ or US-9904020-$ or US-9904019-$ or US-9897767-$ or US-9893813-$ or US-9891392-$ or US-9891390-$ or US-9891387-$ or US-9891385-$ or US-9885841-$ or US-9880365-$ or US-9880357-$ or US-9876309-$ or US-9874702-$ or US-9869826-$ or US-9869824-$ or US-9864151-$ or US-9857545-$ or US-9857537-$ or US-9851512-$ or US-9846283-$ or US-9841566-$ or US-9835808-$ or US-9835807-$).did. or (US-9829650-$ or US-9829643-$ or US-9827438-$ or US-9823428-$ or US-9817195-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9798096-$ or US-9798090-$ or US-9797806-$ or US-9784928-$ or US-9778425-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9759874-$ or US-9759869-$ or US-9746625-$ or US-9746368-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9735523-$).did. or (US-9733436-$ or US-9733434-$ or US-9733123-$ or US-9726830-$ or US-9726829-$ or US-9722367-$ or US-9720184-$ or US-9709753-$ or US-9703062-$ or US-9696497-$ or US-9696477-$ or US-9684134-$ or US-9678286-$				

		or US-9678283-$ or US-9678282-$ or US-9671570-$ or US-9671568-$ or US-9664864-$ or US-9658407-$ or US-9645335-$ or US-9645326-$ or US-9638871-$ or US-9638868-$ or US-9632267-$ or US-9625658-$ or US-9625657-$ or US-9625655-$).did. or (US-9606303-$ or US-9551831-$ or US-9482825-$ or US-9453972-$ or US-9448369-$ or US-9389368-$ or US-9377591-$ or US-9323007-$ or US-9316794-$ or US-9316791-$ or US-9291781-$ or US-9229177-$ or US-9229170-$ or US-9207454-$ or US-9002168-$ or US-8953922-$ or US-8814443-$ or US-8757893-$ or US-8588571-$ or US-8517614-$ or US-8459879-$ or US-8388235-$ or US-8206040-$ or US-8070366-$ or US-7972066-$ or US-7738757-$ or US-7712970-$).did. or (US-7706657-$ or US-7630609-$ or US-7588373-$ or US-7585118-$ or US-7530845-$ or US-7412148-$ or US-7232261-$ or US-7229220-$ or US-7192198-$ or US-7052186-$ or US-7036996-$ or US-6944378-$ or US-6895146-$ or US-6856748-$ or US-6848834-$ or US-6840680-$ or US-6839583-$ or US-6830382-$ or US-6817777-$ or US-6793399-$ or US-6789953-$ or US-6786647-$ or US-6712521-$ or US-6702475-$ or US-6695485-$ or US-6688782-$ or US-6667803-$).did. or (US-6644866-$ or US-6634794-$ or US-6632023-$ or US-6623172-$ or US-6619859-$ or US-6619856-$ or US-6612750-$ or US-6601995-$ or US-6599032-$ or US-6595696-$ or US-6582132-$ or US-6572276-$ or US-6572273-$ or US-6561699-$ or US-6558044-$ or US-6554486-$ or US-6554482-$ or US-6543941-$ or US-6533469-$ or US-6533465-$ or US-6527450-$ or US-6526210-$ or US-6524015-$ or US-6510267-$ or US-6508593-$ or US-6501900-$ or US-6498882-$).did. or (US-6497518-$ or US-6497516-$ or US-6226429-$ or US-6491442-$ or US-6487343-$ or US-6485192-$ or US-6481900-$ or US-6481899-$ or US-6474876-$ or US-				

		6471417-$ or US-6471412-$ or US-6467971-$ or US-6467970-$ or US-6466724-$ or US-6464406-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6457876-$ or US-6456768-$ or US-6450698-$ or US-6447172-$ or US-6445867-$ or US-6437894-$ or US-6435946-$ or US-6431762-$ or US-6425694-$).did. or (US-6425692-$ or US-6422761-$ or US-6422760-$ or US-6422759-$ or US-6419810-$ or US-6412987-$ or US-6412986-$ or US-6409394-$ or US-6409392-$ or US-6409391-$ or US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6389212-$ or US-6386768-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6379052-$ or US-6377840-$ or US-6375363-$ or US-6305849-$ or US-6371659-$ or US-6371657-$ or US-6367986-$ or US-6367984-$ or US-6364536-$).did. or (US-6361218-$ or US-6357932-$ or US-6357931-$ or US-6354746-$ or US-6352372-$ or US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6343950-$ or US-6334715-$ or US-6331079-$ or US-6328481-$ or US-6318904-$ or US-6318903-$ or US-6318902-$ or US-6089759-$ or US-6309111-$ or US-6302592-$ or US-6301004-$ or US-6095695-$ or US-6293706-$ or US-6290527-$ or US-6283640-$ or US-6045270-$ or US-6273618-$ or US-6267513-$ or US-6264375-$).did. or (US-6264373-$ or US-6264372-$ or US-6259839-$ or US-6256446-$ or US-6250817-$ or US-6247851-$ or US-6247849-$ or US-6243526-$ or US-6243518-$ or US-6240235-$ or US-6240229-$ or US-6238249-$ or US-6234681-$ or US-6231244-$ or US-6227719-$ or US-6227718-$ or US-6224269-$ or US-6220763-$ or US-6220762-$ or US-6219479-$ or US-6217226-$ or US-6215944-$ or US-6210045-$ or US-6206577-$ or US-6200040-$ or US-6196729-$ or US-6195477-$).did. or (US-6193420-$ or US-6190616-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6179480-$ or				

		US-6179475-$ or US-6173099-$ or US-6164835-$ or US-6164834-$ or US-6154597-$ or US-6149315-$ or US-6149313-$ or US-6142676-$ or US-6139346-$ or US-6132105-$ or US-6116789-$ or US-6116101-$ or US-6108482-$ or US-6104856-$ or US-6102581-$ or US-6095694-$ or US-6088502-$ or US-6081647-$ or US-6079881-$ or US-6076975-$ or US-6064791-$).did. or (US-6059461-$ or US-6053639-$ or US-6048103-$ or US-6048102-$ or US-6045269-$ or US-6041155-$ or US-6027252-$ or US-6024498-$ or US-6022149-$ or US-6017154-$ or US-6012852-$ or US-6007256-$ or US-6004043-$ or US-6004042-$ or US-5993071-$ or US-5987203-$ or US-5984533-$ or US-5980117-$ or US-5971626-$ or US-5969294-$ or US-5963689-$ or US-5960137-$ or US-5956444-$ or US-5953474-$ or US-5953473-$ or US-5949946-$ or US-5862289-$).did. or (US-5940561-$ or US-5940559-$ or US-5937121-$ or US-5930426-$ or US-5930425-$ or US-5923805-$ or US-5921796-$ or US-5920670-$ or US-5920669-$ or US-5915058-$ or US-5909526-$ or US-5909298-$ or US-5742720-$ or US-5737463-$ or US-5896477-$ or US-5892870-$ or US-5887100-$ or US-5887098-$ or US-5881191-$ or US-5870515-$ or US-5867894-$ or US-5867621-$ or US-5862282-$ or US-5845036-$ or US-5727097-$ or US-5838856-$ or US-5838855-$).did. or (US-5832158-$ or US-5825955-$ or US-5818993-$ or US-5815621-$ or US-5815618-$ or US-5809191-$ or US-5799122-$ or US-5796896-$ or US-5781680-$ or US-5778123-$ or US-5778122-$ or US-5774612-$ or US-5774611-$ or US-5768738-$ or US-5548677-$ or US-5764043-$ or US-5761359-$ or US-5751874-$ or US-5748818-$ or US-5737464-$ or US-5734770-$ or US-5732174-$ or US-5732173-$ or US-5727102-$ or US-5721799-$ or US-5701380-$ or US-5694507-$).did. or (US-5694506-$ or US-5692089-$ or US-5692080-$				

		or US-5687268-$ or US-5682449-$ or US-5680494-$ or US-5673346-$ or US-5671310-$ or US-5668904-$ or US-5666456-$ or US-5666449-$ or US-5664955-$ or US-5661833-$ or US-5581644-$ or US-5651084-$ or US-5647043-$ or US-5645449-$ or US-5642450-$ or US-5633969-$ or US-5620634-$ or US-5619610-$ or US-5386485-$ or US-5611017-$ or US-5611010-$ or US-5607323-$ or US-5603631-$ or US-5602951-$).did. or (US-5600749-$ or US-5600746-$ or US-5325454-$ or US-5592323-$ or US-5588086-$ or US-5588079-$ or US-5579429-$ or US-5574817-$ or US-5574813-$ or US-5570445-$ or US-5563978-$ or US-5563974-$ or US-5563971-$ or US-5555332-$ or US-5550943-$ or US-5548674-$ or US-5542015-$ or US-5537501-$ or US-5530783-$ or US-5528711-$ or US-5521998-$ or US-5521997-$ or US-5519799-$ or US-5506922-$ or US-5499310-$ or US-5497444-$ or US-5485537-$).did. or (US-5483608-$ or US-5473717-$ or US-5452391-$ or US-5450519-$ or US-5446817-$ or US-5444806-$ or US-5420951-$ or US-5418875-$ or US-5339376-$ or US-5414786-$ or US-5408557-$ or US-5367595-$ or US-5384885-$ or US-5379360-$ or US-5372758-$ or US-5367594-$ or US-5366383-$ or US-5363460-$ or US-5359688-$ or US-5339377-$ or US-5335301-$ or US-5333225-$ or US-5333222-$ or US-5333221-$ or US-5329541-$ or US-5323475-$ or US-5317663-$).did. or (US-5315679-$ or US-5315678-$ or US-5305409-$ or US-5297227-$ or US-5293581-$ or US-5282259-$ or US-5280552-$ or US-5274729-$ or US-5267342-$ or US-5265181-$ or US-5259052-$ or US-5239606-$ or US-5233675-$ or US-5233674-$ or US-5231685-$ or US-5228104-$ or US-5222168-$ or US-5214730-$ or US-5210815-$ or US-5199093-$ or US-5179607-$ or US-5177808-$ or US-5166995-$ or US-5159654-$ or US-5157749-$ or US-5155795-$ or US-5134677-				

		$).did. or (US-5134676-$ or US-5134673-$ or US-5133032-$ or US-5129024-$ or US-5127073-$ or US-5124506-$ or US-5119455-$ or US-5115484-$ or US-5109468-$ or US-5109453-$ or US-5101463-$ or US-5091991-$ or US-5091990-$ or US-5082346-$ or US-5082344-$ or US-5077815-$ or US-5076656-$ or US-5073042-$ or US-5064268-$ or US-5058983-$ or US-5052774-$ or US-5048916-$ or US-5042891-$ or US-5018823-$ or US-5016972-$ or US-5016970-$ or US-5015060-$).did. or (US-5013124-$ or US-4998797-$ or US-4998796-$ or US-4995688-$ or US-4993803-$ or US-4991929-$ or US-4986762-$ or US-4986622-$ or US-4976510-$ or US-4973127-$ or US-4973126-$ or US-4964688-$ or US-4960317-$ or US-4955976-$ or US-4953929-$ or US-4944079-$ or US-4921325-$ or US-4915472-$ or US-4900118-$ or US-4898446-$ or US-4892380-$ or US-4886335-$ or US-4877303-$ or US-4856866-$ or US-4854664-$ or US-4852963-$ or US-4850671-$).did. or (US-4850536-$ or US-4848870-$ or US-4846544-$ or US-4844570-$ or US-4842361-$ or US-4834486-$ or US-4830456-$ or US-4824196-$ or US-4818058-$ or US-4813760-$ or US-4807957-$ or US-4805980-$ or US-4795231-$ or US-4793683-$ or US-4789216-$ or US-4787700-$ or US-4786135-$ or US-4784456-$ or US-4783137-$ or US-4781429-$ or US-4773725-$ or US-4767178-$ or US-4762389-$ or US-4762387-$ or US-4759600-$ or US-4759599-$ or US-4758719-$).did. or (US-4741590-$ or US-4740052-$ or US-4737009-$ or US-4722081-$ or US-4718744-$ or US-4717234-$ or US-4715674-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4699460-$ or US-4688887-$ or US-4687291-$ or US-4681398-$ or US-4674831-$ or US-4666241-$ or US-4648688-$ or US-4645296-$ or US-4615581-$ or US-4614402-$ or US-4579418-$ or US-4575183-$ or US-4548467-$ or US-				

		4526438-$ or US-4515434-$ or US-4506946-$ or US-4497536-$).did. or (US-4487474-$ or US-4486072-$ or US-4484796-$ or US-4477146-$ or US-4466009-$ or US-4464817-$ or US-4461539-$ or US-4447121-$ or US-4445753-$ or US-4444461-$ or US-4422716-$ or US-4415232-$ or US-4387957-$ or US-4385801-$ or US-4371233-$ or US-4368948-$ or US-4354731-$ or US-4341439-$ or US-4330172-$ or US-4327964-$ or US-4320938-$ or US-4310218-$ or US-4295707-$ or US-4291943-$ or US-4279469-$ or US-4268115-$ or US-4268114-$).did. or (US-4252407-$ or US-4240695-$ or US-4223976-$ or US-4218113-$ or US-4214812-$ or US-4201445-$ or US-4201444-$ or US-4186997-$ or US-4186996-$ or US-4168109-$ or US-4167304-$ or US-4160580-$ or US-4140365-$ or US-4101198-$ or US-4087158-$ or US-4080044-$ or US-3999837-$ or US-3933409-$ or US-10545295-$ or US-10502903-$ or US-10401575-$ or US-10353155-$).did. or (EP-3258301-$ or EP-3054333-$ or CA-2885821-$ or EP-2444827-$ or WO-2018004847-$ or JP-6173629-$ or WO-2015043158-$ or CN-206584076-$ or WO-2016161341-$ or DE-202016103178-$ or WO-2016082160-$ or EP-3021145-$ or JP-5905950-$ or CA-2689768-$ or CA-2928026-$ or CA-2762411-$ or CA-2859345-$ or DE-202013012295-$ or WO-2016004347-$ or WO-2015190211-$ or EP-2942653-$ or CN-204595258-$ or WO-2015116589-$ or WO-2015103783-$ or GB-201507758-$ or CA-2932688-$).did. or (WO-2015068103-$ or EP-2843452-$ or WO-2014143748-$ or JP-5433802-$ or CN-102870023-$ or WO-2012151175-$ or WO-2014049469-$ or WO-2014009463-$ or CA-2912155-$ or WO-2013126068-$ or WO-2013115791-$ or WO-2013115789-$ or CA-2662854-$ or WO-2011152874-$ or GB-201218194-$ or CN-102456976-$ or WO-2011139938-$ or WO-				

		2011044724-$ or CN-101122658-$ or CN-101931134-$ or WO-2010068896-$ or WO-2010025180-$ or EP-2138880-$ or WO-2009110421-$ or CA-2503690-$ or WO-2008006402-$ or CN-1331421-$).did. or (EP-1168016-$ or EP-1172672-$ or EP-1530068-$ or CA-2321428-$ or AU-2003291687-$ or JP-3106420-$ or EP-1168018-$ or CA-2191600-$ or WO-03093883-$ or CA-2484569-$ or DE-10114144-$ or CN-1118443-$ or WO-03016975-$ or NL-1018440-$ or CA-2284331-$ or EP-0690319-$ or CA-2030897-$ or WO-0155762-$ or CA-2418331-$ or DE-20118858-$ or EP-1124147-$ or EP-1172673-$ or WO-0137010-$ or CA-2198522-$ or WO-0161397-$ or EP-1039324-$ or EP-1039322-$).did. or (EP-1033595-$ or EP-1033594-$ or GB-0007281-$ or EP-0992819-$ or GB-9919699-$ or CA-2262351-$ or CA-2294930-$ or EP-0696748-$ or WO-9734176-$ or CA-2171494-$ or WO-9627811-$ or EP-0633485-$ or EP-0249237-$ or EP-0262847-$ or CA-2082276-$ or GB-9106183-$ or DE-9107960-$ or GB-9103604-$ or WO-9015350-$ or DE-8626183-$ or EP-0262631-$ or EP-0061243-$ or WO-8600147-$ or DE-3112078-$ or GB-2081468-$ or IT-8323399-$ or IT-8323399-$).did. or (GB-2057158-$ or GB-8306227-$ or DK-208682-$ or FR-2487528-$ or FR-2435053-$ or BE-871785-$ or CA-1097111-$ or IT-7925110-$ or FR-2363124-$ or BE-871785-$ or CA-1043604-$ or WO-2019190616-$ or CN-110068899-$).did. or (JP-09033756-$ or JP-04214510-$ or JP-11072659-$ or JP-04220604-$ or JP-56074211-$ or JP-2017138535-$ or JP-05313040-$ or JP-62111222-$ or JP-59140411-$ or JP-59075218-$ or JP-57044113-$ or JP-56066811-$ or JP-55101904-$ or JP-54034251-$).did. or (US-20190107679-$ or US-20180224615-$ or WO-2018125706-$ or US-20180156985-$ or US-20180128988-$ or US-20180120519-$ or US-20180106973-$ or US-				

		20180081128-$ or US-20180052288-$ or US-20180011258-$ or US-20180003903-$ or US-20180364421-$ or US-20170371109-$ or CN-107450131-$ or US-20170336577-$ or US-20170343760-$ or US-9804340-$ or US-20170307830-$ or FR-3050286-$ or US-20170299820-$ or US-20170293088-$ or US-20170261699-$ or US-20170254967-$ or US-20170254966-$ or US-20170227720-$ or US-9726830-$).did. or (US-20170219779-$ or JP-6173629-$ or US-20170205587-$ or US-9709753-$ or US-20170184790-$ or US-9678283-$ or US-20170153398-$ or US-20170139150-$ or US-20170139156-$ or US-20170102504-$ or US-20170115457-$ or WO-2017065999-$ or US-20170090127-$ or WO-2017038704-$ or US-20170059784-$ or US-20170031106-$ or US-20160377819-$ or US-20160349466-$ or US-20160341908-$ or US-20160341911-$ or WO-2016182556-$ or US-20160327757-$ or US-9482820-$ or WO-2016161341-$ or US-20160282566-$ or CN-105978629-$ or US-20160259135-$).did. or (US-20170329090-$ or EP-3054333-$ or US-9389368-$ or WO-2016105567-$ or US-9377591-$ or US-20160178852-$ or US-20160178859-$ or US-20160161680-$ or EP-3021145-$ or US-20160131854-$ or US-20160124158-$ or JP-5905950-$ or WO-2016053853-$ or WO-2016043922-$ or WO-2016033577-$ or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016024014-$ or JP-5860948-$ or CA-2859345-$ or US-20160025937-$ or US-20160004016-$ or US-20160004018-$ or US-20150378110-$ or WO-2015190211-$ or EP-2947485-$).did. or (US-20150331201-$ or CN-104950402-$ or DE-102015106225-$ or US-20160306125-$ or US-20150286012-$ or WO-2015144883-$ or US-20150241644-$ or US-20150226926-$ or US-20150226925-$ or WO-				

		2015116589-$ or US-20150219864-$ or WO-2015103783-$ or CN-104570229-$ or CN-104516061-$ or US-20150177463-$ or US-20150162982-$ or WO-2015070382-$ or WO-2015068103-$ or WO-2015028433-$ or US-20150049989-$ or WO-2015009435-$ or US-20150023637-$ or EP-2818903-$ or US-20140363131-$ or WO-2014197701-$ or US-20140321808-$ or WO-2014165175-$).did. or (WO-2014143748-$ or US-20140219624-$ or EP-2759860-$ or WO-2014113753-$ or US-20140205247-$ or US-20140199034-$ or US-20140153879-$ or US-20140147081-$ or ES-1110405-$ or WO-2014049469-$ or TW-474924-$ or US-20140064688-$ or JP-5433802-$ or EP-2700992-$ or WO-2014011898-$ or US-20140016901-$ or WO-2014011283-$ or WO-2013177234-$ or WO-2013155395-$ or US-20130259429-$ or US-20130230283-$ or WO-2013126068-$ or WO-2013122865-$ or WO-2013117598-$ or WO-2013115789-$ or WO-2013115791-$ or US-20130121645-$).did. or (CN-103091793-$ or WO-2013036843-$ or US-20130051749-$ or TW-201309089-$ or CN-102870023-$ or US-20120308183-$ or WO-2012151175-$ or US-20120263419-$ or US-20120251051-$ or US-20120251054-$ or TW-201233549-$ or US-20120099822-$ or EP-2444827-$ or US-20120082416-$ or US-20120057824-$ or KR-2012000895-$ or US-20120027355-$ or KR-2012000895-$ or WO-2011152874-$ or US-20110274437-$ or US-20110249942-$ or EP-2302431-$ or WO-2010137426-$ or EP-2206458-$ or WO-2010068896-$ or US-7712970-$ or WO-2010025180-$).did. or (US-20100040330-$ or WO-2009110421-$ or US-20090060423-$ or US-20090041411-$ or US-7435009-$ or US-20070098327-$ or US-20070077010-$ or US-20070058907-				

		$ or EP-1752805-$ or US-20060193562-$ or US-20060165352-$ or US-20060153503-$ or WO-2006022840-$ or US-20050053342-$ or US-20040228589-$ or US-20040223699-$ or US-20040062498-$ or EP-1394584-$ or WO-03094297-$ or WO-03093883-$ or US-20030044125-$ or US-20030031437-$ or WO-02061481-$ or US-6422760-$ or WO-02056060-$ or DE-20118858-$ or EP-1172673-$).did. or (EP-1172672-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or US-20010041030-$ or WO-0181965-$ or EP-1124147-$ or EP-1107031-$ or WO-0140839-$ or EP-1092995-$ or EP-1091225-$ or EP-1041416-$ or EP-1041414-$ or EP-1020745-$ or EP-1016885-$ or EP-1010999-$ or GB-2341455-$ or WO-9947958-$ or US-5940561-$ or WO-9928774-$ or WO-9857208-$ or DE-19626036-$ or WO-9746900-$ or US-5692080-$ or EP-803750-$ or WO-9734176-$ or WO-9723794-$).did. or (EP-758099-$ or WO-9634176-$ or WO-9627811-$ or JP-08201656-$ or WO-9616080-$ or EP-697608-$ or EP-696748-$ or WO-9600917-$ or EP-663602-$ or EP-663601-$ or EP-660145-$ or EP-660144-$ or EP-505197-$ or EP-490698-$ or US-5101463-$ or EP-458608-$ or WO-9117540-$ or US-5064268-$ or GB-2241794-$ or EP-430107-$ or WO-9015350-$ or US-4953929-$ or EP-262631-$ or EP-249237-$ or WO-8600147-$ or US-4496213-$ or EP-125398-$).did. or (DE-3208797-$ or GB-2098354-$ or EP-61243-$ or GB-2081468-$ or GB-2057158-$ or DE-2932986-$ or BE-871785-$ or DE-2805949-$ or DE-2558445-$ or US-10502903-$).did.				
S833	1,872	(G02B6/3879).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 13:06
S834	6,060	(G02B6/3885).CPC.	US-PGPUB; USPAT; EPO;	OR	ON	2020/09/01 13:06

			JPO; DERWENT			
S835	1,322	S833 not (S829 S830 S831 S832)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 13:06
S836	696	(US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-$ or US-20190219775-$ or US-20190170931-$ or US-20190137700-$ or US-20190137697-$ or US-20190137695-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20190033531-$ or US-20190004252-$ or US-20190004251-$ or US-20180364422-$ or US-20180364436-$).did. or (US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180321449-$ or US-20180217336-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180128988-$ or US-20170363818-$ or US-20170261696-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170205586-$ or US-20170176691-$ or US-20170176692-$ or US-20170068064-$ or US-20170059785-$ or US-20170063464-$ or US-20170023746-$ or US-20160349458-$ or US-20160327756-$ or US-20160306122-$ or US-20160282565-$).did. or (US-20160274314-$ or US-20160223774-$ or US-20160202428-$ or US-20160091674-$ or US-20150378113-$ or US-20150277059-$ or US-20150260924-$ or US-20150260923-$ or US-20150198774-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20140205257-$ or US-20140169727-$ or US-20140168987-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:06

		20140161392-$ or US-20140153878-$ or US-20140153879-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140037253-$ or US-20140029900-$ or US-20140022627-$ or US-20140016901-$ or US-20140003771-$).did. or (US-20130322825-$ or US-20130158512-$ or US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20120155803-$ or US-20120093462-$ or US-20110299266-$ or US-20110229092-$ or US-20110229083-$ or US-20110064361-$ or US-20110058774-$ or US-20100322563-$ or US-20100178014-$ or US-20100178010-$ or US-20100054668-$ or US-20100027942-$ or US-20090135429-$ or US-20080317415-$ or US-20080273840-$ or US-20080226235-$ or US-20080124033-$ or US-20080090433-$ or US-20080013889-$ or US-20070292084-$ or US-20070031103-$).did. or (US-20060275007-$ or US-20060257075-$ or US-20060257076-$ or US-20060204178-$ or US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060127028-$ or US-20060093274-$ or US-20060083466-$ or US-20060063436-$ or US-20060045428-$ or US-20060018603-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20040157499-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020176960-$ or US-20020142634-$).did. or (US-20020126960-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$).did. or (US-10444442-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9977197-$ or US-9927581-$ or US-9195013-$ or US-9086546-$				

		or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$ or US-7857523-$ or US-7572063-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$ or US-6364537-$).did. or (US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-6179476-$ or US-6179477-$ or US-6130977-$ or US-6062739-$ or US-5971625-$ or US-5970598-$ or US-5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717533-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$ or US-5577146-$).did. or (US-5546281-$ or US-5436994-$ or US-5400428-$ or US-5396572-$ or US-5329604-$ or US-5289554-$ or US-5276755-$ or US-5265182-$ or US-5261019-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212752-$ or US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5121454-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$).did. or (US-5067783-$ or US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$).did. or (US-4728171-$ or US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-				

		4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$).did. or (WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$ or WO-2019086961-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$ or EP-3330757-$ or WO-2018044728-$ or EP-3278153-$ or CN-107636504-$ or WO-2018009426-$ or WO-2017182535-$ or CN-206479676-$ or EP-3180644-$ or EP-3123221-$ or WO-2016174980-$ or WO-2016140710-$ or CN-105683795-$ or WO-2015120031-$ or WO-2015070382-$ or EP-2852856-$ or WO-2015009435-$ or FR-2997767-$ or WO-2014054357-$ or CN-103676018-$).did. or (CA-2866107-$ or GB-201220748-$ or CN-102520489-$ or CN-102445735-$ or CN-102385113-$ or WO-2012015713-$ or DE-102010021179-$ or GB-201004720-$ or DE-112006003952-$ or CA-2593676-$ or WO-2008033262-$ or EP-1783524-$ or AU-2006295165-$ or EP-1762871-$ or DE-60026115-$ or KR-100452879-$ or AU-2004274992-$ or CA-2441872-$ or KR-20040020797-$ or CN-1334472-$ or DE-20111078-$ or DE-10031931-$ or CA-2302068-$ or DE-19834723-$ or WO-9723794-$ or DE-29614436-$ or DE-19525739-$).did. or (CH-687105-$ or DE-19601949-$ or GB-9525323-$ or FR-2707402-$ or WO-9415232-$ or GB-9408857-$ or EP-0546936-$ or MX-9201992-$ or DE-4203966-$ or IT-MI913184-$ or GB-9103982-$ or CH-676513-$ or GB-9025881-$ or DE-3914978-$ or DE-9012174-$ or DE-9010357-$ or DE-8911081-$ or DE-8911080-$ or EP-			

		0339876-$ or EP-0324272-$ or DE-8901052-$ or DE-8900623-$ or EP-0292024-$ or DE-8812341-$ or DE-3737842-$ or DE-3701421-$ or EP-0253426-$).did. or (EP-0249406-$ or KR-870005264-$ or EP-0183820-$ or EP-0166636-$ or EP-0154781-$ or EP-0153249-$ or EP-0098190-$ or EP-0098205-$ or FR-2528984-$ or FR-2502798-$ or GB-2086602-$ or EP-0045271-$ or WO-8002213-$ or DE-2932986-$ or DE-2832839-$ or AU-3682878-$ or GB-1526682-$ or FR-2316611-$ or GB-1450760-$ or FR-2268370-$).did. or (JP-2019184942-$ or JP-2005258017-$ or JP-2000241670-$ or JP-05215939-$ or JP-03059503-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-61129605-$ or JP-61028909-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-59038707-$ or JP-59036207-$ or JP-58190910-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56062212-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$).did. or (US-20200033539-$ or US-20200012053-$ or US-20200003961-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$ or EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190227240-$ or US-20190219775-$ or US-20190204513-$ or US-20190162914-$ or US-20190162917-$).did. or (US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$			

		or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or US-20180372962-$ or US-20180364422-$ or CN-108983368-$ or KR-2018131725-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or US-20180292612-$ or CN-108490551-$).did. or (US-20180231722-$ or JP-6363784-$ or US-20180203196-$ or CN-108279462-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018008399-$ or CN-107479141-$ or EP-3249434-$ or WO-2017182535-$ or US-20170264045-$ or US-20170261698-$ or US-20170261696-$ or KR-2017103050-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017106514-$).did. or (US-20170176691-$ or US-20170176692-$ or WO-2017095928-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$ or US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or WO-2015142551-$ or US-20150260923-$ or CN-104914515-$ or WO-2015126470-$).did. or (WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-				

		$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$ or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$).did. or (WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$ or US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$).did. or (US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$ or EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9723794-$ or WO-9637793-$).did. or (DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-				

		4041425-$ or EP-420490-$ or EP-335531-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$ or EP-440447-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$).did. or (EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$ or EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$).did. or (GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$).did.				
S837	1,322	S835 not S836	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 13:06
S838	5,309	(G02B6/3825).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 13:06
S839	2,727	S838 not (S829 S830 S831 S832 S837)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 13:06
S840	3,186	S834 not (S829 S830 S831 S832 S837 S839)	US-PGPUB; USPAT; EPO; JPO	OR	ON	2020/09/01 13:06
S841	1,686	S828 not (S820 S821 S822 S823 S827 S840)	US-PGPUB; USPAT; EPO; JPO	OR	ON	2020/09/01 13:06
S842	0	S833 not (S820 S821 S822 S823 S827 S840 S841)	US-PGPUB; USPAT; EPO; JPO	OR	ON	2020/09/01 13:19
S843	1,322	S833 not (S829 S830 S831 S832 S840 S841)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/09/01 13:20

S844	81	(US-20040101250-$ or US-20140205247-$ or US-20170160486-$ or US-20180239091-$).did. or (US-3999837-$ or US-4252407-$ or US-6116790-$ or US-6371659-$ or US-6461053-$ or US-6585423-$ or US-7001079-$ or US-9039298-$ or US-9823424-$).did. or (DE-2558445-$ or FR-2296862-$ or BR-7508734-$ or ES-444034-$ or GB-1503979-$ or IT-7869677-$ or CA-1043604-$ or BE-871785-$ or DK-522978-$ or NL-7811579-$ or DE-2849975-$ or GB-2009440-$ or FR-2435053-$ or FR-2446496-$ or CA-1097111-$ or IT-1050771-$ or FR-2446496-$ or FR-2435053-$ or CH-628152-$ or GB-2009440-$ or DE-3112078-$ or FR-2296862-$ or DE-2558445-$ or DE-3112078-$ or IT-1109638-$ or DE-2849975-$).did. or (DK-151733-$ or DK-151733-$ or DK-151733-$ or DE-19626036-$ or WO-9800741-$ or AU-2975197-$ or WO-9928774-$ or EP-0985161-$ or EP-1034445-$ or EP-1092995-$ or EP-1092995-$ or EP-1034445-$ or EP-0985161-$ or ES-2202617-$ or EP-1092995-$ or DE-60010402-$ or DE-60010402-$ or JP-3984293-$ or EP-2138880-$ or JP-4514004-$ or WO-2016053853-$ or WO-2017065999-$ or WO-2017065999-$ or EP-3201668-$ or CN-108351473-$ or CN-208140982-$ or EP-3201668-$).did. or (JP-2001154062-$).did. or (DE-2558445-$ or BE-871785-$ or DE-19626036-$ or WO-9928774-$ or EP-1092995-$ or US-20140205247-$ or CN-104516061-$ or CN-104570229-$ or WO-2016053853-$ or WO-2017065999-$ or US-20180364421-$).did.	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:27
S845	1,140	(US-20010010741-$ or US-20010016102-$ or US-20010033730-$ or US-20010038737-$ or US-20010043776-$ or US-20010048790-$ or US-20020006253-$ or US-20020012503-$ or US-20020012502-$ or US-20020012501-$ or US-20020012238-$ or US-20020025121-$ or US-20020025099-$ or US-	US-PGPUB; USPAT; JPO	OR	ON	2020/09/01 13:27

		20020028055-$ or US-20020031310-$ or US-20020031309-$ or US-20020061171-$ or US-20020064349-$ or US-20020081076-$ or US-20020090177-$ or US-20020094727-$ or US-20020106167-$ or US-20020114581-$ or US-20020118926-$ or US-20020126961-$ or US-20020131720-$).did. or (US-20020150344-$ or US-20020150343-$ or US-20020150353-$ or US-20020150346-$ or US-20020150345-$ or US-20020150342-$ or US-20020159745-$ or US-20020159714-$ or US-20020159712-$ or US-20020168149-$ or US-20020166226-$ or US-20020172469-$ or US-20020177364-$ or US-20020181888-$ or US-20020181884-$ or US-20020186934-$ or US-20020186742-$ or US-20020191881-$ or US-20020197017-$ or US-20020197018-$ or US-20030002816-$ or US-20030002808-$ or US-20030007739-$ or US-20030012512-$ or US-20030031449-$ or US-20030031422-$ or US-20030044122-$).did. or (US-20030044115-$ or US-20030053760-$ or US-20030063868-$ or US-20030063866-$ or US-20030063862-$ or US-20030068135-$ or US-20030072536-$ or US-20030081905-$ or US-20030087505-$ or US-20030091292-$ or US-20030095780-$ or US-20030095779-$ or US-20030103730-$ or US-20030108320-$ or US-20030113086-$ or US-20030128934-$ or US-20030142918-$ or US-20030147597-$ or US-20030147230-$ or US-20030156796-$ or US-20030169975-$ or US-20030169974-$ or US-20030174996-$ or US-20030174972-$ or US-20030174922-$ or US-20030180005-$ or US-20030185520-$).did. or (US-20030189214-$ or US-20030194188-$ or US-20030198029-$ or US-20030231838-$ or US-20040013369-$ or US-20040028340-$ or US-20040033050-$ or US-20040033028-$ or US-20040033027-$ or US-20040036987-$ or US-20040042710-$ or US-20040052471-$ or US-				

		20040054761-$ or US-20040062488-$ or US-20040062486-$ or US-20040072454-$ or US-20040071438-$ or US-20040074852-$ or US-20040081418-$ or US-20040091228-$ or US-20040101253-$ or US-20040105325-$ or US-20040105278-$ or US-20040120652-$ or US-20040131315-$ or US-20040136656-$ or US-20040141692-$).did. or (US-20040151464-$ or US-20040151438-$ or US-20040156592-$ or US-20040161204-$ or US-20040165830-$ or US-20040179787-$ or US-20040184740-$ or US-20040182971-$ or US-20040197053-$ or US-20040202431-$ or US-20040208459-$ or US-20040223701-$ or US-20040240793-$ or US-20040247255-$ or US-20040264873-$ or US-20040266257-$ or US-20040264908-$ or US-20040264876-$ or US-20050008300-$ or US-20050013547-$ or US-20050041928-$ or US-20050069263-$ or US-20050074211-$ or US-20050094948-$ or US-20050094943-$ or US-20050112939-$ or US-20050111796-$).did. or (US-20050118880-$ or US-20050135753-$ or US-20050141817-$ or US-20050185894-$ or US-20050207708-$ or US-20050215119-$ or US-20050220423-$ or US-20050220420-$ or US-20050226586-$ or US-20050232552-$ or US-20050238289-$ or US-20050281526-$ or US-20050281509-$ or US-20050286833-$ or US-20050286835-$ or US-20060013539-$ or US-20060056769-$ or US-20060072878-$ or US-20060083468-$ or US-20060083467-$ or US-20060088248-$ or US-20060093275-$ or US-20060098914-$ or US-20060133758-$ or US-20060140542-$ or US-20060147156-$ or US-20060147155-$).did. or (US-20060154529-$ or US-20060153503-$ or US-20060159401-$ or US-20060159399-$ or US-20060169856-$ or US-20060177182-$ or US-20060197943-$ or US-20060204200-$ or US-20060204180-$ or US-20060245711-$ or US-20060263011-				

		$ or US-20060269205-$ or US-20060269206-$ or US-20060269212-$ or US-20070019913-$ or US-20070036487-$ or US-20070098330-$ or US-20070098329-$ or US-20070105452-$ or US-20070116414-$ or US-20070116411-$ or US-20070140623-$ or US-20070154135-$ or US-20070165984-$ or US-20070183780-$ or US-20070190834-$ or US-20070196053-$).did. or (US-20070196052-$ or US-20070201808-$ or US-20070201798-$ or US-20070212002-$ or US-20070223862-$ or US-20070230874-$ or US-20070263959-$ or US-20070280599-$ or US-20070285194-$ or US-20070297725-$ or US-20080008425-$ or US-20080013897-$ or US-20080013891-$ or US-20080019642-$ or US-20080019656-$ or US-20080044139-$ or US-20080050072-$ or US-20080085082-$ or US-20080095502-$ or US-20080095501-$ or US-20080100456-$ or US-20080170827-$ or US-20080175541-$ or US-20080175550-$ or US-20080175542-$ or US-20080175546-$ or US-20080175545-$).did. or (US-20080175532-$ or US-20080193086-$ or US-20080205825-$ or US-20080240658-$ or US-20080269845-$ or US-20080267566-$ or US-20080273837-$ or US-20080279503-$ or US-20080304792-$ or US-20080310796-$ or US-20080310800-$ or US-20080310795-$ or US-20080317411-$ or US-20090010600-$ or US-20090028507-$ or US-20090034912-$ or US-20090047800-$ or US-20090046981-$ or US-20090060422-$ or US-20090060418-$ or US-20090074359-$ or US-20090103878-$ or US-20090116791-$ or US-20090148101-$ or US-20090156043-$ or US-20090185778-$ or US-20090202214-$).did. or (US-20090214164-$ or US-20090226141-$ or US-20090226137-$ or US-20090232455-$ or US-20090232454-$ or US-20090257722-$ or US-20090257719-$ or US-20090274431-$ or US-20090274432-$ or US-				

		20090285534-$ or US-20090285530-$ or US-20090290838-$ or US-20090304335-$ or US-20100002999-$ or US-20100021111-$ or US-20100029117-$ or US-20100027944-$ or US-20100027943-$ or US-20100046893-$ or US-20100054665-$ or US-20100061681-$ or US-20100074616-$ or US-20100080513-$ or US-20100092134-$ or US-20100092131-$ or US-20100104355-$ or US-20100111484-$).did. or (US-20100129032-$ or US-20100129028-$ or US-20100135618-$ or US-20100141934-$ or US-20100146764-$ or US-20100158444-$ or US-20100183265-$ or US-20100202730-$ or US-20100202737-$ or US-20100209063-$ or US-20100209050-$ or US-20100215318-$ or US-20100215322-$ or US-20100226654-$ or US-20100232757-$ or US-20100239220-$ or US-20100239213-$ or US-20100247057-$ or US-20100247040-$ or US-20100260457-$ or US-20100266245-$ or US-20100272408-$ or US-20100278497-$ or US-20100278488-$ or US-20100284655-$ or US-20100296792-$ or US-20100303408-$).did. or (US-20100322580-$ or US-20100322576-$ or US-20100322554-$ or US-20100329604-$ or US-20100329602-$ or US-20110019964-$ or US-20110038592-$ or US-20110038581-$ or US-20110044583-$ or US-20110058772-$ or US-20110075969-$ or US-20110081798-$ or US-20110081116-$ or US-20110085774-$ or US-20110085765-$ or US-20110091166-$ or US-20110091154-$ or US-20110103797-$ or US-20110116748-$ or US-20110123156-$ or US-20110129186-$ or US-20110142398-$ or US-20110150396-$ or US-20110158593-$ or US-20110158586-$ or US-20110170830-$ or US-20110176777-$).did. or (US-20110188809-$ or US-20110188000-$ or US-20110194828-$ or US-20110200286-$ or US-20110198324-$ or US-20110200294-$ or US-20110206335-$ or US-20110206325-				

		$ or US-20110206324-$ or US-20110211792-$ or US-20110229094-$ or US-20110243508-$ or US-20110243505-$ or US-20110243504-$ or US-20110268391-$ or US-20110293223-$ or US-20110299814-$ or US-20110311186-$ or US-20110317976-$ or US-20120002928-$ or US-20120002925-$ or US-20120033918-$ or US-20120039569-$ or US-20120057831-$ or US-20120057830-$ or US-20120057827-$ or US-20120063735-$).did. or (US-20120069348-$ or US-20120099870-$ or US-20120106901-$ or US-20120114295-$ or US-20120128307-$ or US-20120141084-$ or US-20120155808-$ or US-20120163757-$ or US-20120170895-$ or US-20120195555-$ or US-20120219253-$ or US-20120224823-$ or US-20120237223-$ or US-20120237171-$ or US-20120243831-$ or US-20120243829-$ or US-20120251067-$ or US-20120252244-$ or US-20120251050-$ or US-20120257859-$ or US-20120263426-$ or US-20120294572-$ or US-20120301088-$ or US-20120301080-$ or US-20120321269-$ or US-20120321266-$ or US-20120321254-$).did. or (US-20130011099-$ or US-20130064517-$ or US-20130071068-$ or US-20130071067-$ or US-20130084041-$ or US-20130094827-$ or US-20130094815-$ or US-20130094811-$ or US-20130101257-$ or US-20130108231-$ or US-20130121643-$ or US-20130129285-$ or US-20130156379-$ or US-20130156382-$ or US-20130163937-$ or US-20130163933-$ or US-20130170797-$ or US-20130170796-$ or US-20130183018-$ or US-20130195405-$ or US-20130195418-$ or US-20130209040-$ or US-20130209049-$ or US-20130209052-$ or US-20130209051-$ or US-20130209050-$ or US-20130209041-$).did. or (US-20130216186-$ or US-20130216188-$ or US-20130284844-$ or US-20130287358-$ or US-20130302004-$ or US-20130322828-$ or US-				

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		$ or US-20180074277-$ or US-20180081127-$ or US-20180081122-$ or US-20180078781-$ or US-20180095232-$ or US-20180106975-$ or US-20180113268-$ or US-20180113259-$ or US-20180136410-$ or US-20180143384-$ or US-20180143381-$ or US-20180149813-$ or US-20180157002-$ or US-20180180819-$ or US-20180188460-$ or US-20180196204-$ or US-20180210155-$ or US-20180210153-$).did. or (US-3933409-$ or US-3999837-$ or US-4080044-$ or US-4087158-$ or US-4101198-$ or US-4140365-$ or US-4167304-$ or US-4168109-$ or US-4186996-$ or US-4201445-$ or US-4214812-$ or US-4218113-$ or US-4223976-$ or US-4252407-$ or US-4268115-$ or US-4268114-$ or US-4279469-$ or US-4291943-$ or US-4295707-$ or US-4327964-$ or US-4354731-$ or US-4368948-$ or US-4371233-$ or US-4387957-$ or US-4415232-$ or US-4422716-$).did. or (US-4444461-$ or US-4445753-$ or US-4447121-$ or US-4461539-$ or US-4466009-$ or US-4484796-$ or US-4487474-$ or US-4497536-$ or US-4526438-$ or US-4548467-$ or US-4614402-$ or US-4615581-$ or US-4645296-$ or US-4648688-$ or US-4666241-$ or US-4674831-$ or US-4681398-$ or US-4688887-$ or US-4699460-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4715674-$ or US-4717234-$ or US-4718744-$ or US-4722081-$ or US-4740052-$).did. or (US-4741590-$ or US-4758719-$ or US-4759600-$ or US-4759599-$ or US-4762389-$ or US-4767178-$ or US-4773725-$ or US-4781429-$ or US-4783137-$ or US-4786135-$ or US-4787700-$ or US-4789216-$ or US-4793683-$ or US-4795231-$ or US-4805980-$ or US-4807957-$ or US-4813760-$ or US-4824196-$ or US-4834486-$ or US-4842361-$ or US-4844570-$ or US-4846544-$ or US-4848870-$ or US-4850536-$ or US-4852963-$ or US-4877303-$ or US-4892380-$).did. or				

		(US-4898446-$ or US-4960317-$ or US-4964688-$ or US-4976510-$ or US-4986762-$ or US-4986622-$ or US-4991929-$ or US-4993803-$ or US-4995688-$ or US-4998797-$ or US-5013124-$ or US-5015060-$ or US-5016970-$ or US-5018823-$ or US-5042891-$ or US-5048916-$ or US-5052774-$ or US-5058983-$ or US-5073042-$ or US-5077815-$ or US-5091991-$ or US-5091990-$ or US-5109453-$ or US-5115484-$ or US-5119455-$ or US-5124506-$ or US-5127073-$).did. or (US-5129024-$ or US-5133032-$ or US-5134677-$ or US-5134676-$ or US-5155795-$ or US-5159654-$ or US-5177808-$ or US-5179607-$ or US-5210815-$ or US-5214730-$ or US-5228104-$ or US-5233675-$ or US-5233674-$ or US-5239606-$ or US-5267342-$ or US-5274729-$ or US-5280552-$ or US-5282259-$ or US-5293581-$ or US-5297227-$ or US-5317663-$ or US-5323475-$ or US-5329541-$ or US-5333222-$ or US-5333221-$ or US-5359688-$ or US-5363460-$).did. or (US-5367594-$ or US-5366383-$ or US-5384885-$ or US-5386485-$ or US-5408557-$ or US-5418875-$ or US-5420951-$ or US-5444806-$ or US-5446817-$ or US-5450519-$ or US-5452391-$ or US-5485537-$ or US-5497444-$ or US-5506922-$ or US-5519799-$ or US-5521998-$ or US-5528711-$ or US-5530783-$ or US-5537501-$ or US-5542015-$ or US-5548674-$ or US-5550943-$ or US-5563978-$ or US-5563971-$ or US-5570445-$ or US-5574813-$ or US-5579429-$).did. or (US-5581644-$ or US-5588086-$ or US-5592323-$ or US-5600746-$ or US-5603631-$ or US-5607323-$ or US-5619610-$ or US-5633969-$ or US-5642450-$ or US-5647043-$ or US-5645449-$ or US-5661833-$ or US-5666449-$ or US-5664955-$ or US-5668904-$ or US-5671310-$ or US-5673346-$ or US-5680494-$ or US-5682449-$ or US-5687268-$ or US-5694507-$ or US-5694506-$ or US-5701380-$ or US-5721799-$ or				

		US-5727102-$ or US-5732174-$ or US-5734770-$).did. or (US-5737464-$ or US-5751874-$ or US-5761359-$ or US-5764043-$ or US-5774611-$ or US-5774612-$ or US-5778122-$ or US-5781680-$ or US-5796896-$ or US-5799122-$ or US-5809191-$ or US-5815618-$ or US-5818993-$ or US-5825955-$ or US-5832158-$ or US-5838856-$ or US-5838855-$ or US-5845036-$ or US-5862282-$ or US-5867621-$ or US-5881191-$ or US-5887100-$ or US-5887098-$ or US-5892870-$ or US-5896477-$ or US-5909526-$ or US-5909298-$).did. or (US-5915058-$ or US-5923805-$ or US-5930426-$ or US-5930425-$ or US-5937121-$ or US-5940561-$ or US-5940559-$ or US-5949946-$ or US-5953474-$ or US-5953473-$ or US-5956444-$ or US-5960137-$ or US-5969294-$ or US-5971626-$ or US-5980117-$ or US-5987203-$ or US-5993071-$ or US-6004043-$ or US-6022149-$ or US-6027252-$ or US-6041155-$ or US-6048103-$ or US-6048102-$ or US-6053639-$ or US-6059461-$ or US-6064791-$ or US-6076973-$).did. or (US-6076975-$ or US-6081647-$ or US-6079881-$ or US-6088502-$ or US-6095694-$ or US-6104856-$ or US-6102581-$ or US-6108482-$ or US-6116790-$ or US-6116789-$ or US-6116101-$ or US-6132105-$ or US-6139346-$ or US-6142676-$ or US-6149315-$ or US-6154597-$ or US-6164835-$ or US-6164834-$ or US-6173099-$ or US-6179480-$ or US-6179475-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6190616-$ or US-6195477-$ or US-6193420-$).did. or (US-6196729-$ or US-6200040-$ or US-6206577-$ or US-6217226-$ or US-6220763-$ or US-6220762-$ or US-6224269-$ or US-6227719-$ or US-6227718-$ or US-6240229-$ or US-6238249-$ or US-6243526-$ or US-6247851-$ or US-6247849-$ or US-6256446-$ or US-6259839-$ or US-6264373-$ or US-6264372-$ or US-6267513-$ or US-6273618-$ or US-6290527-$				

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		9482825-$ or US-9551831-$ or US-9625655-$ or US-9632267-$ or US-9638871-$ or US-9638868-$ or US-9645335-$ or US-9658407-$ or US-9671570-$ or US-9671568-$).did. or (US-9678282-$ or US-9696477-$ or US-9722367-$ or US-9720184-$ or US-9726829-$ or US-9735523-$ or US-9733123-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9746625-$ or US-9746368-$ or US-9759874-$ or US-9759869-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9784928-$ or US-9798090-$ or US-9797806-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9817195-$ or US-9823428-$ or US-9829643-$ or US-9827438-$).did. or (US-9835807-$ or US-9841566-$ or US-9857545-$ or US-9857537-$ or US-9864151-$ or US-9869824-$ or US-9876309-$ or US-9874702-$ or US-9880365-$ or US-9880357-$ or US-9885841-$ or US-9893813-$ or US-9891392-$ or US-9891387-$ or US-9891385-$ or US-9897767-$ or US-9904021-$ or US-9904020-$ or US-9910228-$ or US-9910226-$ or US-9915793-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9939600-$ or US-9939590-$ or US-9948017-$).did. or (US-9946036-$ or US-10007069-$ or US-10018787-$).did. or (JP-2016095432-$ or JP-2016095410-$ or JP-2016122100-$ or JP-2016177309-$ or JP-2016188927-$ or JP-2017053937-$ or JP-2017090798-$ or JP-2017111444-$ or JP-2017134118-$ or JP-2017138535-$ or JP-2017151338-$ or JP-2017219768-$).did.				
S846	738	(US-20010041030-$ or US-20020025125-$ or US-20020106162-$ or US-20020114589-$ or US-20020159710-$ or US-20030031452-$ or US-20030044127-$ or US-20030044125-$ or US-20030180004-$ or US-20030223703-$ or US-20040008494-$ or US-20040017983-$ or US-20040017981-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:27

		20040038558-$ or US-20040052472-$ or US-20040062498-$ or US-20040105628-$ or US-20040131317-$ or US-20040223699-$ or US-20040228589-$ or US-20050036744-$ or US-20050053342-$ or US-20050111795-$ or US-20050123246-$ or US-20050135755-$ or US-20050135752-$).did. or (US-20050271328-$ or US-20060045430-$ or US-20060051028-$ or US-20060093282-$ or US-20060153504-$ or US-20060193562-$ or US-20060280409-$ or US-20060285807-$ or US-20070058907-$ or US-20070098327-$ or US-20070160327-$ or US-20080069501-$ or US-20080112672-$ or US-20080124031-$ or US-20080131055-$ or US-20080253719-$ or US-20090003772-$ or US-20090290839-$ or US-20090305542-$ or US-20100322561-$ or US-20110038590-$ or US-20110075971-$ or US-20110091159-$ or US-20110222819-$ or US-20110249942-$ or US-20120027355-$ or US-20120057824-$).did. or (US-20120076459-$ or US-20120082416-$ or US-20120099822-$ or US-20120141070-$ or US-20120251054-$ or US-20120251051-$ or US-20120263423-$ or US-20120263419-$ or US-20120308183-$ or US-20130051749-$ or US-20130064508-$ or US-20130077914-$ or US-20130121645-$ or US-20130129280-$ or US-20130183001-$ or US-20130216189-$ or US-20130230283-$ or US-20130259429-$ or US-20130272671-$ or US-20130308908-$ or US-20140056560-$ or US-20140064665-$ or US-20140064688-$ or US-20140072265-$ or US-20140086545-$ or US-20140147081-$ or US-20140205241-$).did. or (US-20140219614-$ or US-20140219624-$ or US-20140314385-$ or US-20140341510-$ or US-20150003785-$ or US-20150023637-$ or US-20150049989-$ or US-20150071591-$ or US-20150177463-$ or US-20150226926-$ or US-20150241644-$ or US-20150301286-$ or US-				

		20150331201-$ or US-20150338583-$ or US-20150370017-$ or US-20150378112-$ or US-20160004018-$ or US-20160004016-$ or US-20160025937-$ or US-20160077287-$ or US-20160077284-$ or US-20160109661-$ or US-20160131854-$ or US-20160131849-$ or US-20160161680-$ or US-20160178859-$ or US-20160259135-$).did. or (US-20160282566-$ or US-20160282562-$ or US-20160320571-$ or US-20160349464-$ or US-20170059784-$ or US-20170090128-$ or US-20170090127-$ or US-20170102506-$ or US-20170102504-$ or US-20170108653-$ or US-20170115457-$ or US-20170139150-$ or US-20170153398-$ or US-20170184798-$ or US-20170184790-$ or US-20170205587-$ or US-20170219779-$ or US-20170227720-$ or US-20170235060-$ or US-20170242200-$ or US-20170242199-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170261698-$ or US-20170269309-$ or US-20170276883-$).did. or (US-20170276881-$ or US-20170293088-$ or US-20170293087-$ or US-20170307831-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170357060-$ or US-20170357059-$ or US-20170363827-$ or US-20180003903-$ or US-20180011258-$ or US-20180011254-$ or US-20180031774-$ or US-20180052288-$ or US-20180077472-$ or US-20180081128-$ or US-20180081125-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180106973-$ or US-20180156988-$ or US-20180156985-$ or US-20180210154-$).did. or (US-4240695-$ or US-4320938-$ or US-4330172-$ or US-4477146-$ or US-4687291-$ or US-4737009-$ or US-4854664-$ or US-4856866-$ or US-4886335-$ or US-4915472-$ or US-4953929-$ or US-4955976-$ or US-5064268-$ or US-5076656-$ or US-5082346-$ or US-			

		5082344-$ or US-5101463-$ or US-5134673-$ or US-5157749-$ or US-5166995-$ or US-5199093-$ or US-5259052-$ or US-5555332-$ or US-5666456-$ or US-5692080-$ or US-5867894-$).did. or (US-5870515-$ or US-5883995-$ or US-5920670-$ or US-5920669-$ or US-5984533-$ or US-6012852-$ or US-6095695-$ or US-6210045-$ or US-6250817-$ or US-6305849-$ or US-6318902-$ or US-6331079-$ or US-6379052-$ or US-6409392-$ or US-6422761-$ or US-6422760-$ or US-6450698-$ or US-6487343-$ or US-6491442-$ or US-6533465-$ or US-6554486-$ or US-6623172-$ or US-6688782-$ or US-6712521-$ or US-6764222-$ or US-6839583-$ or US-6848834-$).did. or (US-6944378-$ or US-7036996-$ or US-8388235-$ or US-9207454-$ or US-9316791-$ or US-9377591-$ or US-9389368-$ or US-9482820-$ or US-9606303-$ or US-9625657-$ or US-9664864-$ or US-9678283-$ or US-9678286-$ or US-9684134-$ or US-9696497-$ or US-9703062-$ or US-9709753-$ or US-9726830-$ or US-9733436-$ or US-9733434-$ or US-9798096-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9829650-$ or US-9835808-$ or US-9846283-$).did. or (US-9851512-$ or US-9891390-$ or US-9904019-$ or US-9910229-$ or US-9927582-$ or US-9939589-$ or US-9946037-$).did. or (IT-7819792-$ or FR-2363124-$ or IT-7925110-$ or GB-2057158-$ or FR-2487528-$ or GB-2081468-$ or EP-0061243-$ or DK-208682-$ or GB-8306227-$ or IT-8323399-$ or JP-S5856846-$ or EP-0125398-$ or FR-2535069-$ or WO-8600147-$ or EP-0249237-$ or EP-0262847-$ or EP-0262631-$ or DE-8626183-$ or WO-9015350-$ or EP-0408852-$ or GB-9103604-$ or GB-9106183-$ or CA-2030897-$ or DE-9107960-$ or GB-9206076-$ or CA-2057559-$).did. or (CA-2082276-$ or EP-0633485-$ or EP-0690319-$ or CA-2191600-$ or EP-0696748-$ or EP-0697608-$ or CN-1118443-$				

		or WO-9627811-$ or EP-0758099-$ or WO-9734176-$ or CA-2198522-$ or EP-0803750-$ or NL-1003147-$ or EP-0807837-$ or CA-2254335-$ or CA-2294930-$ or CA-2262351-$ or EP-0938003-$ or JP-2945144-$ or CA-2324565-$ or GB-9919699-$ or EP-0992819-$ or CA-2284331-$ or GB-0007281-$ or CA-2288249-$ or DE-19728960-$ or EP-1033595-$).did. or (EP-1033594-$ or EP-1039324-$ or EP-1039322-$ or EP-1041416-$ or EP-1041414-$ or JP-3106420-$ or CA-2321428-$ or EP-1091225-$ or WO-0137010-$ or EP-1107031-$ or KR-20010062142-$ or WO-0155762-$ or EP-1124147-$ or WO-0161397-$ or WO-0181965-$ or CA-2350290-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or KR-20020000530-$ or KR-20020001574-$ or CN-1331421-$ or EP-1172672-$ or EP-1172673-$ or KR-20020006481-$ or KR-20020006480-$ or DE-20118858-$).did. or (CA-2418331-$ or KR-20020050140-$ or WO-02056060-$ or WO-02061481-$ or DE-10114144-$ or NL-1018440-$ or WO-03016975-$ or WO-03093883-$ or CA-2484569-$ or EP-1394584-$ or AU-2003291687-$ or EP-1530068-$ or CA-2503690-$ or CN-1677147-$ or CN-1707299-$ or WO-2008006402-$ or EP-1887395-$ or CN-101122658-$ or WO-2008029850-$ or CA-2662854-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or CA-2689768-$ or EP-2206458-$ or WO-2010137426-$ or CA-2762411-$).did. or (EP-2302431-$ or WO-2011139938-$ or WO-2011152874-$ or EP-2444827-$ or WO-2012054174-$ or WO-2012054174-$ or WO-2012151175-$ or GB-201218194-$ or CN-102870023-$ or WO-2013115791-$ or WO-2013115789-$ or WO-2013126068-$ or CA-2912155-$ or WO-2014009463-$ or WO-2014011898-$ or EP-2700992-$ or JP-5433802-$ or WO-2014049469-$				

		or WO-2014113753-$ or CA-2836675-$ or WO-2014143748-$ or WO-2014165175-$ or WO-2014197701-$ or CN-104241938-$ or CA-2917189-$ or EP-2840425-$ or EP-2843452-$).did. or (WO-2015028433-$ or CA-2885821-$ or WO-2015068103-$ or CA-2932688-$ or GB-201507758-$ or WO-2015103783-$ or WO-2015116589-$ or CN-204595258-$ or WO-2015144883-$ or EP-2942653-$ or EP-2947485-$ or WO-2015190211-$ or WO-2016004347-$ or CN-105278047-$ or DE-202013012295-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or CA-2928026-$ or WO-2016043922-$ or JP-5905950-$ or WO-2016067668-$ or EP-3021145-$ or WO-2016082160-$ or WO-2016103821-$ or DE-202016103178-$ or EP-3054333-$).did. or (WO-2016161341-$ or WO-2017038704-$ or JP-6173629-$ or WO-2017180257-$ or CN-206584076-$ or EP-3258301-$ or WO-2018003776-$ or WO-2018004847-$).did. or (JP-54034251-$ or JP-55101904-$ or JP-56066811-$ or JP-56074211-$ or JP-59075218-$ or JP-04214510-$ or JP-04220604-$ or JP-05313040-$ or JP-08015541-$ or JP-09005575-$ or JP-09033756-$ or JP-10104469-$ or JP-11072659-$ or JP-2000089061-$ or JP-2000284146-$ or JP-2000292655-$ or JP-2000310724-$ or JP-2001013372-$ or JP-2001021764-$ or JP-2001242361-$ or JP-2009294343-$ or JP-2012053420-$ or JP-2012078513-$ or JP-2015022131-$).did. or (DE-2805949-$ or DE-2932986-$ or GB-2057158-$ or GB-2081468-$ or EP-61243-$ or GB-2098354-$ or DE-3208797-$ or EP-125398-$ or US-4496213-$ or WO-8600147-$ or EP-249237-$ or EP-262631-$ or US-4953929-$ or WO-9015350-$ or GB-2241794-$ or US-5064268-$ or WO-9117540-$ or EP-458608-$ or US-5101463-$ or EP-490698-$ or EP-505197-$ or EP-430107-$ or EP-660145-$ or EP-				

		660144-$ or EP-663602-$ or EP-663601-$).did. or (WO-9600917-$ or EP-696748-$ or EP-697608-$ or WO-9627811-$ or EP-758099-$ or WO-9734176-$ or EP-803750-$ or US-5692080-$ or WO-9746900-$ or WO-9857208-$ or WO-9947958-$ or GB-2341455-$ or EP-1041416-$ or EP-1041414-$ or EP-1091225-$ or WO-0140839-$ or EP-1107031-$ or EP-1124147-$ or WO-0181965-$ or US-20010041030-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or EP-1172673-$ or EP-1172672-$ or DE-20118858-$ or WO-02056060-$).did. or (US-6422760-$ or WO-02061481-$ or US-20030031437-$ or US-20030044125-$ or WO-03094297-$ or WO-03093883-$ or EP-1394584-$ or US-20040062498-$ or US-20040223699-$ or US-20040228589-$ or US-20050053342-$ or WO-2006022840-$ or US-20060153503-$ or US-20060165352-$ or US-20060193562-$ or EP-1752805-$ or US-20070058907-$ or US-20070077010-$ or US-20070098327-$ or US-20090041411-$ or US-20090060423-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or EP-2206458-$ or WO-2010137426-$ or EP-2302431-$).did. or (US-20110249942-$ or US-20110274437-$ or WO-2011152874-$ or KR-2012000895-$ or US-20120027355-$ or US-20120057824-$ or US-20120082416-$ or EP-2444827-$ or US-20120099822-$ or US-20120251051-$ or US-20120251054-$ or US-20120263419-$ or WO-2012151175-$ or US-20120308183-$ or CN-102870023-$ or TW-201309089-$ or US-20130051749-$ or WO-2013036843-$ or CN-103091793-$ or US-20130121645-$ or WO-2013115789-$ or WO-2013115791-$ or WO-2013122865-$ or WO-2013126068-$ or US-20130230283-$ or US-20130259429-$ or WO-2013155395-$).did. or (WO-2013177234-$ or WO-2014011898-$ or US-20140016901-$				

		or EP-2700992-$ or JP-5433802-$ or US-20140064688-$ or TW-474924-$ or WO-2014049469-$ or US-20140147081-$ or US-20140153879-$ or ES-1110405-$ or WO-2014113753-$ or EP-2759860-$ or US-20140219624-$ or WO-2014143748-$ or WO-2014165175-$ or US-20140321808-$ or US-20140363131-$ or WO-2014197701-$ or EP-2818903-$ or WO-2015009435-$ or US-20150023637-$ or US-20150049989-$ or WO-2015028433-$ or WO-2015068103-$ or WO-2015070382-$ or US-20150162982-$).did. or (US-20150177463-$ or WO-2015103783-$ or WO-2015116589-$ or US-20150219864-$ or US-20150226926-$ or US-20150226925-$ or US-20150241644-$ or CN-104950402-$ or WO-2015144883-$ or US-20150286012-$ or DE-102015106225-$ or US-20150331201-$ or EP-2947485-$ or WO-2015190211-$ or US-20150378110-$ or US-20160004016-$ or US-20160004018-$ or US-20160025937-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or WO-2016033577-$ or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016043922-$ or JP-5905950-$).did. or (US-20160124158-$ or US-20160131854-$ or EP-3021145-$ or US-20160161680-$ or US-20160178852-$ or US-20160178859-$ or US-9377591-$ or US-9389368-$ or EP-3054333-$ or US-20160259135-$ or CN-105978629-$ or US-20160282566-$ or WO-2016161341-$ or US-20160306125-$ or US-9482820-$ or US-20160341908-$ or US-20160341911-$ or US-20160349466-$ or US-20160377819-$ or US-20170031106-$ or US-20170059784-$ or WO-2017038704-$ or US-20170090127-$ or US-20170102504-$ or US-20170115457-$ or US-20170139150-$ or US-20170139156-$).did. or (US-20170153398-$ or US-9678283-$ or				

		US-20170184790-$ or US-9709753-$ or US-20170205587-$ or JP-6173629-$ or US-20170219779-$ or US-9726830-$ or US-20170227720-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170293088-$ or US-20170307830-$ or US-9804340-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170371109-$ or US-20180003903-$ or US-20180011258-$ or US-20180052288-$ or US-20180081128-$ or US-20180106973-$ or US-20180120519-$ or US-20180128988-$).did.				
S847	136	(US-20020176671-$ or US-20040017980-$ or US-20040126118-$ or US-20040197054-$ or US-20070172177-$ or US-20070286554-$ or US-20100008635-$ or US-20100129034-$ or US-20100290745-$ or US-20110116749-$ or US-20110222830-$ or US-20110229096-$ or US-20110229095-$ or US-20110225792-$ or US-20110255831-$ or US-20110262078-$ or US-20110262077-$ or US-20120014648-$ or US-20120063724-$ or US-20120275749-$ or US-20130136402-$ or US-20130315538-$ or US-20140286610-$ or US-20150016781-$ or US-20150110448-$ or US-20160124170-$).did. or (US-20160202429-$ or US-20170045691-$ or US-20170285277-$ or US-20170299820-$ or US-20180120519-$ or US-20180143380-$ or US-20180231722-$ or US-20180239093-$ or US-20180267255-$ or US-20180292618-$ or US-20180292612-$ or US-20180364421-$ or US-20190107679-$ or US-20190107678-$ or US-20190113691-$ or US-20190137701-$ or US-20190179085-$).did. or (US-5504825-$ or US-5613021-$ or US-5661826-$ or US-6045270-$ or US-6276840-$ or US-6293708-$ or US-6623170-$ or US-6796717-$ or US-6848840-$ or US-6866425-$ or US-6932514-$ or US-6944387-$ or US-6976793-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/09/01 13:27

		7094091-$ or US-7178994-$ or US-7182522-$ or US-7234874-$ or US-7241056-$ or US-7300216-$ or US-7536075-$ or US-7654748-$ or US-7891882-$ or US-7912336-$ or US-8052333-$ or US-8231282-$ or US-8235600-$).did. or (US-8262296-$ or US-8317407-$ or US-8346047-$ or US-8348519-$ or US-8348518-$ or US-8376634-$ or US-8406583-$ or US-8417074-$ or US-8494329-$ or US-8496384-$ or US-8529138-$ or US-8542972-$ or US-8550725-$ or US-8550724-$ or US-8579521-$ or US-8690593-$ or US-8714835-$ or US-8821038-$ or US-8821037-$ or US-8915653-$ or US-8958679-$ or US-9014527-$ or US-9031364-$ or US-9057848-$ or US-9146376-$ or US-9146360-$ or US-9417401-$).did. or (US-9513442-$ or US-9541711-$ or US-9557497-$ or US-9563025-$ or US-9606297-$ or US-9632255-$ or US-9645318-$ or US-9658409-$ or US-9684139-$ or US-9739949-$ or US-9753228-$ or US-9772464-$ or US-9857538-$ or US-9977199-$ or US-9989710-$ or US-10012801-$ or US-10054747-$ or US-10061090-$ or US-10067302-$ or US-10067300-$ or US-10088636-$ or US-10101539-$ or US-10139570-$ or US-10146014-$ or US-10156684-$ or US-10209473-$).did. or (WO-2010083369-$ or EP-2380054-$ or CN-102282495-$ or WO-2014152675-$ or WO-2015043158-$ or CN-104516073-$ or CN-102282495-$ or WO-2018125706-$).did. or (JP-57044113-$).did. or (US-20160327757-$ or US-20170299820-$ or WO-2018125706-$ or US-20190107679-$).did.				
S848	2,088	S844 S845 S846 S847	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/09/01 13:27

S849	56,732	(ferrule connector) with insert$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S850	67,189	G02B6/38$.cpc.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/09/01 13:27
S851	2,566	S849 and S850	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/09/01 13:27
S852	14,810	adapter with (groove channel) with (top bottom upper lower)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S853	105	S851 and S852	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S854	65	S853 not S848	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S855	1,212,659	(groove channel) with upper with lower	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S856	762,779	(groove channel) with top with bottom	US-PGPUB; USPAT; USOCR;	OR	ON	2020/09/01 13:27

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S857	452	S851 and (S855 S856)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/09/01 13:27
S858	328	S857 not (S848 S854)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S859	15,804	("ferrules" "connectors") with align$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S860	2,211	S850 and S859	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S861	358	S860 and (S855 S856)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/09/01 13:27
S862	169	S861 not (S848 S854 S858)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S863	11,633	G02B6/3825,3826.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2020/09/01 13:27

			DERWENT; IBM_TDB			
S864	451	S859 and S863	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/09/01 13:27
S865	215	S864 not (S848 S854 S858 S862)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S866	26,225	("ferrules" "connectors") with align$4 with (groove channel slot)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S867	721	S866 and S863	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/09/01 13:27
S868	157	S867 not (S848 S854 S858 S862 S865)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S869	3,022	S848 S854 S858 S862 S865 S868	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:27
S870	2,871	G02B6/3831.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2020/09/01 13:29

			DERWENT; IBM_TDB			
S871	2,494	S870 not S869	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S872	38	("20010026661" | "20020167793" | "20040228582" | "20050095899" | "20060140543" | "20080032536" | "20080248691" | "20080311781" | "20110059642" | "20120190230" | "20120257865" | "4186997" | "4376565" | "4448467" | "4580868" | "4645295" | "4711511" | "4904199" | "4979792" | "4986769" | "5166995" | "5183408" | "5265181" | "5289554" | "6149313" | "6257917" | "6538882" | "6634796" | "6910911" | "6994478" | "7182523" | "7325975" | "7374347" | "7476118" | "7674046" | "8167638" | "8262403" | "8724955").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2020/09/01 13:29
S873	2,900	ferrule with (mt$2 mpo)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S874	133	S871 and S873	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S875	2,163,412	(slot groove channel key$4) with (upper lower top bottom) with (center central$4 middle through)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S876	45	S871 and S875	US-PGPUB; USPAT; FPRS; EPO; JPO;	OR	ON	2020/09/01 13:29

			DERWENT; IBM_TDB			
S877	43	S876 not (S874)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S878	9,356,685	(slot groove channel key$4) with (upper lower top bottom center central$4 middle through)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S879	425	S871 and S878	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S880	295	S879 not (S874 S877)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S881	471	S874 S877 S880	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S882	20,964	(multiple plural$4) adj2 (key$4 key$way) with (surface top bottom side wall)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S883	15,316	G02B6/3825-3831.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S884	29	S882 and S883	US-PGPUB; USPAT; USOCR;	OR	ON	2020/09/01 13:29

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S885	16	S884 not (S872 S881)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S886	517	S872 S881 S885	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S887	12,989	G02B6/3881,3885.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S888	13,505	G02B6/3879,3825.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S889	23,514	S888 S887	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S890	24,985	S848 S854 S858 S862 S889 S869 S871 S886	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:29
S891	5,174	S848 S854 S858 S862 S871 S886	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2020/09/01 13:35

			JPO; DERWENT; IBM_TDB			
S892	3,158	S848 S854 S858 S862 S886	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:36
S893	2,361	S871 not S873	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:40
S894	2,361	S893 not S869	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:40
S895	2,260	S894 not S824	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:40
S896	2,094	S895 not S828	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/09/01 13:41

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S897	169	((adapter ferrule) and body and opening and central$3 and groove).clm.	US-PGPUB	OR	ON	2020/09/01 13:46

9/1/2020 3:29:47 PM
C:\Users\orojas1\Documents\EAST\Workspaces\16214317.wsp

Bibliographic Data

Application No: 16/214,317

Foreign Priority claimed: ○ Yes ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes ☑ No ☐ Met After Allowance

Verified and Acknowledged: /Omar R Rojas/ (Examiner's Signature) | (Initials)

Title: Alignment Adapter and Alignment Design for a Connector Therefor

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
12/10/2018	385	2883	USCO-053-03
RULE			

APPLICANTS

US Conec, Ltd., Hickory, NC, UNITED STATES

INVENTORS

Hiep V. Nguyen, Fort Mill, SC, UNITED STATES

Darrell R. Childers, Hickory, NC, UNITED STATES

Michael E. Hughes, Hickory, NC, UNITED STATES

Jillcha Fekadu Wakjira, Hickory, NC, UNITED STATES

Joseph P. Howard, Hickory, NC, UNITED STATES

CONTINUING DATA

This application is a CON of 15855750 12/27/2017 PAT 10156684

15855750 is a DIV of 14214931 03/15/2014 PAT 9857538

14214931 has PRO of 61789499 03/15/2013

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

12/27/2018

STATE OR COUNTRY

UNITED STATES

ADDRESS

Us Conec Ltd.
1138 25th Street Southeast
Hickory, NC 28602
UNITED STATES

FILING FEE RECEIVED

$1,720

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor:	Hiep V. Nguyen	)
		) Group Art Unit: 2883
Serial No.:	16/214,317	)
		) Examiner: Rojas, Omar
Filing Date:	December 10, 2018	)
		)
Title:	Alignment Adapter and Alignment Design for a Connector Therefor	)

Mail Box AF
Commissioner for Patents
PO Box 1450
Arlington VA 22313-1450

NOTICE

Applicant hereby brings to the attention of the Examiner and the Office that a Terminal Disclaimer was filed and approved on August 5, 2020. In the Office Action mailed on July 28, 2020, the only requirement was that a Terminal Disclaimer be filed. That having been done on August 5, 2020, Applicant asserts that the application should be passed to issuance.

Respectfully submitted,

/Michael L. Leetzow/

Michael L. Leetzow
Registration No. 35,932
Michael L. Leetzow, P.A.
2393 Crest Ridge Ct.
Sanford, FL 32771
Telephone: 407/302-9970

Date: August 14, 2020

Electronic Acknowledgement Receipt

EFS ID:	40290543
Application Number:	16214317
International Application Number:	
Confirmation Number:	7700
Title of Invention:	Alignment Adapter and Alignment Design for a Connector Therefor
First Named Inventor/Applicant Name:	Hiep V. Nguyen
Customer Number:	152017
Filer:	MICHAEL LEETZOW
Filer Authorized By:	
Attorney Docket Number:	USCO-053-03
Receipt Date:	14-AUG-2020
Filing Date:	10-DEC-2018
Time Stamp:	15:34:03
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	NoticeTDUSCO05303.pdf	58045 06b2e052844612d8c20c742fdeefdfc4ba5df7f3	no	1

Warnings:

Information:	
Total Files Size (in bytes):	58045

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Doc Code: DIST.E.FILE **Document Description: Electronic Terminal Disclaimer - Filed**	PTO/SB/26 U.S. Patent and Trademark Office Department of Commerce

Electronic Petition Request	**TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT**
Application Number	16214317
Filing Date	10-Dec-2018
First Named Inventor	Hiep Nguyen
Attorney Docket Number	USCO-053-03
Title of Invention	Alignment Adapter and Alignment Design for a Connector Therefor

☒ Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action

☒ This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.

Owner	Percent Interest
US Conec, Ltd.	100%

The owner(s) with percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent number(s)

10156684

as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later:
- expires for failure to pay a maintenance fee;
- is held unenforceable;
- is found invalid by a court of competent jurisdiction;
- is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

◉ Terminal disclaimer fee under 37 CFR 1.20(d) is included with Electronic Terminal Disclaimer request.

○	I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.

Applicant claims the following fee status:

○ Small Entity

○ Micro Entity

◉ Regular Undiscounted

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES

I certify, in accordance with 37 CFR 1.4(d)(4) that I am:

◉ An attorney or agent registered to practice before the Patent and Trademark Office who is of record in this application

Registration Number 35932

○ A sole inventor

○ A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors as evidenced by the power of attorney in the application

○ A joint inventor; all of whom are signing this request

Signature	/Michael L. Leetzow/
Name	MICHAEL L LEETZOW

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

Electronic Patent Application Fee Transmittal

Application Number:	16214317
Filing Date:	10-Dec-2018
Title of Invention:	Alignment Adapter and Alignment Design for a Connector Therefor
First Named Inventor/Applicant Name:	Hiep V. Nguyen
Filer:	MICHAEL LEETZOW
Attorney Docket Number:	USCO-053-03

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
STATUTORY OR TERMINAL DISCLAIMER	1814	1	160	160
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**160**

Doc Code: DISQ.E.FILE
Document Description: Electronic Terminal Disclaimer – Approved

Application No.: 16214317

Filing Date: 10-Dec-2018

Applicant/Patent under Reexamination: Nguyen

Electronic Terminal Disclaimer filed on August 5, 2020

☒ APPROVED

This patent is subject to a terminal disclaimer

☐ DISAPPROVED

Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web

U.S. Patent and Trademark Office

Electronic Acknowledgement Receipt

EFS ID:	40202811
Application Number:	16214317
International Application Number:	
Confirmation Number:	7700
Title of Invention:	Alignment Adapter and Alignment Design for a Connector Therefor
First Named Inventor/Applicant Name:	Hiep V. Nguyen
Customer Number:	152017
Filer:	MICHAEL LEETZOW
Filer Authorized By:	
Attorney Docket Number:	USCO-053-03
Receipt Date:	05-AUG-2020
Filing Date:	10-DEC-2018
Time Stamp:	15:37:17
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$160
RAM confirmation Number	E202085F37146744
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Terminal Disclaimer-Filed (Electronic)	eTerminal-Disclaimer.pdf	33512 e03c876a186bae5c12ebd868f50ed9780258ee0a	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30436 ec1abf572cc9f8965cd2dd979a43671f40796d0d	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	63948		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/214,317	12/10/2018	Hiep V. Nguyen	USCO-053-03	7700

152017 7590 07/28/2020

Us Conec Ltd.
1138 25th Street Southeast
Hickory, NC 28602

EXAMINER
ROJAS, OMAR R

ART UNIT	PAPER NUMBER
2883	

NOTIFICATION DATE	DELIVERY MODE
07/28/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eofficeaction@appcoll.com
michael@leetzow.com
ssengupta@usconec.com

Office Action Summary	Application No. 16/214,317	Applicant(s) Nguyen et al.	
	Examiner Omar R Rojas	Art Unit 2883	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 07/06/2020.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL.** 2b) ☑ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 15-31 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 15-31 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/06/2020 has been entered.

Response to Amendment

3. With regards to the amendment filed on 07/06/2020, all the requested changes to the claims have been entered. Applicant's constructive efforts to advance prosecution are appreciated. Claim(s) 15-3 are pending.

Response to Arguments

4. Applicant's arguments, see page 5, filed 07/06/2020, with respect to claims 15, 16, 20-22, 24, and 27-30 have been fully considered and are persuasive. The rejection of claims 15, 16, 20-22, 24, and 27-30 has been withdrawn.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not

patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting provided the reference application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(l)(1) - 706.02(l)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/patent/patents-forms. The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

6. **Claims 15-31 are rejected on the ground of nonstatutory double patenting as being**

unpatentable over claims 1-11 of U.S. Patent No. 10,156,684 (hereinafter "the '684 patent"). Although the claims at issue are not identical, they are not patentably distinct from each other because both sets of claims are directed to the same underlying embodiment and the same disclosure. Claims 1-11 of the '684 patent only differ from pending claims 15-31in that the patented claims do not recite all of the additional aspects recited in pending claims 15-31. It would have been obvious to one of ordinary skill in the art before the effective filing date to modify the invention of claims 1-11 of the '684 patent to include additional unclaimed aspects from the underlying embodiment of the patented claims, thereby obtaining the invention specified by pending claims 15-31. Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date to obtain the invention specified by claims 15-31 in view of claims 1-11 of the '684 patent.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent No. 9,366,829 discloses an adapter (70) for aligning multiple fiber connectors (20) inserted from first and second sides of the adapter (70).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar R. Rojas whose telephone number is (571)272-2357. The examiner can normally be reached on Monday-Friday, 10AM-6PM EST.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomas Hollweg can be reached on 571-270-1739. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see https://ppair-my.uspto.gov/pair/PrivatePair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Omar R Rojas/
Primary Examiner
Art Unit 2883

or
July 23, 2020

Notice of References Cited	Application/Control No. 16/214,317	Applicant(s)/Patent Under Reexamination Nguyen et al.	
	Examiner Omar R Rojas	Art Unit 2883	Page 1 of 1

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	Omar R Rojas	2883

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Symbol	Date	Examiner
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CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

/Omar R Rojas/ Primary Examiner, Art Unit 2883	

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Senko Advanced Components v. US Connec Ltd.
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EAST Search History

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S562	38	("20010026661" | "20020167793" | "20040228582" | "20050095899" | "20060140543" | "20080032536" | "20080248691" | "20080311781" | "20110059642" | "20120190230" | "20120257865" | "4186997" | "4376565" | "4448467" | "4580868" | "4645295" | "4711511" | "4904199" | "4979792" | "4986769" | "5166995" | "5183408" | "5265181" | "5289554" | "6149313" | "6257917" | "6538882" | "6634796" | "6910911" | "6994478" | "7182523" | "7325975" | "7374347" | "7476118" | "7674046" | "8167638" | "8262403" | "8724955").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2020/07/22 17:53
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		20170254961-$ or US-20170254960-$ or US-20170276887-$ or US-20170276886-$ or US-20170285272-$ or US-20170293091-$ or US-20170299821-$ or US-20170299818-$ or US-20170299817-$).did. or (US-20170307832-$ or US-20170307829-$ or US-20170315307-$ or US-20170315305-$ or US-20170315304-$ or US-20170315303-$ or US-20170331234-$ or US-20170336571-$ or US-20170343742-$ or US-20170343741-$ or US-20170341972-$ or US-20170351038-$ or US-20170351037-$ or US-20170359091-$ or US-20170363815-$ or US-20170363810-$ or US-20170363509-$ or US-20170371118-$ or US-20170371107-$ or US-20180003910-$ or US-20180011261-$ or US-20180017740-$ or US-20180024302-$ or US-20180024301-$ or US-20180024300-$ or US-20180024294-$ or US-20180031782-$).did. or (US-20180031775-$ or US-20180059338-$ or US-20180074277-$ or US-20180081127-$ or US-20180081122-$ or US-20180078781-$ or US-20180095232-$ or US-20180106975-$ or US-20180113268-$ or US-20180113259-$ or US-20180136410-$ or US-20180143384-$ or US-20180143381-$ or US-20180149813-$ or US-20180157002-$ or US-20180180819-$ or US-20180188460-$ or US-20180196204-$ or US-20180210155-$ or US-20180210153-$).did. or (US-3933409-$ or US-3999837-$ or US-4080044-$ or US-4087158-$ or US-4101198-$ or US-4140365-$ or US-4167304-$ or US-4168109-$ or US-4186996-$ or US-4201445-$ or US-4214812-$ or US-4218113-$ or US-4223976-$ or US-4252407-$ or US-4268115-$ or US-4268114-$ or US-4279469-$ or US-4291943-$ or US-4295707-$ or US-4327964-$ or US-4354731-$ or US-4368948-$ or US-4371233-$ or US-4387957-$ or US-4415232-$ or US-4422716-$).did. or (US-4444461-$ or US-4445753-$ or US-4447121-$ or US-4461539-$ or US-4466009-$				

		or US-4484796-$ or US-4487474-$ or US-4497536-$ or US-4526438-$ or US-4548467-$ or US-4614402-$ or US-4615581-$ or US-4645296-$ or US-4648688-$ or US-4666241-$ or US-4674831-$ or US-4681398-$ or US-4688887-$ or US-4699460-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4715674-$ or US-4717234-$ or US-4718744-$ or US-4722081-$ or US-4740052-$).did. or (US-4741590-$ or US-4758719-$ or US-4759600-$ or US-4759599-$ or US-4762389-$ or US-4767178-$ or US-4773725-$ or US-4781429-$ or US-4783137-$ or US-4786135-$ or US-4787700-$ or US-4789216-$ or US-4793683-$ or US-4795231-$ or US-4805980-$ or US-4807957-$ or US-4813760-$ or US-4824196-$ or US-4834486-$ or US-4842361-$ or US-4844570-$ or US-4846544-$ or US-4848870-$ or US-4850536-$ or US-4852963-$ or US-4877303-$ or US-4892380-$).did. or (US-4898446-$ or US-4960317-$ or US-4964688-$ or US-4976510-$ or US-4986762-$ or US-4986622-$ or US-4991929-$ or US-4993803-$ or US-4995688-$ or US-4998797-$ or US-5013124-$ or US-5015060-$ or US-5016970-$ or US-5018823-$ or US-5042891-$ or US-5048916-$ or US-5052774-$ or US-5058983-$ or US-5073042-$ or US-5077815-$ or US-5091991-$ or US-5091990-$ or US-5109453-$ or US-5115484-$ or US-5119455-$ or US-5124506-$ or US-5127073-$).did. or (US-5129024-$ or US-5133032-$ or US-5134677-$ or US-5134676-$ or US-5155795-$ or US-5159654-$ or US-5177808-$ or US-5179607-$ or US-5210815-$ or US-5214730-$ or US-5228104-$ or US-5233675-$ or US-5233674-$ or US-5239606-$ or US-5267342-$ or US-5274729-$ or US-5280552-$ or US-5282259-$ or US-5293581-$ or US-5297227-$ or US-5317663-$ or US-5323475-$ or US-5329541-$ or US-5333222-$ or US-5333221-$ or US-5359688-$ or US-5363460-$).did. or (US-5367594-$ or US-				

		5366383-$ or US-5384885-$ or US-5386485-$ or US-5408557-$ or US-5418875-$ or US-5420951-$ or US-5444806-$ or US-5446817-$ or US-5450519-$ or US-5452391-$ or US-5485537-$ or US-5497444-$ or US-5506922-$ or US-5519799-$ or US-5521998-$ or US-5528711-$ or US-5530783-$ or US-5537501-$ or US-5542015-$ or US-5548674-$ or US-5550943-$ or US-5563978-$ or US-5563971-$ or US-5570445-$ or US-5574813-$ or US-5579429-$).did. or (US-5581644-$ or US-5588086-$ or US-5592323-$ or US-5600746-$ or US-5603631-$ or US-5607323-$ or US-5619610-$ or US-5633969-$ or US-5642450-$ or US-5647043-$ or US-5645449-$ or US-5661833-$ or US-5666449-$ or US-5664955-$ or US-5668904-$ or US-5671310-$ or US-5673346-$ or US-5680494-$ or US-5682449-$ or US-5687268-$ or US-5694507-$ or US-5694506-$ or US-5701380-$ or US-5721799-$ or US-5727102-$ or US-5732174-$ or US-5734770-$).did. or (US-5737464-$ or US-5751874-$ or US-5761359-$ or US-5764043-$ or US-5774611-$ or US-5774612-$ or US-5778122-$ or US-5781680-$ or US-5796896-$ or US-5799122-$ or US-5809191-$ or US-5815618-$ or US-5818993-$ or US-5825955-$ or US-5832158-$ or US-5838856-$ or US-5838855-$ or US-5845036-$ or US-5862282-$ or US-5867621-$ or US-5881191-$ or US-5887100-$ or US-5887098-$ or US-5892870-$ or US-5896477-$ or US-5909526-$ or US-5909298-$).did. or (US-5915058-$ or US-5923805-$ or US-5930426-$ or US-5930425-$ or US-5937121-$ or US-5940561-$ or US-5940559-$ or US-5949946-$ or US-5953474-$ or US-5953473-$ or US-5956444-$ or US-5960137-$ or US-5969294-$ or US-5971626-$ or US-5980117-$ or US-5987203-$ or US-5993071-$ or US-6004043-$ or US-6022149-$ or US-6027252-$ or US-6041155-$ or US-6048103-$ or US-6048102-$ or US-6053639-$ or US-6059461-$ or US-				

		6064791-$ or US-6076973-$).did. or (US-6076975-$ or US-6081647-$ or US-6079881-$ or US-6088502-$ or US-6095694-$ or US-6104856-$ or US-6102581-$ or US-6108482-$ or US-6116790-$ or US-6116789-$ or US-6116101-$ or US-6132105-$ or US-6139346-$ or US-6142676-$ or US-6149315-$ or US-6154597-$ or US-6164835-$ or US-6164834-$ or US-6173099-$ or US-6179480-$ or US-6179475-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6190616-$ or US-6195477-$ or US-6193420-$).did. or (US-6196729-$ or US-6200040-$ or US-6206577-$ or US-6217226-$ or US-6220763-$ or US-6220762-$ or US-6224269-$ or US-6227719-$ or US-6227718-$ or US-6240229-$ or US-6238249-$ or US-6243526-$ or US-6247851-$ or US-6247849-$ or US-6256446-$ or US-6259839-$ or US-6264373-$ or US-6264372-$ or US-6267513-$ or US-6273618-$ or US-6290527-$ or US-6301004-$ or US-6302592-$ or US-6309111-$ or US-6318904-$ or US-6318903-$ or US-6334715-$).did. or (US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6354746-$ or US-6357932-$ or US-6361218-$ or US-6364536-$ or US-6367986-$ or US-6367984-$ or US-6371659-$ or US-6377840-$ or US-6375363-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6389212-$ or US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6409391-$ or US-6412987-$ or US-6419810-$ or US-6422759-$ or US-6425692-$ or US-6425694-$ or US-6431762-$ or US-6437894-$).did. or (US-6435946-$ or US-6445867-$ or US-6456768-$ or US-6457876-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6466724-$ or US-6464406-$ or US-6467971-$ or US-6467970-$ or US-6471417-$ or US-6471412-$ or US-6474876-$ or US-6478472-$ or US-6481900-$ or US-6481899-$ or US-6485192-$ or US-6497518-$ or US-6497516-$ or US-6501900-$ or US-6508593-$ or				

		US-6526210-$ or US-6524015-$ or US-6527450-$ or US-6533469-$ or US-6543941-$).did. or (US-6554482-$ or US-6558044-$ or US-6561699-$ or US-6572276-$ or US-6572273-$ or US-6582132-$ or US-6595696-$ or US-6601995-$ or US-6612750-$ or US-6619859-$ or US-6619856-$ or US-6632023-$ or US-6634794-$ or US-6644866-$ or US-6667803-$ or US-6695485-$ or US-6702477-$ or US-6702475-$ or US-6786647-$ or US-6789953-$ or US-6793399-$ or US-6840680-$ or US-6856748-$ or US-6895146-$ or US-7232261-$ or US-7435009-$ or US-7530845-$).did. or (US-7585118-$ or US-7588373-$ or US-7706657-$ or US-7738757-$ or US-7972066-$ or US-8070366-$ or US-8206040-$ or US-8517614-$ or US-8588571-$ or US-8953922-$ or US-9229177-$ or US-9229170-$ or US-9291781-$ or US-9316794-$ or US-9323007-$ or US-9448369-$ or US-9453972-$ or US-9482825-$ or US-9551831-$ or US-9625655-$ or US-9632267-$ or US-9638871-$ or US-9638868-$ or US-9645335-$ or US-9658407-$ or US-9671570-$ or US-9671568-$).did. or (US-9678282-$ or US-9696477-$ or US-9722367-$ or US-9720184-$ or US-9726829-$ or US-9735523-$ or US-9733123-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9746625-$ or US-9746368-$ or US-9759874-$ or US-9759869-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9784928-$ or US-9798090-$ or US-9797806-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9817195-$ or US-9823428-$ or US-9829643-$ or US-9827438-$).did. or (US-9835807-$ or US-9841566-$ or US-9857545-$ or US-9857537-$ or US-9864151-$ or US-9869824-$ or US-9876309-$ or US-9874702-$ or US-9880365-$ or US-9880357-$ or US-9885841-$ or US-9893813-$ or US-9891392-$ or US-9891387-$ or US-9891385-$ or US-9897767-$ or US-9904021-$ or US-9904020-$ or US-9910228-$				

		or US-9910226-$ or US-9915793-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9939600-$ or US-9939590-$ or US-9948017-$).did. or (US-9946036-$ or US-10007069-$ or US-10018787-$).did. or (JP-2016095432-$ or JP-2016095410-$ or JP-2016122100-$ or JP-2016177309-$ or JP-2016188927-$ or JP-2017053937-$ or JP-2017090798-$ or JP-2017111444-$ or JP-2017134118-$ or JP-2017138535-$ or JP-2017151338-$ or JP-2017219768-$).did.				
S565	737	(US-20010041030-$ or US-20020025125-$ or US-20020106162-$ or US-20020114589-$ or US-20020159710-$ or US-20030031452-$ or US-20030044127-$ or US-20030044125-$ or US-20030180004-$ or US-20030223703-$ or US-20040008494-$ or US-20040017983-$ or US-20040017981-$ or US-20040038558-$ or US-20040052472-$ or US-20040062498-$ or US-20040105628-$ or US-20040131317-$ or US-20040223699-$ or US-20040228589-$ or US-20050036744-$ or US-20050053342-$ or US-20050111795-$ or US-20050123246-$ or US-20050135755-$ or US-20050135752-$).did. or (US-20050271328-$ or US-20060045430-$ or US-20060051028-$ or US-20060093282-$ or US-20060153504-$ or US-20060193562-$ or US-20060280409-$ or US-20060285807-$ or US-20070058907-$ or US-20070098327-$ or US-20070160327-$ or US-20080069501-$ or US-20080112672-$ or US-20080124031-$ or US-20080131055-$ or US-20080253719-$ or US-20090003772-$ or US-20090290839-$ or US-20090305542-$ or US-20100322561-$ or US-20110038590-$ or US-20110075971-$ or US-20110091159-$ or US-20110222819-$ or US-20110249942-$ or US-20120027355-$ or US-20120057824-$).did. or (US-20120076459-$ or US-20120082416-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 17:53

		$ or US-20120099822-$ or US-20120141070-$ or US-20120251054-$ or US-20120251051-$ or US-20120263423-$ or US-20120263419-$ or US-20120308183-$ or US-20130051749-$ or US-20130064508-$ or US-20130077914-$ or US-20130121645-$ or US-20130129280-$ or US-20130183001-$ or US-20130216189-$ or US-20130230283-$ or US-20130259429-$ or US-20130272671-$ or US-20130308908-$ or US-20140056560-$ or US-20140064665-$ or US-20140064688-$ or US-20140072265-$ or US-20140086545-$ or US-20140147081-$ or US-20140205241-$).did. or (US-20140219614-$ or US-20140219624-$ or US-20140314385-$ or US-20140341510-$ or US-20150003785-$ or US-20150023637-$ or US-20150049989-$ or US-20150071591-$ or US-20150177463-$ or US-20150226926-$ or US-20150241644-$ or US-20150301286-$ or US-20150331201-$ or US-20150338583-$ or US-20150370017-$ or US-20150378112-$ or US-20160004018-$ or US-20160004016-$ or US-20160025937-$ or US-20160077287-$ or US-20160077284-$ or US-20160109661-$ or US-20160131854-$ or US-20160131849-$ or US-20160161680-$ or US-20160178859-$ or US-20160259135-$).did. or (US-20160282566-$ or US-20160282562-$ or US-20160320571-$ or US-20160349464-$ or US-20170059784-$ or US-20170090128-$ or US-20170090127-$ or US-20170102506-$ or US-20170102504-$ or US-20170108653-$ or US-20170115457-$ or US-20170139150-$ or US-20170153398-$ or US-20170184798-$ or US-20170184790-$ or US-20170205587-$ or US-20170219779-$ or US-20170227720-$ or US-20170235060-$ or US-20170242200-$ or US-20170242199-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170261698-$ or US-20170269309-$ or US-20170276883-$).did. or (US-				

		20170276881-$ or US-20170293088-$ or US-20170293087-$ or US-20170307831-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170357060-$ or US-20170357059-$ or US-20170363827-$ or US-20180003903-$ or US-20180011258-$ or US-20180011254-$ or US-20180031774-$ or US-20180052288-$ or US-20180077472-$ or US-20180081128-$ or US-20180081125-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180106973-$ or US-20180156988-$ or US-20180156985-$ or US-20180210154-$).did. or (US-4240695-$ or US-4320938-$ or US-4330172-$ or US-4477146-$ or US-4687291-$ or US-4737009-$ or US-4854664-$ or US-4856866-$ or US-4886335-$ or US-4915472-$ or US-4953929-$ or US-4955976-$ or US-5064268-$ or US-5076656-$ or US-5082346-$ or US-5082344-$ or US-5101463-$ or US-5134673-$ or US-5157749-$ or US-5166995-$ or US-5199093-$ or US-5259052-$ or US-5555332-$ or US-5666456-$ or US-5692080-$ or US-5867894-$).did. or (US-5870515-$ or US-5883995-$ or US-5920670-$ or US-5920669-$ or US-5984533-$ or US-6012852-$ or US-6095695-$ or US-6210045-$ or US-6250817-$ or US-6305849-$ or US-6318902-$ or US-6331079-$ or US-6379052-$ or US-6409392-$ or US-6422761-$ or US-6422760-$ or US-6450698-$ or US-6487343-$ or US-6491442-$ or US-6533465-$ or US-6554486-$ or US-6623172-$ or US-6688782-$ or US-6712521-$ or US-6764222-$ or US-6839583-$ or US-6848834-$).did. or (US-6944378-$ or US-7036996-$ or US-8388235-$ or US-9207454-$ or US-9316791-$ or US-9377591-$ or US-9389368-$ or US-9482820-$ or US-9606303-$ or US-9625657-$ or US-9664864-$ or US-9678283-$ or US-9678286-$ or US-9684134-$ or US-9696497-$ or US-9703062-$ or US-9709753-$ or US-			

		9726830-$ or US-9733436-$ or US-9733434-$ or US-9798096-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9829650-$ or US-9835808-$ or US-9846283-$).did. or (US-9851512-$ or US-9891390-$ or US-9904019-$ or US-9910229-$ or US-9927582-$ or US-9939589-$ or US-9946037-$).did. or (IT-7819792-$ or FR-2363124-$ or IT-7925110-$ or GB-2057158-$ or FR-2487528-$ or GB-2081468-$ or EP-0061243-$ or DK-208682-$ or GB-8306227-$ or IT-8323399-$ or JP-S5856846-$ or EP-0125398-$ or FR-2535069-$ or WO-8600147-$ or EP-0249237-$ or EP-0262847-$ or EP-0262631-$ or DE-8626183-$ or WO-9015350-$ or EP-0408852-$ or GB-9103604-$ or GB-9106183-$ or CA-2030897-$ or DE-9107960-$ or GB-9206076-$ or CA-2057559-$).did. or (CA-2082276-$ or EP-0633485-$ or EP-0690319-$ or CA-2191600-$ or EP-0696748-$ or EP-0697608-$ or CN-1118443-$ or WO-9627811-$ or EP-0758099-$ or WO-9734176-$ or CA-2198522-$ or EP-0803750-$ or NL-1003147-$ or EP-0807837-$ or CA-2254335-$ or CA-2294930-$ or CA-2262351-$ or EP-0938003-$ or JP-2945144-$ or CA-2324565-$ or GB-9919699-$ or EP-0992819-$ or CA-2284331-$ or GB-0007281-$ or CA-2288249-$ or DE-19728960-$ or EP-1033595-$).did. or (EP-1033594-$ or EP-1039324-$ or EP-1039322-$ or EP-1041416-$ or EP-1041414-$ or JP-3106420-$ or CA-2321428-$ or EP-1091225-$ or WO-0137010-$ or EP-1107031-$ or KR-20010062142-$ or WO-0155762-$ or EP-1124147-$ or WO-0161397-$ or WO-0181965-$ or CA-2350290-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or KR-20020000530-$ or KR-20020001574-$ or CN-1331421-$ or EP-1172672-$ or EP-1172673-$ or KR-20020006481-$ or KR-20020006480-$ or DE-20118858-$).did. or (CA-2418331-$ or KR-20020050140-$ or WO-02056060-$ or WO-02061481-$ or DE-10114144-				

		$ or NL-1018440-$ or WO-03016975-$ or WO-03093883-$ or CA-2484569-$ or EP-1394584-$ or AU-2003291687-$ or EP-1530068-$ or CA-2503690-$ or CN-1677147-$ or CN-1707299-$ or WO-2008006402-$ or EP-1887395-$ or CN-101122658-$ or WO-2008029850-$ or CA-2662854-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or CA-2689768-$ or EP-2206458-$ or WO-2010137426-$ or CA-2762411-$).did. or (EP-2302431-$ or WO-2011139938-$ or WO-2011152874-$ or EP-2444827-$ or WO-2012054174-$ or WO-2012054174-$ or WO-2012151175-$ or GB-201218194-$ or CN-102870023-$ or WO-2013115791-$ or WO-2013115789-$ or WO-2013126068-$ or CA-2912155-$ or WO-2014009463-$ or WO-2014011898-$ or EP-2700992-$ or JP-5433802-$ or WO-2014049469-$ or WO-2014113753-$ or CA-2836675-$ or WO-2014143748-$ or WO-2014165175-$ or WO-2014197701-$ or CN-104241938-$ or CA-2917189-$ or EP-2840425-$ or EP-2843452-$).did. or (WO-2015028433-$ or CA-2885821-$ or WO-2015068103-$ or CA-2932688-$ or GB-201507758-$ or WO-2015103783-$ or WO-2015116589-$ or CN-204595258-$ or WO-2015144883-$ or EP-2942653-$ or EP-2947485-$ or WO-2015190211-$ or WO-2016004347-$ or CN-105278047-$ or DE-202013012295-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or CA-2928026-$ or WO-2016043922-$ or JP-5905950-$ or WO-2016067668-$ or EP-3021145-$ or WO-2016082160-$ or WO-2016103821-$ or DE-202016103178-$ or EP-3054333-$).did. or (WO-2016161341-$ or WO-2017038704-$ or JP-6173629-$ or WO-2017180257-$ or CN-206584076-$ or EP-3258301-$ or WO-2018003776-$ or WO-2018004847-$).did. or (JP-				

		54034251-$ or JP-55101904-$ or JP-56066811-$ or JP-56074211-$ or JP-59075218-$ or JP-04214510-$ or JP-04220604-$ or JP-05313040-$ or JP-08015541-$ or JP-09005575-$ or JP-09033756-$ or JP-10104469-$ or JP-11072659-$ or JP-2000089061-$ or JP-2000284146-$ or JP-2000292655-$ or JP-2000310724-$ or JP-2001013372-$ or JP-2001021764-$ or JP-2001242361-$ or JP-2009294343-$ or JP-2012053420-$ or JP-2012078513-$ or JP-2015022131-$).did. or (DE-2805949-$ or DE-2932986-$ or GB-2057158-$ or GB-2081468-$ or EP-61243-$ or GB-2098354-$ or DE-3208797-$ or EP-125398-$ or US-4496213-$ or WO-8600147-$ or EP-249237-$ or EP-262631-$ or US-4953929-$ or WO-9015350-$ or GB-2241794-$ or US-5064268-$ or WO-9117540-$ or EP-458608-$ or US-5101463-$ or EP-490698-$ or EP-505197-$ or EP-430107-$ or EP-660145-$ or EP-660144-$ or EP-663602-$ or EP-663601-$).did. or (WO-9600917-$ or EP-696748-$ or EP-697608-$ or WO-9627811-$ or EP-758099-$ or WO-9734176-$ or EP-803750-$ or US-5692080-$ or WO-9746900-$ or WO-9857208-$ or WO-9947958-$ or GB-2341455-$ or EP-1041416-$ or EP-1041414-$ or EP-1091225-$ or WO-0140839-$ or EP-1107031-$ or EP-1124147-$ or WO-0181965-$ or US-20010041030-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or EP-1172673-$ or EP-1172672-$ or DE-20118858-$ or WO-02056060-$).did. or (US-6422760-$ or WO-02061481-$ or US-20030031437-$ or US-20030044125-$ or WO-03094297-$ or WO-03093883-$ or EP-1394584-$ or US-20040062498-$ or US-20040223699-$ or US-20040228589-$ or US-20050053342-$ or WO-2006022840-$ or US-20060153503-$ or US-20060165352-$ or US-20060193562-$ or EP-1752805-$ or US-20070058907-$ or US-20070077010-$ or US-20070098327-$ or US-20090041411-				

		$ or US-20090060423-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or EP-2206458-$ or WO-2010137426-$ or EP-2302431-$).did. or (US-20110249942-$ or US-20110274437-$ or WO-2011152874-$ or KR-2012000895-$ or US-20120027355-$ or US-20120057824-$ or US-20120082416-$ or EP-2444827-$ or US-20120099822-$ or US-20120251051-$ or US-20120251054-$ or US-20120263419-$ or WO-2012151175-$ or US-20120308183-$ or CN-102870023-$ or TW-201309089-$ or US-20130051749-$ or WO-2013036843-$ or CN-103091793-$ or US-20130121645-$ or WO-2013115789-$ or WO-2013115791-$ or WO-2013122865-$ or WO-2013126068-$ or US-20130230283-$ or US-20130259429-$ or WO-2013155395-$).did. or (WO-2013177234-$ or WO-2014011898-$ or US-20140016901-$ or EP-2700992-$ or JP-5433802-$ or US-20140064688-$ or TW-474924-$ or WO-2014049469-$ or US-20140147081-$ or US-20140153879-$ or ES-1110405-$ or WO-2014113753-$ or EP-2759860-$ or US-20140219624-$ or WO-2014143748-$ or WO-2014165175-$ or US-20140321808-$ or US-20140363131-$ or WO-2014197701-$ or EP-2818903-$ or WO-2015009435-$ or US-20150023637-$ or US-20150049989-$ or WO-2015028433-$ or WO-2015068103-$ or WO-2015070382-$ or US-20150162982-$).did. or (US-20150177463-$ or WO-2015103783-$ or WO-2015116589-$ or US-20150219864-$ or US-20150226926-$ or US-20150226925-$ or US-20150241644-$ or CN-104950402-$ or WO-2015144883-$ or US-20150286012-$ or DE-102015106225-$ or US-20150331201-$ or EP-2947485-$ or WO-2015190211-$ or US-20150378110-$ or US-20160004016-$ or US-20160004018-$ or US-				

		20160025937-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or WO-2016033577-$ or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016043922-$ or JP-5905950-$).did. or (US-20160124158-$ or US-20160131854-$ or EP-3021145-$ or US-20160161680-$ or US-20160178852-$ or US-20160178859-$ or US-9377591-$ or US-9389368-$ or EP-3054333-$ or US-20160259135-$ or CN-105978629-$ or US-20160282566-$ or WO-2016161341-$ or US-20160306125-$ or US-9482820-$ or US-20160341908-$ or US-20160341911-$ or US-20160349466-$ or US-20160377819-$ or US-20170031106-$ or US-20170059784-$ or WO-2017038704-$ or US-20170090127-$ or US-20170102504-$ or US-20170115457-$ or US-20170139150-$ or US-20170139156-$).did. or (US-20170153398-$ or US-9678283-$ or US-20170184790-$ or US-9709753-$ or US-20170205587-$ or JP-6173629-$ or US-20170219779-$ or US-9726830-$ or US-20170227720-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170293088-$ or US-20170307830-$ or US-9804340-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170371109-$ or US-20180003903-$ or US-20180011258-$ or US-20180052288-$ or US-20180081128-$ or US-20180106973-$ or US-20180120519-$ or US-20180128988-$).did.				
S566	136	(US-20020176671-$ or US-20040017980-$ or US-20040126118-$ or US-20040197054-$ or US-20070172177-$ or US-20070286554-$ or US-20100008635-$ or US-20100129034-$ or US-20100290745-$ or US-20110116749-$ or US-20110222830-$ or US-20110229096-$ or US-20110229095-$ or US-20110225792-$ or US-20110255831-$ or US-20110262078-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 17:53

		20110262077-$ or US-20120014648-$ or US-20120063724-$ or US-20120275749-$ or US-20130136402-$ or US-20130315538-$ or US-20140286610-$ or US-20150016781-$ or US-20150110448-$ or US-20160124170-$).did. or (US-20160202429-$ or US-20170045691-$ or US-20170285277-$ or US-20170299820-$ or US-20180120519-$ or US-20180143380-$ or US-20180231722-$ or US-20180239093-$ or US-20180267255-$ or US-20180292618-$ or US-20180292612-$ or US-20180364421-$ or US-20190107679-$ or US-20190107678-$ or US-20190113691-$ or US-20190137701-$ or US-20190179085-$).did. or (US-5504825-$ or US-5613021-$ or US-5661826-$ or US-6045270-$ or US-6276840-$ or US-6293708-$ or US-6623170-$ or US-6796717-$ or US-6848840-$ or US-6866425-$ or US-6932514-$ or US-6944387-$ or US-6976793-$ or US-7094091-$ or US-7178994-$ or US-7182522-$ or US-7234874-$ or US-7241056-$ or US-7300216-$ or US-7536075-$ or US-7654748-$ or US-7891882-$ or US-7912336-$ or US-8052333-$ or US-8231282-$ or US-8235600-$).did. or (US-8262296-$ or US-8317407-$ or US-8346047-$ or US-8348519-$ or US-8348518-$ or US-8376634-$ or US-8406583-$ or US-8417074-$ or US-8494329-$ or US-8496384-$ or US-8529138-$ or US-8542972-$ or US-8550725-$ or US-8550724-$ or US-8579521-$ or US-8690593-$ or US-8714835-$ or US-8821038-$ or US-8821037-$ or US-8915653-$ or US-8958679-$ or US-9014527-$ or US-9031364-$ or US-9057848-$ or US-9146376-$ or US-9146360-$ or US-9417401-$).did. or (US-9513442-$ or US-9541711-$ or US-9557497-$ or US-9563025-$ or US-9606297-$ or US-9632255-$ or US-9645318-$ or US-9658409-$ or US-9684139-$ or US-9739949-$ or US-9753228-$ or US-9772464-$ or US-9857538-$ or US-9977199-$ or US-9989710-$ or US-				

		10012801-$ or US-10054747-$ or US-10061090-$ or US-10067302-$ or US-10067300-$ or US-10088636-$ or US-10101539-$ or US-10139570-$ or US-10146014-$ or US-10156684-$ or US-10209473-$).did. or (WO-2010083369-$ or EP-2380054-$ or CN-102282495-$ or WO-2014152675-$ or WO-2015043158-$ or CN-104516073-$ or CN-102282495-$ or WO-2018125706-$).did. or (JP-57044113-$).did. or (US-20160327757-$ or US-20170299820-$ or WO-2018125706-$ or US-20190107679-$).did.				
S567	2,087	S563 S564 S565 S566	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S568	56,021	(ferrule connector) with insert$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S569	66,377	G02B6/38$.cpc.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S570	2,541	S568 and S569	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S571	14,591	adapter with (groove channel) with (top bottom upper lower)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53

S572	102	S570 and S571	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S573	62	S572 not S567	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S574	1,186,315	(groove channel) with upper with lower	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S575	735,634	(groove channel) with top with bottom	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S576	447	S570 and (S574 S575)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S577	325	S576 not (S567 S573)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S578	15,680	("ferrules" "connectors") with align$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S579	2,186	S569 and S578	US-PGPUB; USPAT;	OR	ON	2020/07/22 17:53

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S580	353	S579 and (S574 S575)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S581	167	S580 not (S567 S573 S577)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S582	11,374	G02B6/3825,3826.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S583	441	S578 and S582	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S584	206	S583 not (S567 S573 S577 S581)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S585	26,017	("ferrules" "connectors") with align$4 with (groove channel slot)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S586	705	S585 and S582	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	OFF	2020/07/22 17:53

			JPO; DERWENT; IBM_TDB			
S587	151	S586 not (S567 S573 S577 S581 S584)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S588	2,998	S567 S573 S577 S581 S584 S587	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S589	2,792	G02B6/3831.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S590	2,427	S589 not S588	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S591	2,864	ferrule with (mt$2 mpo)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S592	129	S590 and S591	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S593	2,107,838	(slot groove channel key$4) with (upper lower top bottom) with (center central$4 middle through)	US-PGPUB; USPAT; FPRS; EPO; JPO;	OR	ON	2020/07/22 17:53

			DERWENT; IBM_TDB			
S594	42	S590 and S593	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S595	40	S594 not (S592)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S596	9,201,619	(slot groove channel key$4) with (upper lower top bottom center central$4 middle through)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S597	416	S590 and S596	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S598	291	S597 not (S592 S595)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S599	460	S592 S595 S598	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S600	20,748	(multiple plural$4) adj2 (key$4 key$way) with (surface top bottom side wall)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S601	15,013	G02B6/3825-3831.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2020/07/22 17:53

			JPO; DERWENT; IBM_TDB			
S602	28	S600 and S601	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S603	15	S602 not (S562 S599)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S604	81	(US-20040101250-$ or US-20140205247-$ or US-20170160486-$ or US-20180239091-$).did. or (US-3999837-$ or US-4252407-$ or US-6116790-$ or US-6371659-$ or US-6461053-$ or US-6585423-$ or US-7001079-$ or US-9039298-$ or US-9823424-$).did. or (DE-2558445-$ or FR-2296862-$ or BR-7508734-$ or ES-444034-$ or GB-1503979-$ or IT-7869677-$ or CA-1043604-$ or BE-871785-$ or DK-522978-$ or NL-7811579-$ or DE-2849975-$ or GB-2009440-$ or FR-2435053-$ or FR-2446496-$ or CA-1097111-$ or IT-1050771-$ or FR-2446496-$ or FR-2435053-$ or CH-628152-$ or GB-2009440-$ or DE-3112078-$ or FR-2296862-$ or DE-2558445-$ or DE-3112078-$ or IT-1109638-$ or DE-2849975-$).did. or (DK-151733-$ or DK-151733-$ or DK-151733-$ or DE-19626036-$ or WO-9800741-$ or AU-2975197-$ or WO-9928774-$ or EP-0985161-$ or EP-1034445-$ or EP-1092995-$ or EP-1092995-$ or EP-1034445-$ or EP-0985161-$ or ES-2202617-$ or EP-1092995-$ or DE-60010402-$ or DE-60010402-$ or JP-3984293-$ or EP-2138880-$ or JP-4514004-$ or WO-2016053853-$ or WO-2017065999-$ or WO-2017065999-$ or EP-3201668-$ or CN-108351473-$ or CN-208140982-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 17:53

		$ or EP-3201668-$).did. or (JP-2001154062-$).did. or (DE-2558445-$ or BE-871785-$ or DE-19626036-$ or WO-9928774-$ or EP-1092995-$ or US-20140205247-$ or CN-104516061-$ or CN-104570229-$ or WO-2016053853-$ or WO-2017065999-$ or US-20180364421-$).did.				
S605	1,140	(US-20010010741-$ or US-20010016102-$ or US-20010033730-$ or US-20010038737-$ or US-20010043776-$ or US-20010048790-$ or US-20020006253-$ or US-20020012503-$ or US-20020012502-$ or US-20020012501-$ or US-20020012238-$ or US-20020025121-$ or US-20020025099-$ or US-20020028055-$ or US-20020031310-$ or US-20020031309-$ or US-20020061171-$ or US-20020064349-$ or US-20020081076-$ or US-20020090177-$ or US-20020094727-$ or US-20020106167-$ or US-20020114581-$ or US-20020118926-$ or US-20020126961-$ or US-20020131720-$).did. or (US-20020150344-$ or US-20020150343-$ or US-20020150353-$ or US-20020150346-$ or US-20020150345-$ or US-20020150342-$ or US-20020159745-$ or US-20020159714-$ or US-20020159712-$ or US-20020168149-$ or US-20020166226-$ or US-20020172469-$ or US-20020177364-$ or US-20020181888-$ or US-20020181884-$ or US-20020186934-$ or US-20020186742-$ or US-20020191881-$ or US-20020197017-$ or US-20020197018-$ or US-20030002816-$ or US-20030002808-$ or US-20030007739-$ or US-20030012512-$ or US-20030031449-$ or US-20030031422-$ or US-20030044122-$).did. or (US-20030044115-$ or US-20030053760-$ or US-20030063868-$ or US-20030063866-$ or US-20030063862-$ or US-20030068135-$ or US-20030072536-$ or US-20030081905-$ or US-20030087505-$ or US-20030091292-$ or US-20030095780-	US-PGPUB; USPAT; JPO	OR	ON	2020/07/22 17:53

		$ or US-20030095779-$ or US-20030103730-$ or US-20030108320-$ or US-20030113086-$ or US-20030128934-$ or US-20030142918-$ or US-20030147597-$ or US-20030147230-$ or US-20030156796-$ or US-20030169975-$ or US-20030169974-$ or US-20030174996-$ or US-20030174972-$ or US-20030174922-$ or US-20030180005-$ or US-20030185520-$).did. or (US-20030189214-$ or US-20030194188-$ or US-20030198029-$ or US-20030231838-$ or US-20040013369-$ or US-20040028340-$ or US-20040033050-$ or US-20040033028-$ or US-20040033027-$ or US-20040036987-$ or US-20040042710-$ or US-20040052471-$ or US-20040054761-$ or US-20040062488-$ or US-20040062486-$ or US-20040072454-$ or US-20040071438-$ or US-20040074852-$ or US-20040081418-$ or US-20040091228-$ or US-20040101253-$ or US-20040105325-$ or US-20040105278-$ or US-20040120652-$ or US-20040131315-$ or US-20040136656-$ or US-20040141692-$).did. or (US-20040151464-$ or US-20040151438-$ or US-20040156592-$ or US-20040161204-$ or US-20040165830-$ or US-20040179787-$ or US-20040184740-$ or US-20040182971-$ or US-20040197053-$ or US-20040202431-$ or US-20040208459-$ or US-20040223701-$ or US-20040240793-$ or US-20040247255-$ or US-20040264873-$ or US-20040266257-$ or US-20040264908-$ or US-20040264876-$ or US-20050008300-$ or US-20050013547-$ or US-20050041928-$ or US-20050069263-$ or US-20050074211-$ or US-20050094948-$ or US-20050094943-$ or US-20050112939-$ or US-20050111796-$).did. or (US-20050118880-$ or US-20050135753-$ or US-20050141817-$ or US-20050185894-$ or US-20050207708-$ or US-20050215119-$ or US-20050220423-$ or US-20050220420-$ or US-20050226586-$ or US-				

		20050232552-$ or US-20050238289-$ or US-20050281526-$ or US-20050281509-$ or US-20050286833-$ or US-20050286835-$ or US-20060013539-$ or US-20060056769-$ or US-20060072878-$ or US-20060083468-$ or US-20060083467-$ or US-20060088248-$ or US-20060093275-$ or US-20060098914-$ or US-20060133758-$ or US-20060140542-$ or US-20060147156-$ or US-20060147155-$).did. or (US-20060154529-$ or US-20060153503-$ or US-20060159401-$ or US-20060159399-$ or US-20060169856-$ or US-20060177182-$ or US-20060197943-$ or US-20060204200-$ or US-20060204180-$ or US-20060245711-$ or US-20060263011-$ or US-20060269205-$ or US-20060269206-$ or US-20060269212-$ or US-20070019913-$ or US-20070036487-$ or US-20070098330-$ or US-20070098329-$ or US-20070105452-$ or US-20070116414-$ or US-20070116411-$ or US-20070140623-$ or US-20070154135-$ or US-20070165984-$ or US-20070183780-$ or US-20070190834-$ or US-20070196053-$).did. or (US-20070196052-$ or US-20070201808-$ or US-20070201798-$ or US-20070212002-$ or US-20070223862-$ or US-20070230874-$ or US-20070263959-$ or US-20070280599-$ or US-20070285194-$ or US-20070297725-$ or US-20080008425-$ or US-20080013897-$ or US-20080013891-$ or US-20080019642-$ or US-20080019656-$ or US-20080044139-$ or US-20080050072-$ or US-20080085082-$ or US-20080095502-$ or US-20080095501-$ or US-20080100456-$ or US-20080170827-$ or US-20080175541-$ or US-20080175550-$ or US-20080175542-$ or US-20080175546-$ or US-20080175545-$).did. or (US-20080175532-$ or US-20080193086-$ or US-20080205825-$ or US-20080240658-$ or US-20080269845-$ or US-20080267566-$ or US-20080273837-$ or US-20080279503-				

		$ or US-20080304792-$ or US-20080310796-$ or US-20080310800-$ or US-20080310795-$ or US-20080317411-$ or US-20090010600-$ or US-20090028507-$ or US-20090034912-$ or US-20090047800-$ or US-20090046981-$ or US-20090060422-$ or US-20090060418-$ or US-20090074359-$ or US-20090103878-$ or US-20090116791-$ or US-20090148101-$ or US-20090156043-$ or US-20090185778-$ or US-20090202214-$).did. or (US-20090214164-$ or US-20090226141-$ or US-20090226137-$ or US-20090232455-$ or US-20090232454-$ or US-20090257722-$ or US-20090257719-$ or US-20090274431-$ or US-20090274432-$ or US-20090285534-$ or US-20090285530-$ or US-20090290838-$ or US-20090304335-$ or US-20100002999-$ or US-20100021111-$ or US-20100029117-$ or US-20100027944-$ or US-20100027943-$ or US-20100046893-$ or US-20100054665-$ or US-20100061681-$ or US-20100074616-$ or US-20100080513-$ or US-20100092134-$ or US-20100092131-$ or US-20100104355-$ or US-20100111484-$).did. or (US-20100129032-$ or US-20100129028-$ or US-20100135618-$ or US-20100141934-$ or US-20100146764-$ or US-20100158444-$ or US-20100183265-$ or US-20100202730-$ or US-20100202737-$ or US-20100209063-$ or US-20100209050-$ or US-20100215318-$ or US-20100215322-$ or US-20100226654-$ or US-20100232757-$ or US-20100239220-$ or US-20100239213-$ or US-20100247057-$ or US-20100247040-$ or US-20100260457-$ or US-20100266245-$ or US-20100272408-$ or US-20100278497-$ or US-20100278488-$ or US-20100284655-$ or US-20100296792-$ or US-20100303408-$).did. or (US-20100322580-$ or US-20100322576-$ or US-20100322554-$ or US-20100329604-$ or US-20100329602-$ or US-20110019964-$ or US-				

		20110038592-$ or US-20110038581-$ or US-20110044583-$ or US-20110058772-$ or US-20110075969-$ or US-20110081798-$ or US-20110081116-$ or US-20110085774-$ or US-20110085765-$ or US-20110091166-$ or US-20110091154-$ or US-20110103797-$ or US-20110116748-$ or US-20110123156-$ or US-20110129186-$ or US-20110142398-$ or US-20110150396-$ or US-20110158593-$ or US-20110158586-$ or US-20110170830-$ or US-20110176777-$).did. or (US-20110188809-$ or US-20110188000-$ or US-20110194828-$ or US-20110200286-$ or US-20110198324-$ or US-20110200294-$ or US-20110206335-$ or US-20110206325-$ or US-20110206324-$ or US-20110211792-$ or US-20110229094-$ or US-20110243508-$ or US-20110243505-$ or US-20110243504-$ or US-20110268391-$ or US-20110293223-$ or US-20110299814-$ or US-20110311186-$ or US-20110317976-$ or US-20120002928-$ or US-20120002925-$ or US-20120033918-$ or US-20120039569-$ or US-20120057831-$ or US-20120057830-$ or US-20120057827-$ or US-20120063735-$).did. or (US-20120069348-$ or US-20120099870-$ or US-20120106901-$ or US-20120114295-$ or US-20120128307-$ or US-20120141084-$ or US-20120155808-$ or US-20120163757-$ or US-20120170895-$ or US-20120195555-$ or US-20120219253-$ or US-20120224823-$ or US-20120237223-$ or US-20120237171-$ or US-20120243831-$ or US-20120243829-$ or US-20120251067-$ or US-20120252244-$ or US-20120251050-$ or US-20120257859-$ or US-20120263426-$ or US-20120294572-$ or US-20120301088-$ or US-20120301080-$ or US-20120321269-$ or US-20120321266-$ or US-20120321254-$).did. or (US-20130011099-$ or US-20130064517-$ or US-20130071068-$ or US-20130071067-$ or US-20130084041-				

		$ or US-20130094827-$ or US-20130094815-$ or US-20130094811-$ or US-20130101257-$ or US-20130108231-$ or US-20130121643-$ or US-20130129285-$ or US-20130156379-$ or US-20130156382-$ or US-20130163937-$ or US-20130163933-$ or US-20130170797-$ or US-20130170796-$ or US-20130183018-$ or US-20130195405-$ or US-20130195418-$ or US-20130209040-$ or US-20130209049-$ or US-20130209052-$ or US-20130209051-$ or US-20130209050-$ or US-20130209041-$).did. or (US-20130216186-$ or US-20130216188-$ or US-20130284844-$ or US-20130287358-$ or US-20130302004-$ or US-20130322828-$ or US-20130323940-$ or US-20130322826-$ or US-20130330957-$ or US-20130343764-$ or US-20130343707-$ or US-20140016902-$ or US-20140023322-$ or US-20140038462-$ or US-20140044394-$ or US-20140064690-$ or US-20140064664-$ or US-20140072297-$ or US-20140072263-$ or US-20140082913-$ or US-20140093210-$ or US-20140104808-$ or US-20140126875-$ or US-20140126874-$ or US-20140124140-$ or US-20140133821-$ or US-20140133803-$).did. or (US-20140141649-$ or US-20140147082-$ or US-20140161394-$ or US-20140161407-$ or US-20140161400-$ or US-20140169732-$ or US-20140178007-$ or US-20140205253-$ or US-20140205247-$ or US-20140219615-$ or US-20140220794-$ or US-20140219619-$ or US-20140241690-$ or US-20140241689-$ or US-20140241688-$ or US-20140241667-$ or US-20140273584-$ or US-20140270646-$ or US-20140294339-$ or US-20140308010-$ or US-20140308008-$ or US-20140321813-$ or US-20140321814-$ or US-20140328063-$ or US-20140334790-$ or US-20140334780-$ or US-20140334778-$).did. or (US-20140348481-$ or US-20140348467-$ or US-20140355936-$ or US-				

		20140376870-$ or US-20150003774-$ or US-20150012072-$ or US-20150030323-$ or US-20150050002-$ or US-20150055917-$ or US-20150055928-$ or US-20150063758-$ or US-20150060539-$ or US-20150078710-$ or US-20150139588-$ or US-20150147033-$ or US-20150147031-$ or US-20150153516-$ or US-20150177467-$ or US-20150185423-$ or US-20150192744-$ or US-20150205060-$ or US-20150205053-$ or US-20150212284-$ or US-20150212279-$ or US-20150219856-$ or US-20150219857-$ or US-20150226923-$).did. or (US-20150234131-$ or US-20150234128-$ or US-20150241650-$ or US-20150247977-$ or US-20150253183-$ or US-20150260927-$ or US-20150268424-$ or US-20150277057-$ or US-20150277061-$ or US-20150277058-$ or US-20150288449-$ or US-20150288447-$ or US-20150286014-$ or US-20150286013-$ or US-20150286011-$ or US-20150285999-$ or US-20150301288-$ or US-20150301293-$ or US-20150309279-$ or US-20150323752-$ or US-20150346452-$ or US-20150346449-$ or US-20150355417-$ or US-20150355414-$ or US-20150362678-$ or US-20150378117-$ or US-20150378111-$).did. or (US-20160004017-$ or US-20160011383-$ or US-20160011376-$ or US-20160018604-$ or US-20160018606-$ or US-20160033723-$ or US-20160041356-$ or US-20160047994-$ or US-20160062051-$ or US-20160070081-$ or US-20160085045-$ or US-20160085035-$ or US-20160085031-$ or US-20160091673-$ or US-20160111808-$ or US-20160109676-$ or US-20160116685-$ or US-20160116683-$ or US-20160116681-$ or US-20160131857-$ or US-20160139342-$ or US-20160139339-$ or US-20160147022-$ or US-20160154190-$ or US-20160161679-$ or US-20160170152-$ or US-20160178860-$).did. or (US-20160178855-$ or US-20160187589-				

		$ or US-20160195683-$ or US-20160195681-$ or US-20160209605-$ or US-20160216454-$ or US-20160216460-$ or US-20160223763-$ or US-20160238798-$ or US-20160238794-$ or US-20160238789-$ or US-20160246011-$ or US-20160252685-$ or US-20160266330-$ or US-20160266329-$ or US-20160266327-$ or US-20160274311-$ or US-20160291259-$ or US-20160306123-$ or US-20160306121-$ or US-20160313513-$ or US-20160320567-$ or US-20160320566-$ or US-20160327757-$ or US-20160324402-$ or US-20160356966-$ or US-20160365685-$).did. or (US-20160370549-$ or US-20160370548-$ or US-20170003459-$ or US-20170035275-$ or US-20170059782-$ or US-20170068063-$ or US-20170082806-$ or US-20170097485-$ or US-20170097471-$ or US-20170102507-$ or US-20170108659-$ or US-20170108430-$ or US-20170123171-$ or US-20170123163-$ or US-20170131481-$ or US-20170139158-$ or US-20170139157-$ or US-20170146749-$ or US-20170153394-$ or US-20170163573-$ or US-20170162978-$ or US-20170160500-$ or US-20170160496-$ or US-20170160486-$ or US-20170160478-$ or US-20170160477-$ or US-20170160476-$).did. or (US-20170168244-$ or US-20170176252-$ or US-20170184800-$ or US-20170192182-$ or US-20170199338-$ or US-20170199336-$ or US-20170205591-$ or US-20170205588-$ or US-20170212310-$ or US-20170212309-$ or US-20170222347-$ or US-20170227727-$ or US-20170227718-$ or US-20170235077-$ or US-20170242198-$ or US-20170242196-$ or US-20170248762-$ or US-20170254962-$ or US-20170254961-$ or US-20170254960-$ or US-20170276887-$ or US-20170276886-$ or US-20170285272-$ or US-20170293091-$ or US-20170299821-$ or US-20170299818-$ or US-20170299817-$).did. or (US-			

		20170307832-$ or US-20170307829-$ or US-20170315307-$ or US-20170315305-$ or US-20170315304-$ or US-20170315303-$ or US-20170331234-$ or US-20170336571-$ or US-20170343742-$ or US-20170343741-$ or US-20170341972-$ or US-20170351038-$ or US-20170351037-$ or US-20170359091-$ or US-20170363815-$ or US-20170363810-$ or US-20170363509-$ or US-20170371118-$ or US-20170371107-$ or US-20180003910-$ or US-20180011261-$ or US-20180017740-$ or US-20180024302-$ or US-20180024301-$ or US-20180024300-$ or US-20180024294-$ or US-20180031782-$).did. or (US-20180031775-$ or US-20180059338-$ or US-20180074277-$ or US-20180081127-$ or US-20180081122-$ or US-20180078781-$ or US-20180095232-$ or US-20180106975-$ or US-20180113268-$ or US-20180113259-$ or US-20180136410-$ or US-20180143384-$ or US-20180143381-$ or US-20180149813-$ or US-20180157002-$ or US-20180180819-$ or US-20180188460-$ or US-20180196204-$ or US-20180210155-$ or US-20180210153-$).did. or (US-3933409-$ or US-3999837-$ or US-4080044-$ or US-4087158-$ or US-4101198-$ or US-4140365-$ or US-4167304-$ or US-4168109-$ or US-4186996-$ or US-4201445-$ or US-4214812-$ or US-4218113-$ or US-4223976-$ or US-4252407-$ or US-4268115-$ or US-4268114-$ or US-4279469-$ or US-4291943-$ or US-4295707-$ or US-4327964-$ or US-4354731-$ or US-4368948-$ or US-4371233-$ or US-4387957-$ or US-4415232-$ or US-4422716-$).did. or (US-4444461-$ or US-4445753-$ or US-4447121-$ or US-4461539-$ or US-4466009-$ or US-4484796-$ or US-4487474-$ or US-4497536-$ or US-4526438-$ or US-4548467-$ or US-4614402-$ or US-4615581-$ or US-4645296-$ or US-4648688-$ or US-4666241-$ or US-4674831-$ or US-4681398-$				

		or US-4688887-$ or US-4699460-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4715674-$ or US-4717234-$ or US-4718744-$ or US-4722081-$ or US-4740052-$).did. or (US-4741590-$ or US-4758719-$ or US-4759600-$ or US-4759599-$ or US-4762389-$ or US-4767178-$ or US-4773725-$ or US-4781429-$ or US-4783137-$ or US-4786135-$ or US-4787700-$ or US-4789216-$ or US-4793683-$ or US-4795231-$ or US-4805980-$ or US-4807957-$ or US-4813760-$ or US-4824196-$ or US-4834486-$ or US-4842361-$ or US-4844570-$ or US-4846544-$ or US-4848870-$ or US-4850536-$ or US-4852963-$ or US-4877303-$ or US-4892380-$).did. or (US-4898446-$ or US-4960317-$ or US-4964688-$ or US-4976510-$ or US-4986762-$ or US-4986622-$ or US-4991929-$ or US-4993803-$ or US-4995688-$ or US-4998797-$ or US-5013124-$ or US-5015060-$ or US-5016970-$ or US-5018823-$ or US-5042891-$ or US-5048916-$ or US-5052774-$ or US-5058983-$ or US-5073042-$ or US-5077815-$ or US-5091991-$ or US-5091990-$ or US-5109453-$ or US-5115484-$ or US-5119455-$ or US-5124506-$ or US-5127073-$).did. or (US-5129024-$ or US-5133032-$ or US-5134677-$ or US-5134676-$ or US-5155795-$ or US-5159654-$ or US-5177808-$ or US-5179607-$ or US-5210815-$ or US-5214730-$ or US-5228104-$ or US-5233675-$ or US-5233674-$ or US-5239606-$ or US-5267342-$ or US-5274729-$ or US-5280552-$ or US-5282259-$ or US-5293581-$ or US-5297227-$ or US-5317663-$ or US-5323475-$ or US-5329541-$ or US-5333222-$ or US-5333221-$ or US-5359688-$ or US-5363460-$).did. or (US-5367594-$ or US-5366383-$ or US-5384885-$ or US-5386485-$ or US-5408557-$ or US-5418875-$ or US-5420951-$ or US-5444806-$ or US-5446817-$ or US-5450519-$ or US-5452391-$ or US-5485537-$ or US-5497444-$ or US-				

		5506922-$ or US-5519799-$ or US-5521998-$ or US-5528711-$ or US-5530783-$ or US-5537501-$ or US-5542015-$ or US-5548674-$ or US-5550943-$ or US-5563978-$ or US-5563971-$ or US-5570445-$ or US-5574813-$ or US-5579429-$).did. or (US-5581644-$ or US-5588086-$ or US-5592323-$ or US-5600746-$ or US-5603631-$ or US-5607323-$ or US-5619610-$ or US-5633969-$ or US-5642450-$ or US-5647043-$ or US-5645449-$ or US-5661833-$ or US-5666449-$ or US-5664955-$ or US-5668904-$ or US-5671310-$ or US-5673346-$ or US-5680494-$ or US-5682449-$ or US-5687268-$ or US-5694507-$ or US-5694506-$ or US-5701380-$ or US-5721799-$ or US-5727102-$ or US-5732174-$ or US-5734770-$).did. or (US-5737464-$ or US-5751874-$ or US-5761359-$ or US-5764043-$ or US-5774611-$ or US-5774612-$ or US-5778122-$ or US-5781680-$ or US-5796896-$ or US-5799122-$ or US-5809191-$ or US-5815618-$ or US-5818993-$ or US-5825955-$ or US-5832158-$ or US-5838856-$ or US-5838855-$ or US-5845036-$ or US-5862282-$ or US-5867621-$ or US-5881191-$ or US-5887100-$ or US-5887098-$ or US-5892870-$ or US-5896477-$ or US-5909526-$ or US-5909298-$).did. or (US-5915058-$ or US-5923805-$ or US-5930426-$ or US-5930425-$ or US-5937121-$ or US-5940561-$ or US-5940559-$ or US-5949946-$ or US-5953474-$ or US-5953473-$ or US-5956444-$ or US-5960137-$ or US-5969294-$ or US-5971626-$ or US-5980117-$ or US-5987203-$ or US-5993071-$ or US-6004043-$ or US-6022149-$ or US-6027252-$ or US-6041155-$ or US-6048103-$ or US-6048102-$ or US-6053639-$ or US-6059461-$ or US-6064791-$ or US-6076973-$).did. or (US-6076975-$ or US-6081647-$ or US-6079881-$ or US-6088502-$ or US-6095694-$ or US-6104856-$ or US-6102581-$ or US-6108482-$ or US-6116790-$ or US-6116789-$ or				

		US-6116101-$ or US-6132105-$ or US-6139346-$ or US-6142676-$ or US-6149315-$ or US-6154597-$ or US-6164835-$ or US-6164834-$ or US-6173099-$ or US-6179480-$ or US-6179475-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6190616-$ or US-6195477-$ or US-6193420-$).did. or (US-6196729-$ or US-6200040-$ or US-6206577-$ or US-6217226-$ or US-6220763-$ or US-6220762-$ or US-6224269-$ or US-6227719-$ or US-6227718-$ or US-6240229-$ or US-6238249-$ or US-6243526-$ or US-6247851-$ or US-6247849-$ or US-6256446-$ or US-6259839-$ or US-6264373-$ or US-6264372-$ or US-6267513-$ or US-6273618-$ or US-6290527-$ or US-6301004-$ or US-6302592-$ or US-6309111-$ or US-6318904-$ or US-6318903-$ or US-6334715-$).did. or (US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6354746-$ or US-6357932-$ or US-6361218-$ or US-6364536-$ or US-6367986-$ or US-6367984-$ or US-6371659-$ or US-6377840-$ or US-6375363-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6389212-$ or US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6409391-$ or US-6412987-$ or US-6419810-$ or US-6422759-$ or US-6425692-$ or US-6425694-$ or US-6431762-$ or US-6437894-$).did. or (US-6435946-$ or US-6445867-$ or US-6456768-$ or US-6457876-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6466724-$ or US-6464406-$ or US-6467971-$ or US-6467970-$ or US-6471417-$ or US-6471412-$ or US-6474876-$ or US-6478472-$ or US-6481900-$ or US-6481899-$ or US-6485192-$ or US-6497518-$ or US-6497516-$ or US-6501900-$ or US-6508593-$ or US-6526210-$ or US-6524015-$ or US-6527450-$ or US-6533469-$ or US-6543941-$).did. or (US-6554482-$ or US-6558044-$ or US-6561699-$ or US-6572276-$ or US-6572273-$ or US-6582132-$ or US-6595696-$				

		or US-6601995-$ or US-6612750-$ or US-6619859-$ or US-6619856-$ or US-6632023-$ or US-6634794-$ or US-6644866-$ or US-6667803-$ or US-6695485-$ or US-6702477-$ or US-6702475-$ or US-6786647-$ or US-6789953-$ or US-6793399-$ or US-6840680-$ or US-6856748-$ or US-6895146-$ or US-7232261-$ or US-7435009-$ or US-7530845-$).did. or (US-7585118-$ or US-7588373-$ or US-7706657-$ or US-7738757-$ or US-7972066-$ or US-8070366-$ or US-8206040-$ or US-8517614-$ or US-8588571-$ or US-8953922-$ or US-9229177-$ or US-9229170-$ or US-9291781-$ or US-9316794-$ or US-9323007-$ or US-9448369-$ or US-9453972-$ or US-9482825-$ or US-9551831-$ or US-9625655-$ or US-9632267-$ or US-9638871-$ or US-9638868-$ or US-9645335-$ or US-9658407-$ or US-9671570-$ or US-9671568-$).did. or (US-9678282-$ or US-9696477-$ or US-9722367-$ or US-9720184-$ or US-9726829-$ or US-9735523-$ or US-9733123-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9746625-$ or US-9746368-$ or US-9759874-$ or US-9759869-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9784928-$ or US-9798090-$ or US-9797806-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9817195-$ or US-9823428-$ or US-9829643-$ or US-9827438-$).did. or (US-9835807-$ or US-9841566-$ or US-9857545-$ or US-9857537-$ or US-9864151-$ or US-9869824-$ or US-9876309-$ or US-9874702-$ or US-9880365-$ or US-9880357-$ or US-9885841-$ or US-9893813-$ or US-9891392-$ or US-9891387-$ or US-9891385-$ or US-9897767-$ or US-9904021-$ or US-9904020-$ or US-9910228-$ or US-9910226-$ or US-9915793-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9939600-$ or US-9939590-$ or US-9948017-$).did. or (US-9946036-$ or US-10007069-$ or US-10018787-$).did.				

		or (JP-2016095432-$ or JP-2016095410-$ or JP-2016122100-$ or JP-2016177309-$ or JP-2016188927-$ or JP-2017053937-$ or JP-2017090798-$ or JP-2017111444-$ or JP-2017134118-$ or JP-2017138535-$ or JP-2017151338-$ or JP-2017219768-$).did.				
S606	737	(US-20010041030-$ or US-20020025125-$ or US-20020106162-$ or US-20020114589-$ or US-20020159710-$ or US-20030031452-$ or US-20030044127-$ or US-20030044125-$ or US-20030180004-$ or US-20030223703-$ or US-20040008494-$ or US-20040017983-$ or US-20040017981-$ or US-20040038558-$ or US-20040052472-$ or US-20040062498-$ or US-20040105628-$ or US-20040131317-$ or US-20040223699-$ or US-20040228589-$ or US-20050036744-$ or US-20050053342-$ or US-20050111795-$ or US-20050123246-$ or US-20050135755-$ or US-20050135752-$).did. or (US-20050271328-$ or US-20060045430-$ or US-20060051028-$ or US-20060093282-$ or US-20060153504-$ or US-20060193562-$ or US-20060280409-$ or US-20060285807-$ or US-20070058907-$ or US-20070098327-$ or US-20070160327-$ or US-20080069501-$ or US-20080112672-$ or US-20080124031-$ or US-20080131055-$ or US-20080253719-$ or US-20090003772-$ or US-20090290839-$ or US-20090305542-$ or US-20100322561-$ or US-20110038590-$ or US-20110075971-$ or US-20110091159-$ or US-20110222819-$ or US-20110249942-$ or US-20120027355-$ or US-20120057824-$).did. or (US-20120076459-$ or US-20120082416-$ or US-20120099822-$ or US-20120141070-$ or US-20120251054-$ or US-20120251051-$ or US-20120263423-$ or US-20120263419-$ or US-20120308183-$ or US-20130051749-$ or US-20130064508-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 17:53

		$ or US-20130077914-$ or US-20130121645-$ or US-20130129280-$ or US-20130183001-$ or US-20130216189-$ or US-20130230283-$ or US-20130259429-$ or US-20130272671-$ or US-20130308908-$ or US-20140056560-$ or US-20140064665-$ or US-20140064688-$ or US-20140072265-$ or US-20140086545-$ or US-20140147081-$ or US-20140205241-$).did. or (US-20140219614-$ or US-20140219624-$ or US-20140314385-$ or US-20140341510-$ or US-20150003785-$ or US-20150023637-$ or US-20150049989-$ or US-20150071591-$ or US-20150177463-$ or US-20150226926-$ or US-20150241644-$ or US-20150301286-$ or US-20150331201-$ or US-20150338583-$ or US-20150370017-$ or US-20150378112-$ or US-20160004018-$ or US-20160004016-$ or US-20160025937-$ or US-20160077287-$ or US-20160077284-$ or US-20160109661-$ or US-20160131854-$ or US-20160131849-$ or US-20160161680-$ or US-20160178859-$ or US-20160259135-$).did. or (US-20160282566-$ or US-20160282562-$ or US-20160320571-$ or US-20160349464-$ or US-20170059784-$ or US-20170090128-$ or US-20170090127-$ or US-20170102506-$ or US-20170102504-$ or US-20170108653-$ or US-20170115457-$ or US-20170139150-$ or US-20170153398-$ or US-20170184798-$ or US-20170184790-$ or US-20170205587-$ or US-20170219779-$ or US-20170227720-$ or US-20170235060-$ or US-20170242200-$ or US-20170242199-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170261698-$ or US-20170269309-$ or US-20170276883-$).did. or (US-20170276881-$ or US-20170293088-$ or US-20170293087-$ or US-20170307831-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170357060-$ or US-20170357059-$ or US-				

		20170363827-$ or US-20180003903-$ or US-20180011258-$ or US-20180011254-$ or US-20180031774-$ or US-20180052288-$ or US-20180077472-$ or US-20180081128-$ or US-20180081125-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180106973-$ or US-20180156988-$ or US-20180156985-$ or US-20180210154-$).did. or (US-4240695-$ or US-4320938-$ or US-4330172-$ or US-4477146-$ or US-4687291-$ or US-4737009-$ or US-4854664-$ or US-4856866-$ or US-4886335-$ or US-4915472-$ or US-4953929-$ or US-4955976-$ or US-5064268-$ or US-5076656-$ or US-5082346-$ or US-5082344-$ or US-5101463-$ or US-5134673-$ or US-5157749-$ or US-5166995-$ or US-5199093-$ or US-5259052-$ or US-5555332-$ or US-5666456-$ or US-5692080-$ or US-5867894-$).did. or (US-5870515-$ or US-5883995-$ or US-5920670-$ or US-5920669-$ or US-5984533-$ or US-6012852-$ or US-6095695-$ or US-6210045-$ or US-6250817-$ or US-6305849-$ or US-6318902-$ or US-6331079-$ or US-6379052-$ or US-6409392-$ or US-6422761-$ or US-6422760-$ or US-6450698-$ or US-6487343-$ or US-6491442-$ or US-6533465-$ or US-6554486-$ or US-6623172-$ or US-6688782-$ or US-6712521-$ or US-6764222-$ or US-6839583-$ or US-6848834-$).did. or (US-6944378-$ or US-7036996-$ or US-8388235-$ or US-9207454-$ or US-9316791-$ or US-9377591-$ or US-9389368-$ or US-9482820-$ or US-9606303-$ or US-9625657-$ or US-9664864-$ or US-9678283-$ or US-9678286-$ or US-9684134-$ or US-9696497-$ or US-9703062-$ or US-9709753-$ or US-9726830-$ or US-9733436-$ or US-9733434-$ or US-9798096-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9829650-$ or US-9835808-$ or US-9846283-$).did. or (US-9851512-$ or US-9891390-$ or				

		US-9904019-$ or US-9910229-$ or US-9927582-$ or US-9939589-$ or US-9946037-$).did. or (IT-7819792-$ or FR-2363124-$ or IT-7925110-$ or GB-2057158-$ or FR-2487528-$ or GB-2081468-$ or EP-0061243-$ or DK-208682-$ or GB-8306227-$ or IT-8323399-$ or JP-S5856846-$ or EP-0125398-$ or FR-2535069-$ or WO-8600147-$ or EP-0249237-$ or EP-0262847-$ or EP-0262631-$ or DE-8626183-$ or WO-9015350-$ or EP-0408852-$ or GB-9103604-$ or GB-9106183-$ or CA-2030897-$ or DE-9107960-$ or GB-9206076-$ or CA-2057559-$).did. or (CA-2082276-$ or EP-0633485-$ or EP-0690319-$ or CA-2191600-$ or EP-0696748-$ or EP-0697608-$ or CN-1118443-$ or WO-9627811-$ or EP-0758099-$ or WO-9734176-$ or CA-2198522-$ or EP-0803750-$ or NL-1003147-$ or EP-0807837-$ or CA-2254335-$ or CA-2294930-$ or CA-2262351-$ or EP-0938003-$ or JP-2945144-$ or CA-2324565-$ or GB-9919699-$ or EP-0992819-$ or CA-2284331-$ or GB-0007281-$ or CA-2288249-$ or DE-19728960-$ or EP-1033595-$).did. or (EP-1033594-$ or EP-1039324-$ or EP-1039322-$ or EP-1041416-$ or EP-1041414-$ or JP-3106420-$ or CA-2321428-$ or EP-1091225-$ or WO-0137010-$ or EP-1107031-$ or KR-20010062142-$ or WO-0155762-$ or EP-1124147-$ or WO-0161397-$ or WO-0181965-$ or CA-2350290-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or KR-20020000530-$ or KR-20020001574-$ or CN-1331421-$ or EP-1172672-$ or EP-1172673-$ or KR-20020006481-$ or KR-20020006480-$ or DE-20118858-$).did. or (CA-2418331-$ or KR-20020050140-$ or WO-02056060-$ or WO-02061481-$ or DE-10114144-$ or NL-1018440-$ or WO-03016975-$ or WO-03093883-$ or CA-2484569-$ or EP-1394584-$ or AU-2003291687-$ or EP-1530068-$ or CA-2503690-$ or CN-1677147-$ or CN-1707299-$ or WO-				

		2008006402-$ or EP-1887395-$ or CN-101122658-$ or WO-2008029850-$ or CA-2662854-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or CA-2689768-$ or EP-2206458-$ or WO-2010137426-$ or CA-2762411-$).did. or (EP-2302431-$ or WO-2011139938-$ or WO-2011152874-$ or EP-2444827-$ or WO-2012054174-$ or WO-2012054174-$ or WO-2012151175-$ or GB-201218194-$ or CN-102870023-$ or WO-2013115791-$ or WO-2013115789-$ or WO-2013126068-$ or CA-2912155-$ or WO-2014009463-$ or WO-2014011898-$ or EP-2700992-$ or JP-5433802-$ or WO-2014049469-$ or WO-2014113753-$ or CA-2836675-$ or WO-2014143748-$ or WO-2014165175-$ or WO-2014197701-$ or CN-104241938-$ or CA-2917189-$ or EP-2840425-$ or EP-2843452-$).did. or (WO-2015028433-$ or CA-2885821-$ or WO-2015068103-$ or CA-2932688-$ or GB-201507758-$ or WO-2015103783-$ or WO-2015116589-$ or CN-204595258-$ or WO-2015144883-$ or EP-2942653-$ or EP-2947485-$ or WO-2015190211-$ or WO-2016004347-$ or CN-105278047-$ or DE-202013012295-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or CA-2928026-$ or WO-2016043922-$ or JP-5905950-$ or WO-2016067668-$ or EP-3021145-$ or WO-2016082160-$ or WO-2016103821-$ or DE-202016103178-$ or EP-3054333-$).did. or (WO-2016161341-$ or WO-2017038704-$ or JP-6173629-$ or WO-2017180257-$ or CN-206584076-$ or EP-3258301-$ or WO-2018003776-$ or WO-2018004847-$).did. or (JP-54034251-$ or JP-55101904-$ or JP-56066811-$ or JP-56074211-$ or JP-59075218-$ or JP-04214510-$ or JP-04220604-$ or JP-05313040-$ or JP-08015541-$ or JP-09005575-$ or JP-09033756-$ or JP-10104469-$ or JP-			

		11072659-$ or JP-2000089061-$ or JP-2000284146-$ or JP-2000292655-$ or JP-2000310724-$ or JP-2001013372-$ or JP-2001021764-$ or JP-2001242361-$ or JP-2009294343-$ or JP-2012053420-$ or JP-2012078513-$ or JP-2015022131-$).did. or (DE-2805949-$ or DE-2932986-$ or GB-2057158-$ or GB-2081468-$ or EP-61243-$ or GB-2098354-$ or DE-3208797-$ or EP-125398-$ or US-4496213-$ or WO-8600147-$ or EP-249237-$ or EP-262631-$ or US-4953929-$ or WO-9015350-$ or GB-2241794-$ or US-5064268-$ or WO-9117540-$ or EP-458608-$ or US-5101463-$ or EP-490698-$ or EP-505197-$ or EP-430107-$ or EP-660145-$ or EP-660144-$ or EP-663602-$ or EP-663601-$).did. or (WO-9600917-$ or EP-696748-$ or EP-697608-$ or WO-9627811-$ or EP-758099-$ or WO-9734176-$ or EP-803750-$ or US-5692080-$ or WO-9746900-$ or WO-9857208-$ or WO-9947958-$ or GB-2341455-$ or EP-1041416-$ or EP-1041414-$ or EP-1091225-$ or WO-0140839-$ or EP-1107031-$ or EP-1124147-$ or WO-0181965-$ or US-20010041030-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or EP-1172673-$ or EP-1172672-$ or DE-20118858-$ or WO-02056060-$).did. or (US-6422760-$ or WO-02061481-$ or US-20030031437-$ or US-20030044125-$ or WO-03094297-$ or WO-03093883-$ or EP-1394584-$ or US-20040062498-$ or US-20040223699-$ or US-20040228589-$ or US-20050053342-$ or WO-2006022840-$ or US-20060153503-$ or US-20060165352-$ or US-20060193562-$ or EP-1752805-$ or US-20070058907-$ or US-20070077010-$ or US-20070098327-$ or US-20090041411-$ or US-20090060423-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or EP-2206458-$ or WO-2010137426-$ or EP-2302431-$).did. or (US-20110249942-$ or US-20110274437-				

		$ or WO-2011152874-$ or KR-2012000895-$ or US-20120027355-$ or US-20120057824-$ or US-20120082416-$ or EP-2444827-$ or US-20120099822-$ or US-20120251051-$ or US-20120251054-$ or US-20120263419-$ or WO-2012151175-$ or US-20120308183-$ or CN-102870023-$ or TW-201309089-$ or US-20130051749-$ or WO-2013036843-$ or CN-103091793-$ or US-20130121645-$ or WO-2013115789-$ or WO-2013115791-$ or WO-2013122865-$ or WO-2013126068-$ or US-20130230283-$ or US-20130259429-$ or WO-2013155395-$).did. or (WO-2013177234-$ or WO-2014011898-$ or US-20140016901-$ or EP-2700992-$ or JP-5433802-$ or US-20140064688-$ or TW-474924-$ or WO-2014049469-$ or US-20140147081-$ or US-20140153879-$ or ES-1110405-$ or WO-2014113753-$ or EP-2759860-$ or US-20140219624-$ or WO-2014143748-$ or WO-2014165175-$ or US-20140321808-$ or US-20140363131-$ or WO-2014197701-$ or EP-2818903-$ or WO-2015009435-$ or US-20150023637-$ or US-20150049989-$ or WO-2015028433-$ or WO-2015068103-$ or WO-2015070382-$ or US-20150162982-$).did. or (US-20150177463-$ or WO-2015103783-$ or WO-2015116589-$ or US-20150219864-$ or US-20150226926-$ or US-20150226925-$ or US-20150241644-$ or CN-104950402-$ or WO-2015144883-$ or US-20150286012-$ or DE-102015106225-$ or US-20150331201-$ or EP-2947485-$ or WO-2015190211-$ or US-20150378110-$ or US-20160004016-$ or US-20160004018-$ or US-20160025937-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or WO-2016033577-$ or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016043922-$ or JP-5905950-$).did.				

		or (US-20160124158-$ or US-20160131854-$ or EP-3021145-$ or US-20160161680-$ or US-20160178852-$ or US-20160178859-$ or US-9377591-$ or US-9389368-$ or EP-3054333-$ or US-20160259135-$ or CN-105978629-$ or US-20160282566-$ or WO-2016161341-$ or US-20160306125-$ or US-9482820-$ or US-20160341908-$ or US-20160341911-$ or US-20160349466-$ or US-20160377819-$ or US-20170031106-$ or US-20170059784-$ or WO-2017038704-$ or US-20170090127-$ or US-20170102504-$ or US-20170115457-$ or US-20170139150-$ or US-20170139156-$).did. or (US-20170153398-$ or US-9678283-$ or US-20170184790-$ or US-9709753-$ or US-20170205587-$ or JP-6173629-$ or US-20170219779-$ or US-9726830-$ or US-20170227720-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170293088-$ or US-20170307830-$ or US-9804340-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170371109-$ or US-20180003903-$ or US-20180011258-$ or US-20180052288-$ or US-20180081128-$ or US-20180106973-$ or US-20180120519-$ or US-20180128988-$).did.				
S607	136	(US-20020176671-$ or US-20040017980-$ or US-20040126118-$ or US-20040197054-$ or US-20070172177-$ or US-20070286554-$ or US-20100008635-$ or US-20100129034-$ or US-20100290745-$ or US-20110116749-$ or US-20110222830-$ or US-20110229096-$ or US-20110229095-$ or US-20110225792-$ or US-20110255831-$ or US-20110262078-$ or US-20110262077-$ or US-20120014648-$ or US-20120063724-$ or US-20120275749-$ or US-20130136402-$ or US-20130315538-$ or US-20140286610-$ or US-20150016781-$ or US-20150110448-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 17:53

		20160124170-$).did. or (US-20160202429-$ or US-20170045691-$ or US-20170285277-$ or US-20170299820-$ or US-20180120519-$ or US-20180143380-$ or US-20180231722-$ or US-20180239093-$ or US-20180267255-$ or US-20180292618-$ or US-20180292612-$ or US-20180364421-$ or US-20190107679-$ or US-20190107678-$ or US-20190113691-$ or US-20190137701-$ or US-20190179085-$).did. or (US-5504825-$ or US-5613021-$ or US-5661826-$ or US-6045270-$ or US-6276840-$ or US-6293708-$ or US-6623170-$ or US-6796717-$ or US-6848840-$ or US-6866425-$ or US-6932514-$ or US-6944387-$ or US-6976793-$ or US-7094091-$ or US-7178994-$ or US-7182522-$ or US-7234874-$ or US-7241056-$ or US-7300216-$ or US-7536075-$ or US-7654748-$ or US-7891882-$ or US-7912336-$ or US-8052333-$ or US-8231282-$ or US-8235600-$).did. or (US-8262296-$ or US-8317407-$ or US-8346047-$ or US-8348519-$ or US-8348518-$ or US-8376634-$ or US-8406583-$ or US-8417074-$ or US-8494329-$ or US-8496384-$ or US-8529138-$ or US-8542972-$ or US-8550725-$ or US-8550724-$ or US-8579521-$ or US-8690593-$ or US-8714835-$ or US-8821038-$ or US-8821037-$ or US-8915653-$ or US-8958679-$ or US-9014527-$ or US-9031364-$ or US-9057848-$ or US-9146376-$ or US-9146360-$ or US-9417401-$).did. or (US-9513442-$ or US-9541711-$ or US-9557497-$ or US-9563025-$ or US-9606297-$ or US-9632255-$ or US-9645318-$ or US-9658409-$ or US-9684139-$ or US-9739949-$ or US-9753228-$ or US-9772464-$ or US-9857538-$ or US-9977199-$ or US-9989710-$ or US-10012801-$ or US-10054747-$ or US-10061090-$ or US-10067302-$ or US-10067300-$ or US-10088636-$ or US-10101539-$ or US-10139570-$ or US-10146014-$ or US-10156684-$ or US-10209473-				

		$).did. or (WO-2010083369-$ or EP-2380054-$ or CN-102282495-$ or WO-2014152675-$ or WO-2015043158-$ or CN-104516073-$ or CN-102282495-$ or WO-2018125706-$).did. or (JP-57044113-$).did. or (US-20160327757-$ or US-20170299820-$ or WO-2018125706-$ or US-20190107679-$).did.				
S608	2,087	S604 S605 S606 S607	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S609	56,021	(ferrule connector) with insert$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S610	66,377	G02B6/38$.cpc.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S611	2,541	S609 and S610	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S612	14,591	adapter with (groove channel) with (top bottom upper lower)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S613	102	S611 and S612	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53

S614	62	S613 not S608	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S615	1,186,315	(groove channel) with upper with lower	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S616	735,634	(groove channel) with top with bottom	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S617	447	S611 and (S615 S616)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S618	325	S617 not (S608 S614)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S619	15,680	("ferrules" "connectors") with align$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S620	2,186	S610 and S619	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S621	353	S620 and (S615 S616)	US-PGPUB; USPAT;	OR	OFF	2020/07/22 17:53

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S622	167	S621 not (S608 S614 S618)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S623	11,374	G02B6/3825,3826.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S624	441	S619 and S623	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S625	206	S624 not (S608 S614 S618 S622)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S626	26,017	("ferrules" "connectors") with align$4 with (groove channel slot)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S627	705	S626 and S623	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 17:53
S628	151	S627 not (S608 S614 S618 S622 S625)	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2020/07/22 17:53

			JPO; DERWENT; IBM_TDB			
S629	2,998	S608 S614 S618 S622 S625 S628	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S630	2,792	G02B6/3831.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S631	2,427	S630 not S629	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S632	38	("20010026661" | "20020167793" | "20040228582" | "20050095899" | "20060140543" | "20080032536" | "20080248691" | "20080311781" | "20110059642" | "20120190230" | "20120257865" | "4186997" | "4376565" | "4448467" | "4580868" | "4645295" | "4711511" | "4904199" | "4979792" | "4986769" | "5166995" | "5183408" | "5265181" | "5289554" | "6149313" | "6257917" | "6538882" | "6634796" | "6910911" | "6994478" | "7182523" | "7325975" | "7374347" | "7476118" | "7674046" | "8167638" | "8262403" | "8724955").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2020/07/22 17:53
S633	2,864	ferrule with (mt$2 mpo)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S634	129	S631 and S633	US-PGPUB; USPAT;	OR	ON	2020/07/22 17:53

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S635	2,107,838	(slot groove channel key$4) with (upper lower top bottom) with (center central$4 middle through)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S636	42	S631 and S635	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S637	40	S636 not (S634)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S638	20,748	(multiple plural$4) adj2 (key$4 key$way) with (surface top bottom side wall)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S639	15,013	G02B6/3825-3831.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S640	28	S638 and S639	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S641	12,760	G02B6/3881,3885.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53

S642	13,201	G02B6/3879,3825.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S643	23,087	S642 S641	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S644	533	gang$4 with (adapter adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S645	75	S643 and S644	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S646	146,261	G02B6/38$3.cpc. G02B6/42$3.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S647	92	S644 and S646	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53
S648	17	S647 not S645	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 17:53

S649	81	(US-20040101250-$ or US-20140205247-$ or US-20170160486-$ or US-20180239091-$).did. or (US-3999837-$ or US-4252407-$ or US-6116790-$ or US-6371659-$ or US-6461053-$ or US-6585423-$ or US-7001079-$ or US-9039298-$ or US-9823424-$).did. or (DE-2558445-$ or FR-2296862-$ or BR-7508734-$ or ES-444034-$ or GB-1503979-$ or IT-7869677-$ or CA-1043604-$ or BE-871785-$ or DK-522978-$ or NL-7811579-$ or DE-2849975-$ or GB-2009440-$ or FR-2435053-$ or FR-2446496-$ or CA-1097111-$ or IT-1050771-$ or FR-2446496-$ or FR-2435053-$ or CH-628152-$ or GB-2009440-$ or DE-3112078-$ or FR-2296862-$ or DE-2558445-$ or DE-3112078-$ or IT-1109638-$ or DE-2849975-$).did. or (DK-151733-$ or DK-151733-$ or DK-151733-$ or DE-19626036-$ or WO-9800741-$ or AU-2975197-$ or WO-9928774-$ or EP-0985161-$ or EP-1034445-$ or EP-1092995-$ or EP-1092995-$ or EP-1034445-$ or EP-0985161-$ or ES-2202617-$ or EP-1092995-$ or DE-60010402-$ or DE-60010402-$ or JP-3984293-$ or EP-2138880-$ or JP-4514004-$ or WO-2016053853-$ or WO-2017065999-$ or WO-2017065999-$ or EP-3201668-$ or CN-108351473-$ or CN-208140982-$ or EP-3201668-$).did. or (JP-2001154062-$).did. or (DE-2558445-$ or BE-871785-$ or DE-19626036-$ or WO-9928774-$ or EP-1092995-$ or US-20140205247-$ or CN-104516061-$ or CN-104570229-$ or WO-2016053853-$ or WO-2017065999-$ or US-20180364421-$).did.	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 18:13
S650	1,140	(US-20010010741-$ or US-20010016102-$ or US-20010033730-$ or US-20010038737-$ or US-20010043776-$ or US-20010048790-$ or US-20020006253-$ or US-20020012503-$ or US-20020012502-$ or US-20020012501-$ or US-20020012238-$ or US-20020025121-$ or US-20020025099-$ or US-	US-PGPUB; USPAT; JPO	OR	ON	2020/07/22 18:13

		20020028055-$ or US-20020031310-$ or US-20020031309-$ or US-20020061171-$ or US-20020064349-$ or US-20020081076-$ or US-20020090177-$ or US-20020094727-$ or US-20020106167-$ or US-20020114581-$ or US-20020118926-$ or US-20020126961-$ or US-20020131720-$).did. or (US-20020150344-$ or US-20020150343-$ or US-20020150353-$ or US-20020150346-$ or US-20020150345-$ or US-20020150342-$ or US-20020159745-$ or US-20020159714-$ or US-20020159712-$ or US-20020168149-$ or US-20020166226-$ or US-20020172469-$ or US-20020177364-$ or US-20020181888-$ or US-20020181884-$ or US-20020186934-$ or US-20020186742-$ or US-20020191881-$ or US-20020197017-$ or US-20020197018-$ or US-20030002816-$ or US-20030002808-$ or US-20030007739-$ or US-20030012512-$ or US-20030031449-$ or US-20030031422-$ or US-20030044122-$).did. or (US-20030044115-$ or US-20030053760-$ or US-20030063868-$ or US-20030063866-$ or US-20030063862-$ or US-20030068135-$ or US-20030072536-$ or US-20030081905-$ or US-20030087505-$ or US-20030091292-$ or US-20030095780-$ or US-20030095779-$ or US-20030103730-$ or US-20030108320-$ or US-20030113086-$ or US-20030128934-$ or US-20030142918-$ or US-20030147597-$ or US-20030147230-$ or US-20030156796-$ or US-20030169975-$ or US-20030169974-$ or US-20030174996-$ or US-20030174972-$ or US-20030174922-$ or US-20030180005-$ or US-20030185520-$).did. or (US-20030189214-$ or US-20030194188-$ or US-20030198029-$ or US-20030231838-$ or US-20040013369-$ or US-20040028340-$ or US-20040033050-$ or US-20040033028-$ or US-20040033027-$ or US-20040036987-$ or US-20040042710-$ or US-20040052471-$ or US-				

		20040054761-$ or US-20040062488-$ or US-20040062486-$ or US-20040072454-$ or US-20040071438-$ or US-20040074852-$ or US-20040081418-$ or US-20040091228-$ or US-20040101253-$ or US-20040105325-$ or US-20040105278-$ or US-20040120652-$ or US-20040131315-$ or US-20040136656-$ or US-20040141692-$).did. or (US-20040151464-$ or US-20040151438-$ or US-20040156592-$ or US-20040161204-$ or US-20040165830-$ or US-20040179787-$ or US-20040184740-$ or US-20040182971-$ or US-20040197053-$ or US-20040202431-$ or US-20040208459-$ or US-20040223701-$ or US-20040240793-$ or US-20040247255-$ or US-20040264873-$ or US-20040266257-$ or US-20040264908-$ or US-20040264876-$ or US-20050008300-$ or US-20050013547-$ or US-20050041928-$ or US-20050069263-$ or US-20050074211-$ or US-20050094948-$ or US-20050094943-$ or US-20050112939-$ or US-20050111796-$).did. or (US-20050118880-$ or US-20050135753-$ or US-20050141817-$ or US-20050185894-$ or US-20050207708-$ or US-20050215119-$ or US-20050220423-$ or US-20050220420-$ or US-20050226586-$ or US-20050232552-$ or US-20050238289-$ or US-20050281526-$ or US-20050281509-$ or US-20050286833-$ or US-20050286835-$ or US-20060013539-$ or US-20060056769-$ or US-20060072878-$ or US-20060083468-$ or US-20060083467-$ or US-20060088248-$ or US-20060093275-$ or US-20060098914-$ or US-20060133758-$ or US-20060140542-$ or US-20060147156-$ or US-20060147155-$).did. or (US-20060154529-$ or US-20060153503-$ or US-20060159401-$ or US-20060159399-$ or US-20060169856-$ or US-20060177182-$ or US-20060197943-$ or US-20060204200-$ or US-20060204180-$ or US-20060245711-$ or US-20060263011-				

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		(US-4898446-$ or US-4960317-$ or US-4964688-$ or US-4976510-$ or US-4986762-$ or US-4986622-$ or US-4991929-$ or US-4993803-$ or US-4995688-$ or US-4998797-$ or US-5013124-$ or US-5015060-$ or US-5016970-$ or US-5018823-$ or US-5042891-$ or US-5048916-$ or US-5052774-$ or US-5058983-$ or US-5073042-$ or US-5077815-$ or US-5091991-$ or US-5091990-$ or US-5109453-$ or US-5115484-$ or US-5119455-$ or US-5124506-$ or US-5127073-$).did. or (US-5129024-$ or US-5133032-$ or US-5134677-$ or US-5134676-$ or US-5155795-$ or US-5159654-$ or US-5177808-$ or US-5179607-$ or US-5210815-$ or US-5214730-$ or US-5228104-$ or US-5233675-$ or US-5233674-$ or US-5239606-$ or US-5267342-$ or US-5274729-$ or US-5280552-$ or US-5282259-$ or US-5293581-$ or US-5297227-$ or US-5317663-$ or US-5323475-$ or US-5329541-$ or US-5333222-$ or US-5333221-$ or US-5359688-$ or US-5363460-$).did. or (US-5367594-$ or US-5366383-$ or US-5384885-$ or US-5386485-$ or US-5408557-$ or US-5418875-$ or US-5420951-$ or US-5444806-$ or US-5446817-$ or US-5450519-$ or US-5452391-$ or US-5485537-$ or US-5497444-$ or US-5506922-$ or US-5519799-$ or US-5521998-$ or US-5528711-$ or US-5530783-$ or US-5537501-$ or US-5542015-$ or US-5548674-$ or US-5550943-$ or US-5563978-$ or US-5563971-$ or US-5570445-$ or US-5574813-$ or US-5579429-$).did. or (US-5581644-$ or US-5588086-$ or US-5592323-$ or US-5600746-$ or US-5603631-$ or US-5607323-$ or US-5619610-$ or US-5633969-$ or US-5642450-$ or US-5647043-$ or US-5645449-$ or US-5661833-$ or US-5666449-$ or US-5664955-$ or US-5668904-$ or US-5671310-$ or US-5673346-$ or US-5680494-$ or US-5682449-$ or US-5687268-$ or US-5694507-$ or US-5694506-$ or US-5701380-$ or US-5721799-$ or				

		US-5727102-$ or US-5732174-$ or US-5734770-$).did. or (US-5737464-$ or US-5751874-$ or US-5761359-$ or US-5764043-$ or US-5774611-$ or US-5774612-$ or US-5778122-$ or US-5781680-$ or US-5796896-$ or US-5799122-$ or US-5809191-$ or US-5815618-$ or US-5818993-$ or US-5825955-$ or US-5832158-$ or US-5838856-$ or US-5838855-$ or US-5845036-$ or US-5862282-$ or US-5867621-$ or US-5881191-$ or US-5887100-$ or US-5887098-$ or US-5892870-$ or US-5896477-$ or US-5909526-$ or US-5909298-$).did. or (US-5915058-$ or US-5923805-$ or US-5930426-$ or US-5930425-$ or US-5937121-$ or US-5940561-$ or US-5940559-$ or US-5949946-$ or US-5953474-$ or US-5953473-$ or US-5956444-$ or US-5960137-$ or US-5969294-$ or US-5971626-$ or US-5980117-$ or US-5987203-$ or US-5993071-$ or US-6004043-$ or US-6022149-$ or US-6027252-$ or US-6041155-$ or US-6048103-$ or US-6048102-$ or US-6053639-$ or US-6059461-$ or US-6064791-$ or US-6076973-$).did. or (US-6076975-$ or US-6081647-$ or US-6079881-$ or US-6088502-$ or US-6095694-$ or US-6104856-$ or US-6102581-$ or US-6108482-$ or US-6116790-$ or US-6116789-$ or US-6116101-$ or US-6132105-$ or US-6139346-$ or US-6142676-$ or US-6149315-$ or US-6154597-$ or US-6164835-$ or US-6164834-$ or US-6173099-$ or US-6179480-$ or US-6179475-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6190616-$ or US-6195477-$ or US-6193420-$).did. or (US-6196729-$ or US-6200040-$ or US-6206577-$ or US-6217226-$ or US-6220763-$ or US-6220762-$ or US-6224269-$ or US-6227719-$ or US-6227718-$ or US-6240229-$ or US-6238249-$ or US-6243526-$ or US-6247851-$ or US-6247849-$ or US-6256446-$ or US-6259839-$ or US-6264373-$ or US-6264372-$ or US-6267513-$ or US-6273618-$ or US-6290527-$				

		or US-6301004-$ or US-6302592-$ or US-6309111-$ or US-6318904-$ or US-6318903-$ or US-6334715-$).did. or (US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6354746-$ or US-6357932-$ or US-6361218-$ or US-6364536-$ or US-6367986-$ or US-6367984-$ or US-6371659-$ or US-6377840-$ or US-6375363-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6389212-$ or US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6409391-$ or US-6412987-$ or US-6419810-$ or US-6422759-$ or US-6425692-$ or US-6425694-$ or US-6431762-$ or US-6437894-$).did. or (US-6435946-$ or US-6445867-$ or US-6456768-$ or US-6457876-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6466724-$ or US-6464406-$ or US-6467971-$ or US-6467970-$ or US-6471417-$ or US-6471412-$ or US-6474876-$ or US-6478472-$ or US-6481900-$ or US-6481899-$ or US-6485192-$ or US-6497518-$ or US-6497516-$ or US-6501900-$ or US-6508593-$ or US-6526210-$ or US-6524015-$ or US-6527450-$ or US-6533469-$ or US-6543941-$).did. or (US-6554482-$ or US-6558044-$ or US-6561699-$ or US-6572276-$ or US-6572273-$ or US-6582132-$ or US-6595696-$ or US-6601995-$ or US-6612750-$ or US-6619859-$ or US-6619856-$ or US-6632023-$ or US-6634794-$ or US-6644866-$ or US-6667803-$ or US-6695485-$ or US-6702477-$ or US-6702475-$ or US-6786647-$ or US-6789953-$ or US-6793399-$ or US-6840680-$ or US-6856748-$ or US-6895146-$ or US-7232261-$ or US-7435009-$ or US-7530845-$).did. or (US-7585118-$ or US-7588373-$ or US-7706657-$ or US-7738757-$ or US-7972066-$ or US-8070366-$ or US-8206040-$ or US-8517614-$ or US-8588571-$ or US-8953922-$ or US-9229177-$ or US-9229170-$ or US-9291781-$ or US-9316794-$ or US-9323007-$ or US-9448369-$ or US-9453972-$ or US-				

		9482825-$ or US-9551831-$ or US-9625655-$ or US-9632267-$ or US-9638871-$ or US-9638868-$ or US-9645335-$ or US-9658407-$ or US-9671570-$ or US-9671568-$).did. or (US-9678282-$ or US-9696477-$ or US-9722367-$ or US-9720184-$ or US-9726829-$ or US-9735523-$ or US-9733123-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9746625-$ or US-9746368-$ or US-9759874-$ or US-9759869-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9784928-$ or US-9798090-$ or US-9797806-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9817195-$ or US-9823428-$ or US-9829643-$ or US-9827438-$).did. or (US-9835807-$ or US-9841566-$ or US-9857545-$ or US-9857537-$ or US-9864151-$ or US-9869824-$ or US-9876309-$ or US-9874702-$ or US-9880365-$ or US-9880357-$ or US-9885841-$ or US-9893813-$ or US-9891392-$ or US-9891387-$ or US-9891385-$ or US-9897767-$ or US-9904021-$ or US-9904020-$ or US-9910228-$ or US-9910226-$ or US-9915793-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9939600-$ or US-9939590-$ or US-9948017-$).did. or (US-9946036-$ or US-10007069-$ or US-10018787-$).did. or (JP-2016095432-$ or JP-2016095410-$ or JP-2016122100-$ or JP-2016177309-$ or JP-2016188927-$ or JP-2017053937-$ or JP-2017090798-$ or JP-2017111444-$ or JP-2017134118-$ or JP-2017138535-$ or JP-2017151338-$ or JP-2017219768-$).did.				
S651	737	(US-20010041030-$ or US-20020025125-$ or US-20020106162-$ or US-20020114589-$ or US-20020159710-$ or US-20030031452-$ or US-20030044127-$ or US-20030044125-$ or US-20030180004-$ or US-20030223703-$ or US-20040008494-$ or US-20040017983-$ or US-20040017981-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 18:13

		20040038558-$ or US-20040052472-$ or US-20040062498-$ or US-20040105628-$ or US-20040131317-$ or US-20040223699-$ or US-20040228589-$ or US-20050036744-$ or US-20050053342-$ or US-20050111795-$ or US-20050123246-$ or US-20050135755-$ or US-20050135752-$).did. or (US-20050271328-$ or US-20060045430-$ or US-20060051028-$ or US-20060093282-$ or US-20060153504-$ or US-20060193562-$ or US-20060280409-$ or US-20060285807-$ or US-20070058907-$ or US-20070098327-$ or US-20070160327-$ or US-20080069501-$ or US-20080112672-$ or US-20080124031-$ or US-20080131055-$ or US-20080253719-$ or US-20090003772-$ or US-20090290839-$ or US-20090305542-$ or US-20100322561-$ or US-20110038590-$ or US-20110075971-$ or US-20110091159-$ or US-20110222819-$ or US-20110249942-$ or US-20120027355-$ or US-20120057824-$).did. or (US-20120076459-$ or US-20120082416-$ or US-20120099822-$ or US-20120141070-$ or US-20120251054-$ or US-20120251051-$ or US-20120263423-$ or US-20120263419-$ or US-20120308183-$ or US-20130051749-$ or US-20130064508-$ or US-20130077914-$ or US-20130121645-$ or US-20130129280-$ or US-20130183001-$ or US-20130216189-$ or US-20130230283-$ or US-20130259429-$ or US-20130272671-$ or US-20130308908-$ or US-20140056560-$ or US-20140064665-$ or US-20140064688-$ or US-20140072265-$ or US-20140086545-$ or US-20140147081-$ or US-20140205241-$).did. or (US-20140219614-$ or US-20140219624-$ or US-20140314385-$ or US-20140341510-$ or US-20150003785-$ or US-20150023637-$ or US-20150049989-$ or US-20150071591-$ or US-20150177463-$ or US-20150226926-$ or US-20150241644-$ or US-20150301286-$ or US-				

		20150331201-$ or US-20150338583-$ or US-20150370017-$ or US-20150378112-$ or US-20160004018-$ or US-20160004016-$ or US-20160025937-$ or US-20160077287-$ or US-20160077284-$ or US-20160109661-$ or US-20160131854-$ or US-20160131849-$ or US-20160161680-$ or US-20160178859-$ or US-20160259135-$).did. or (US-20160282566-$ or US-20160282562-$ or US-20160320571-$ or US-20160349464-$ or US-20170059784-$ or US-20170090128-$ or US-20170090127-$ or US-20170102506-$ or US-20170102504-$ or US-20170108653-$ or US-20170115457-$ or US-20170139150-$ or US-20170153398-$ or US-20170184798-$ or US-20170184790-$ or US-20170205587-$ or US-20170219779-$ or US-20170227720-$ or US-20170235060-$ or US-20170242200-$ or US-20170242199-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170261698-$ or US-20170269309-$ or US-20170276883-$).did. or (US-20170276881-$ or US-20170293088-$ or US-20170293087-$ or US-20170307831-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170357060-$ or US-20170357059-$ or US-20170363827-$ or US-20180003903-$ or US-20180011258-$ or US-20180011254-$ or US-20180031774-$ or US-20180052288-$ or US-20180077472-$ or US-20180081128-$ or US-20180081125-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180106973-$ or US-20180156988-$ or US-20180156985-$ or US-20180210154-$).did. or (US-4240695-$ or US-4320938-$ or US-4330172-$ or US-4477146-$ or US-4687291-$ or US-4737009-$ or US-4854664-$ or US-4856866-$ or US-4886335-$ or US-4915472-$ or US-4953929-$ or US-4955976-$ or US-5064268-$ or US-5076656-$ or US-5082346-$ or US-			

		5082344-$ or US-5101463-$ or US-5134673-$ or US-5157749-$ or US-5166995-$ or US-5199093-$ or US-5259052-$ or US-5555332-$ or US-5666456-$ or US-5692080-$ or US-5867894-$).did. or (US-5870515-$ or US-5883995-$ or US-5920670-$ or US-5920669-$ or US-5984533-$ or US-6012852-$ or US-6095695-$ or US-6210045-$ or US-6250817-$ or US-6305849-$ or US-6318902-$ or US-6331079-$ or US-6379052-$ or US-6409392-$ or US-6422761-$ or US-6422760-$ or US-6450698-$ or US-6487343-$ or US-6491442-$ or US-6533465-$ or US-6554486-$ or US-6623172-$ or US-6688782-$ or US-6712521-$ or US-6764222-$ or US-6839583-$ or US-6848834-$).did. or (US-6944378-$ or US-7036996-$ or US-8388235-$ or US-9207454-$ or US-9316791-$ or US-9377591-$ or US-9389368-$ or US-9482820-$ or US-9606303-$ or US-9625657-$ or US-9664864-$ or US-9678283-$ or US-9678286-$ or US-9684134-$ or US-9696497-$ or US-9703062-$ or US-9709753-$ or US-9726830-$ or US-9733436-$ or US-9733434-$ or US-9798096-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9829650-$ or US-9835808-$ or US-9846283-$).did. or (US-9851512-$ or US-9891390-$ or US-9904019-$ or US-9910229-$ or US-9927582-$ or US-9939589-$ or US-9946037-$).did. or (IT-7819792-$ or FR-2363124-$ or IT-7925110-$ or GB-2057158-$ or FR-2487528-$ or GB-2081468-$ or EP-0061243-$ or DK-208682-$ or GB-8306227-$ or IT-8323399-$ or JP-S5856846-$ or EP-0125398-$ or FR-2535069-$ or WO-8600147-$ or EP-0249237-$ or EP-0262847-$ or EP-0262631-$ or DE-8626183-$ or WO-9015350-$ or EP-0408852-$ or GB-9103604-$ or GB-9106183-$ or CA-2030897-$ or DE-9107960-$ or GB-9206076-$ or CA-2057559-$).did. or (CA-2082276-$ or EP-0633485-$ or EP-0690319-$ or CA-2191600-$ or EP-0696748-$ or EP-0697608-$ or CN-1118443-$				

		or WO-9627811-$ or EP-0758099-$ or WO-9734176-$ or CA-2198522-$ or EP-0803750-$ or NL-1003147-$ or EP-0807837-$ or CA-2254335-$ or CA-2294930-$ or CA-2262351-$ or EP-0938003-$ or JP-2945144-$ or CA-2324565-$ or GB-9919699-$ or EP-0992819-$ or CA-2284331-$ or GB-0007281-$ or CA-2288249-$ or DE-19728960-$ or EP-1033595-$).did. or (EP-1033594-$ or EP-1039324-$ or EP-1039322-$ or EP-1041416-$ or EP-1041414-$ or JP-3106420-$ or CA-2321428-$ or EP-1091225-$ or WO-0137010-$ or EP-1107031-$ or KR-20010062142-$ or WO-0155762-$ or EP-1124147-$ or WO-0161397-$ or WO-0181965-$ or CA-2350290-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or KR-20020000530-$ or KR-20020001574-$ or CN-1331421-$ or EP-1172672-$ or EP-1172673-$ or KR-20020006481-$ or KR-20020006480-$ or DE-20118858-$).did. or (CA-2418331-$ or KR-20020050140-$ or WO-02056060-$ or WO-02061481-$ or DE-10114144-$ or NL-1018440-$ or WO-03016975-$ or WO-03093883-$ or CA-2484569-$ or EP-1394584-$ or AU-2003291687-$ or EP-1530068-$ or CA-2503690-$ or CN-1677147-$ or CN-1707299-$ or WO-2008006402-$ or EP-1887395-$ or CN-101122658-$ or WO-2008029850-$ or CA-2662854-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or CA-2689768-$ or EP-2206458-$ or WO-2010137426-$ or CA-2762411-$).did. or (EP-2302431-$ or WO-2011139938-$ or WO-2011152874-$ or EP-2444827-$ or WO-2012054174-$ or WO-2012054174-$ or WO-2012151175-$ or GB-201218194-$ or CN-102870023-$ or WO-2013115791-$ or WO-2013115789-$ or WO-2013126068-$ or CA-2912155-$ or WO-2014009463-$ or WO-2014011898-$ or EP-2700992-$ or JP-5433802-$ or WO-2014049469-$				

		or WO-2014113753-$ or CA-2836675-$ or WO-2014143748-$ or WO-2014165175-$ or WO-2014197701-$ or CN-104241938-$ or CA-2917189-$ or EP-2840425-$ or EP-2843452-$).did. or (WO-2015028433-$ or CA-2885821-$ or WO-2015068103-$ or CA-2932688-$ or GB-201507758-$ or WO-2015103783-$ or WO-2015116589-$ or CN-204595258-$ or WO-2015144883-$ or EP-2942653-$ or EP-2947485-$ or WO-2015190211-$ or WO-2016004347-$ or CN-105278047-$ or DE-202013012295-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or CA-2928026-$ or WO-2016043922-$ or JP-5905950-$ or WO-2016067668-$ or EP-3021145-$ or WO-2016082160-$ or WO-2016103821-$ or DE-202016103178-$ or EP-3054333-$).did. or (WO-2016161341-$ or WO-2017038704-$ or JP-6173629-$ or WO-2017180257-$ or CN-206584076-$ or EP-3258301-$ or WO-2018003776-$ or WO-2018004847-$).did. or (JP-54034251-$ or JP-55101904-$ or JP-56066811-$ or JP-56074211-$ or JP-59075218-$ or JP-04214510-$ or JP-04220604-$ or JP-05313040-$ or JP-08015541-$ or JP-09005575-$ or JP-09033756-$ or JP-10104469-$ or JP-11072659-$ or JP-2000089061-$ or JP-2000284146-$ or JP-2000292655-$ or JP-2000310724-$ or JP-2001013372-$ or JP-2001021764-$ or JP-2001242361-$ or JP-2009294343-$ or JP-2012053420-$ or JP-2012078513-$ or JP-2015022131-$).did. or (DE-2805949-$ or DE-2932986-$ or GB-2057158-$ or GB-2081468-$ or EP-61243-$ or GB-2098354-$ or DE-3208797-$ or EP-125398-$ or US-4496213-$ or WO-8600147-$ or EP-249237-$ or EP-262631-$ or US-4953929-$ or WO-9015350-$ or GB-2241794-$ or US-5064268-$ or WO-9117540-$ or EP-458608-$ or US-5101463-$ or EP-490698-$ or EP-505197-$ or EP-430107-$ or EP-660145-$ or EP-				

		660144-$ or EP-663602-$ or EP-663601-$).did. or (WO-9600917-$ or EP-696748-$ or EP-697608-$ or WO-9627811-$ or EP-758099-$ or WO-9734176-$ or EP-803750-$ or US-5692080-$ or WO-9746900-$ or WO-9857208-$ or WO-9947958-$ or GB-2341455-$ or EP-1041416-$ or EP-1041414-$ or EP-1091225-$ or WO-0140839-$ or EP-1107031-$ or EP-1124147-$ or WO-0181965-$ or US-20010041030-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or EP-1172673-$ or EP-1172672-$ or DE-20118858-$ or WO-02056060-$).did. or (US-6422760-$ or WO-02061481-$ or US-20030031437-$ or US-20030044125-$ or WO-03094297-$ or WO-03093883-$ or EP-1394584-$ or US-20040062498-$ or US-20040223699-$ or US-20040228589-$ or US-20050053342-$ or WO-2006022840-$ or US-20060153503-$ or US-20060165352-$ or US-20060193562-$ or EP-1752805-$ or US-20070058907-$ or US-20070077010-$ or US-20070098327-$ or US-20090041411-$ or US-20090060423-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or EP-2206458-$ or WO-2010137426-$ or EP-2302431-$).did. or (US-20110249942-$ or US-20110274437-$ or WO-2011152874-$ or KR-2012000895-$ or US-20120027355-$ or US-20120057824-$ or US-20120082416-$ or EP-2444827-$ or US-20120099822-$ or US-20120251051-$ or US-20120251054-$ or US-20120263419-$ or WO-2012151175-$ or US-20120308183-$ or CN-102870023-$ or TW-201309089-$ or US-20130051749-$ or WO-2013036843-$ or CN-103091793-$ or US-20130121645-$ or WO-2013115789-$ or WO-2013115791-$ or WO-2013122865-$ or WO-2013126068-$ or US-20130230283-$ or US-20130259429-$ or WO-2013155395-$).did. or (WO-2013177234-$ or WO-2014011898-$ or US-20140016901-$				

		or EP-2700992-$ or JP-5433802-$ or US-20140064688-$ or TW-474924-$ or WO-2014049469-$ or US-20140147081-$ or US-20140153879-$ or ES-1110405-$ or WO-2014113753-$ or EP-2759860-$ or US-20140219624-$ or WO-2014143748-$ or WO-2014165175-$ or US-20140321808-$ or US-20140363131-$ or WO-2014197701-$ or EP-2818903-$ or WO-2015009435-$ or US-20150023637-$ or US-20150049989-$ or WO-2015028433-$ or WO-2015068103-$ or WO-2015070382-$ or US-20150162982-$).did. or (US-20150177463-$ or WO-2015103783-$ or WO-2015116589-$ or US-20150219864-$ or US-20150226926-$ or US-20150226925-$ or US-20150241644-$ or CN-104950402-$ or WO-2015144883-$ or US-20150286012-$ or DE-102015106225-$ or US-20150331201-$ or EP-2947485-$ or WO-2015190211-$ or US-20150378110-$ or US-20160004016-$ or US-20160004018-$ or US-20160025937-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or WO-2016033577-$ or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016043922-$ or JP-5905950-$).did. or (US-20160124158-$ or US-20160131854-$ or EP-3021145-$ or US-20160161680-$ or US-20160178852-$ or US-20160178859-$ or US-9377591-$ or US-9389368-$ or EP-3054333-$ or US-20160259135-$ or CN-105978629-$ or US-20160282566-$ or WO-2016161341-$ or US-20160306125-$ or US-9482820-$ or US-20160341908-$ or US-20160341911-$ or US-20160349466-$ or US-20160377819-$ or US-20170031106-$ or US-20170059784-$ or WO-2017038704-$ or US-20170090127-$ or US-20170102504-$ or US-20170115457-$ or US-20170139150-$ or US-20170139156-$).did. or (US-20170153398-$ or US-9678283-$ or				

		US-20170184790-$ or US-9709753-$ or US-20170205587-$ or JP-6173629-$ or US-20170219779-$ or US-9726830-$ or US-20170227720-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170293088-$ or US-20170307830-$ or US-9804340-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170371109-$ or US-20180003903-$ or US-20180011258-$ or US-20180052288-$ or US-20180081128-$ or US-20180106973-$ or US-20180120519-$ or US-20180128988-$).did.				
S652	136	(US-20020176671-$ or US-20040017980-$ or US-20040126118-$ or US-20040197054-$ or US-20070172177-$ or US-20070286554-$ or US-20100008635-$ or US-20100129034-$ or US-20100290745-$ or US-20110116749-$ or US-20110222830-$ or US-20110229096-$ or US-20110229095-$ or US-20110225792-$ or US-20110255831-$ or US-20110262078-$ or US-20110262077-$ or US-20120014648-$ or US-20120063724-$ or US-20120275749-$ or US-20130136402-$ or US-20130315538-$ or US-20140286610-$ or US-20150016781-$ or US-20150110448-$ or US-20160124170-$).did. or (US-20160202429-$ or US-20170045691-$ or US-20170285277-$ or US-20170299820-$ or US-20180120519-$ or US-20180143380-$ or US-20180231722-$ or US-20180239093-$ or US-20180267255-$ or US-20180292618-$ or US-20180292612-$ or US-20180364421-$ or US-20190107679-$ or US-20190107678-$ or US-20190113691-$ or US-20190137701-$ or US-20190179085-$).did. or (US-5504825-$ or US-5613021-$ or US-5661826-$ or US-6045270-$ or US-6276840-$ or US-6293708-$ or US-6623170-$ or US-6796717-$ or US-6848840-$ or US-6866425-$ or US-6932514-$ or US-6944387-$ or US-6976793-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 18:13

		7094091-$ or US-7178994-$ or US-7182522-$ or US-7234874-$ or US-7241056-$ or US-7300216-$ or US-7536075-$ or US-7654748-$ or US-7891882-$ or US-7912336-$ or US-8052333-$ or US-8231282-$ or US-8235600-$).did. or (US-8262296-$ or US-8317407-$ or US-8346047-$ or US-8348519-$ or US-8348518-$ or US-8376634-$ or US-8406583-$ or US-8417074-$ or US-8494329-$ or US-8496384-$ or US-8529138-$ or US-8542972-$ or US-8550725-$ or US-8550724-$ or US-8579521-$ or US-8690593-$ or US-8714835-$ or US-8821038-$ or US-8821037-$ or US-8915653-$ or US-8958679-$ or US-9014527-$ or US-9031364-$ or US-9057848-$ or US-9146376-$ or US-9146360-$ or US-9417401-$).did. or (US-9513442-$ or US-9541711-$ or US-9557497-$ or US-9563025-$ or US-9606297-$ or US-9632255-$ or US-9645318-$ or US-9658409-$ or US-9684139-$ or US-9739949-$ or US-9753228-$ or US-9772464-$ or US-9857538-$ or US-9977199-$ or US-9989710-$ or US-10012801-$ or US-10054747-$ or US-10061090-$ or US-10067302-$ or US-10067300-$ or US-10088636-$ or US-10101539-$ or US-10139570-$ or US-10146014-$ or US-10156684-$ or US-10209473-$).did. or (WO-2010083369-$ or EP-2380054-$ or CN-102282495-$ or WO-2014152675-$ or WO-2015043158-$ or CN-104516073-$ or CN-102282495-$ or WO-2018125706-$).did. or (JP-57044113-$).did. or (US-20160327757-$ or US-20170299820-$ or WO-2018125706-$ or US-20190107679-$).did.				
S653	2,087	S649 S650 S651 S652	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:13

S654	56,021	(ferrule connector) with insert$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S655	66,377	G02B6/38$.cpc.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:13
S656	2,541	S654 and S655	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:13
S657	14,591	adapter with (groove channel) with (top bottom upper lower)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S658	102	S656 and S657	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S659	62	S658 not S653	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S660	1,186,315	(groove channel) with upper with lower	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S661	735,634	(groove channel) with top with bottom	US-PGPUB; USPAT; USOCR;	OR	ON	2020/07/22 18:13

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S662	447	S656 and (S660 S661)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:13
S663	325	S662 not (S653 S659)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S664	15,680	("ferrules" "connectors") with align$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S665	2,186	S655 and S664	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S666	353	S665 and (S660 S661)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:13
S667	167	S666 not (S653 S659 S663)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S668	11,374	G02B6/3825,3826.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2020/07/22 18:13

			DERWENT; IBM_TDB			
S669	441	S664 and S668	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:13
S670	206	S669 not (S653 S659 S663 S667)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S671	26,017	("ferrules" "connectors") with align$4 with (groove channel slot)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S672	705	S671 and S668	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:13
S673	151	S672 not (S653 S659 S663 S667 S670)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S674	2,998	S653 S659 S663 S667 S670 S673	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:13
S675	81	(US-20040101250-$ or US-20140205247-$ or US-20170160486-$ or US-20180239091-$).did. or (US-3999837-$ or US-4252407-$ or US-6116790-$ or US-6371659-$ or US-6461053-$ or US-6585423-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 18:14

		7001079-$ or US-9039298-$ or US-9823424-$).did. or (DE-2558445-$ or FR-2296862-$ or BR-7508734-$ or ES-444034-$ or GB-1503979-$ or IT-7869677-$ or CA-1043604-$ or BE-871785-$ or DK-522978-$ or NL-7811579-$ or DE-2849975-$ or GB-2009440-$ or FR-2435053-$ or FR-2446496-$ or CA-1097111-$ or IT-1050771-$ or FR-2446496-$ or FR-2435053-$ or CH-628152-$ or GB-2009440-$ or DE-3112078-$ or FR-2296862-$ or DE-2558445-$ or DE-3112078-$ or IT-1109638-$ or DE-2849975-$).did. or (DK-151733-$ or DK-151733-$ or DK-151733-$ or DE-19626036-$ or WO-9800741-$ or AU-2975197-$ or WO-9928774-$ or EP-0985161-$ or EP-1034445-$ or EP-1092995-$ or EP-1092995-$ or EP-1034445-$ or EP-0985161-$ or ES-2202617-$ or EP-1092995-$ or DE-60010402-$ or DE-60010402-$ or JP-3984293-$ or EP-2138880-$ or JP-4514004-$ or WO-2016053853-$ or WO-2017065999-$ or WO-2017065999-$ or EP-3201668-$ or CN-108351473-$ or CN-208140982-$ or EP-3201668-$).did. or (JP-2001154062-$).did. or (DE-2558445-$ or BE-871785-$ or DE-19626036-$ or WO-9928774-$ or EP-1092995-$ or US-20140205247-$ or CN-104516061-$ or CN-104570229-$ or WO-2016053853-$ or WO-2017065999-$ or US-20180364421-$).did.				
S676	1,140	(US-20010010741-$ or US-20010016102-$ or US-20010033730-$ or US-20010038737-$ or US-20010043776-$ or US-20010048790-$ or US-20020006253-$ or US-20020012503-$ or US-20020012502-$ or US-20020012501-$ or US-20020012238-$ or US-20020025121-$ or US-20020025099-$ or US-20020028055-$ or US-20020031310-$ or US-20020031309-$ or US-20020061171-$ or US-20020064349-$ or US-20020081076-$ or US-20020090177-$ or US-20020094727-$ or US-20020106167-$ or US-	US-PGPUB; USPAT; JPO	OR	ON	2020/07/22 18:14

		20020114581-$ or US-20020118926-$ or US-20020126961-$ or US-20020131720-$).did. or (US-20020150344-$ or US-20020150343-$ or US-20020150353-$ or US-20020150346-$ or US-20020150345-$ or US-20020150342-$ or US-20020159745-$ or US-20020159714-$ or US-20020159712-$ or US-20020168149-$ or US-20020166226-$ or US-20020172469-$ or US-20020177364-$ or US-20020181888-$ or US-20020181884-$ or US-20020186934-$ or US-20020186742-$ or US-20020191881-$ or US-20020197017-$ or US-20020197018-$ or US-20030002816-$ or US-20030002808-$ or US-20030007739-$ or US-20030012512-$ or US-20030031449-$ or US-20030031422-$ or US-20030044122-$).did. or (US-20030044115-$ or US-20030053760-$ or US-20030063868-$ or US-20030063866-$ or US-20030063862-$ or US-20030068135-$ or US-20030072536-$ or US-20030081905-$ or US-20030087505-$ or US-20030091292-$ or US-20030095780-$ or US-20030095779-$ or US-20030103730-$ or US-20030108320-$ or US-20030113086-$ or US-20030128934-$ or US-20030142918-$ or US-20030147597-$ or US-20030147230-$ or US-20030156796-$ or US-20030169975-$ or US-20030169974-$ or US-20030174996-$ or US-20030174972-$ or US-20030174922-$ or US-20030180005-$ or US-20030185520-$).did. or (US-20030189214-$ or US-20030194188-$ or US-20030198029-$ or US-20030231838-$ or US-20040013369-$ or US-20040028340-$ or US-20040033050-$ or US-20040033028-$ or US-20040033027-$ or US-20040036987-$ or US-20040042710-$ or US-20040052471-$ or US-20040054761-$ or US-20040062488-$ or US-20040062486-$ or US-20040072454-$ or US-20040071438-$ or US-20040074852-$ or US-20040081418-$ or US-20040091228-$ or US-20040101253-$ or US-				

		20040105325-$ or US-20040105278-$ or US-20040120652-$ or US-20040131315-$ or US-20040136656-$ or US-20040141692-$).did. or (US-20040151464-$ or US-20040151438-$ or US-20040156592-$ or US-20040161204-$ or US-20040165830-$ or US-20040179787-$ or US-20040184740-$ or US-20040182971-$ or US-20040197053-$ or US-20040202431-$ or US-20040208459-$ or US-20040223701-$ or US-20040240793-$ or US-20040247255-$ or US-20040264873-$ or US-20040266257-$ or US-20040264908-$ or US-20040264876-$ or US-20050008300-$ or US-20050013547-$ or US-20050041928-$ or US-20050069263-$ or US-20050074211-$ or US-20050094948-$ or US-20050094943-$ or US-20050112939-$ or US-20050111796-$).did. or (US-20050118880-$ or US-20050135753-$ or US-20050141817-$ or US-20050185894-$ or US-20050207708-$ or US-20050215119-$ or US-20050220423-$ or US-20050220420-$ or US-20050226586-$ or US-20050232552-$ or US-20050238289-$ or US-20050281526-$ or US-20050281509-$ or US-20050286833-$ or US-20050286835-$ or US-20060013539-$ or US-20060056769-$ or US-20060072878-$ or US-20060083468-$ or US-20060083467-$ or US-20060088248-$ or US-20060093275-$ or US-20060098914-$ or US-20060133758-$ or US-20060140542-$ or US-20060147156-$ or US-20060147155-$).did. or (US-20060154529-$ or US-20060153503-$ or US-20060159401-$ or US-20060159399-$ or US-20060169856-$ or US-20060177182-$ or US-20060197943-$ or US-20060204200-$ or US-20060204180-$ or US-20060245711-$ or US-20060263011-$ or US-20060269205-$ or US-20060269206-$ or US-20060269212-$ or US-20070019913-$ or US-20070036487-$ or US-20070098330-$ or US-20070098329-$ or US-20070105452-$ or US-20070116414-				

		$ or US-20070116411-$ or US-20070140623-$ or US-20070154135-$ or US-20070165984-$ or US-20070183780-$ or US-20070190834-$ or US-20070196053-$).did. or (US-20070196052-$ or US-20070201808-$ or US-20070201798-$ or US-20070212002-$ or US-20070223862-$ or US-20070230874-$ or US-20070263959-$ or US-20070280599-$ or US-20070285194-$ or US-20070297725-$ or US-20080008425-$ or US-20080013897-$ or US-20080013891-$ or US-20080019642-$ or US-20080019656-$ or US-20080044139-$ or US-20080050072-$ or US-20080085082-$ or US-20080095502-$ or US-20080095501-$ or US-20080100456-$ or US-20080170827-$ or US-20080175541-$ or US-20080175550-$ or US-20080175542-$ or US-20080175546-$ or US-20080175545-$).did. or (US-20080175532-$ or US-20080193086-$ or US-20080205825-$ or US-20080240658-$ or US-20080269845-$ or US-20080267566-$ or US-20080273837-$ or US-20080279503-$ or US-20080304792-$ or US-20080310796-$ or US-20080310800-$ or US-20080310795-$ or US-20080317411-$ or US-20090010600-$ or US-20090028507-$ or US-20090034912-$ or US-20090047800-$ or US-20090046981-$ or US-20090060422-$ or US-20090060418-$ or US-20090074359-$ or US-20090103878-$ or US-20090116791-$ or US-20090148101-$ or US-20090156043-$ or US-20090185778-$ or US-20090202214-$).did. or (US-20090214164-$ or US-20090226141-$ or US-20090226137-$ or US-20090232455-$ or US-20090232454-$ or US-20090257722-$ or US-20090257719-$ or US-20090274431-$ or US-20090274432-$ or US-20090285534-$ or US-20090285530-$ or US-20090290838-$ or US-20090304335-$ or US-20100002999-$ or US-20100021111-$ or US-20100029117-$ or US-20100027944-$ or US-20100027943-$ or US-				

		20100046893-$ or US-20100054665-$ or US-20100061681-$ or US-20100074616-$ or US-20100080513-$ or US-20100092134-$ or US-20100092131-$ or US-20100104355-$ or US-20100111484-$).did. or (US-20100129032-$ or US-20100129028-$ or US-20100135618-$ or US-20100141934-$ or US-20100146764-$ or US-20100158444-$ or US-20100183265-$ or US-20100202730-$ or US-20100202737-$ or US-20100209063-$ or US-20100209050-$ or US-20100215318-$ or US-20100215322-$ or US-20100226654-$ or US-20100232757-$ or US-20100239220-$ or US-20100239213-$ or US-20100247057-$ or US-20100247040-$ or US-20100260457-$ or US-20100266245-$ or US-20100272408-$ or US-20100278497-$ or US-20100278488-$ or US-20100284655-$ or US-20100296792-$ or US-20100303408-$).did. or (US-20100322580-$ or US-20100322576-$ or US-20100322554-$ or US-20100329604-$ or US-20100329602-$ or US-20110019964-$ or US-20110038592-$ or US-20110038581-$ or US-20110044583-$ or US-20110058772-$ or US-20110075969-$ or US-20110081798-$ or US-20110081116-$ or US-20110085774-$ or US-20110085765-$ or US-20110091166-$ or US-20110091154-$ or US-20110103797-$ or US-20110116748-$ or US-20110123156-$ or US-20110129186-$ or US-20110142398-$ or US-20110150396-$ or US-20110158593-$ or US-20110158586-$ or US-20110170830-$ or US-20110176777-$).did. or (US-20110188809-$ or US-20110188000-$ or US-20110194828-$ or US-20110200286-$ or US-20110198324-$ or US-20110200294-$ or US-20110206335-$ or US-20110206325-$ or US-20110206324-$ or US-20110211792-$ or US-20110229094-$ or US-20110243508-$ or US-20110243505-$ or US-20110243504-$ or US-20110268391-$ or US-20110293223-$ or US-20110299814-				

		$ or US-20110311186-$ or US-20110317976-$ or US-20120002928-$ or US-20120002925-$ or US-20120033918-$ or US-20120039569-$ or US-20120057831-$ or US-20120057830-$ or US-20120057827-$ or US-20120063735-$).did. or (US-20120069348-$ or US-20120099870-$ or US-20120106901-$ or US-20120114295-$ or US-20120128307-$ or US-20120141084-$ or US-20120155808-$ or US-20120163757-$ or US-20120170895-$ or US-20120195555-$ or US-20120219253-$ or US-20120224823-$ or US-20120237223-$ or US-20120237171-$ or US-20120243831-$ or US-20120243829-$ or US-20120251067-$ or US-20120252244-$ or US-20120251050-$ or US-20120257859-$ or US-20120263426-$ or US-20120294572-$ or US-20120301088-$ or US-20120301080-$ or US-20120321269-$ or US-20120321266-$ or US-20120321254-$).did. or (US-20130011099-$ or US-20130064517-$ or US-20130071068-$ or US-20130071067-$ or US-20130084041-$ or US-20130094827-$ or US-20130094815-$ or US-20130094811-$ or US-20130101257-$ or US-20130108231-$ or US-20130121643-$ or US-20130129285-$ or US-20130156379-$ or US-20130156382-$ or US-20130163937-$ or US-20130163933-$ or US-20130170797-$ or US-20130170796-$ or US-20130183018-$ or US-20130195405-$ or US-20130195418-$ or US-20130209040-$ or US-20130209049-$ or US-20130209052-$ or US-20130209051-$ or US-20130209050-$ or US-20130209041-$).did. or (US-20130216186-$ or US-20130216188-$ or US-20130284844-$ or US-20130287358-$ or US-20130302004-$ or US-20130322828-$ or US-20130323940-$ or US-20130322826-$ or US-20130330957-$ or US-20130343764-$ or US-20130343707-$ or US-20140016902-$ or US-20140023322-$ or US-20140038462-$ or US-20140044394-$ or US-				

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		$ or US-20150286011-$ or US-20150285999-$ or US-20150301288-$ or US-20150301293-$ or US-20150309279-$ or US-20150323752-$ or US-20150346452-$ or US-20150346449-$ or US-20150355417-$ or US-20150355414-$ or US-20150362678-$ or US-20150378117-$ or US-20150378111-$).did. or (US-20160004017-$ or US-20160011383-$ or US-20160011376-$ or US-20160018604-$ or US-20160018606-$ or US-20160033723-$ or US-20160041356-$ or US-20160047994-$ or US-20160062051-$ or US-20160070081-$ or US-20160085045-$ or US-20160085035-$ or US-20160085031-$ or US-20160091673-$ or US-20160111808-$ or US-20160109676-$ or US-20160116685-$ or US-20160116683-$ or US-20160116681-$ or US-20160131857-$ or US-20160139342-$ or US-20160139339-$ or US-20160147022-$ or US-20160154190-$ or US-20160161679-$ or US-20160170152-$ or US-20160178860-$).did. or (US-20160178855-$ or US-20160187589-$ or US-20160195683-$ or US-20160195681-$ or US-20160209605-$ or US-20160216454-$ or US-20160216460-$ or US-20160223763-$ or US-20160238798-$ or US-20160238794-$ or US-20160238789-$ or US-20160246011-$ or US-20160252685-$ or US-20160266330-$ or US-20160266329-$ or US-20160266327-$ or US-20160274311-$ or US-20160291259-$ or US-20160306123-$ or US-20160306121-$ or US-20160313513-$ or US-20160320567-$ or US-20160320566-$ or US-20160327757-$ or US-20160324402-$ or US-20160356966-$ or US-20160365685-$).did. or (US-20160370549-$ or US-20160370548-$ or US-20170003459-$ or US-20170035275-$ or US-20170059782-$ or US-20170068063-$ or US-20170082806-$ or US-20170097485-$ or US-20170097471-$ or US-20170102507-$ or US-20170108659-$ or US-20170108430-$ or US-				

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		$ or US-20180143384-$ or US-20180143381-$ or US-20180149813-$ or US-20180157002-$ or US-20180180819-$ or US-20180188460-$ or US-20180196204-$ or US-20180210155-$ or US-20180210153-$).did. or (US-3933409-$ or US-3999837-$ or US-4080044-$ or US-4087158-$ or US-4101198-$ or US-4140365-$ or US-4167304-$ or US-4168109-$ or US-4186996-$ or US-4201445-$ or US-4214812-$ or US-4218113-$ or US-4223976-$ or US-4252407-$ or US-4268115-$ or US-4268114-$ or US-4279469-$ or US-4291943-$ or US-4295707-$ or US-4327964-$ or US-4354731-$ or US-4368948-$ or US-4371233-$ or US-4387957-$ or US-4415232-$ or US-4422716-$).did. or (US-4444461-$ or US-4445753-$ or US-4447121-$ or US-4461539-$ or US-4466009-$ or US-4484796-$ or US-4487474-$ or US-4497536-$ or US-4526438-$ or US-4548467-$ or US-4614402-$ or US-4615581-$ or US-4645296-$ or US-4648688-$ or US-4666241-$ or US-4674831-$ or US-4681398-$ or US-4688887-$ or US-4699460-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4715674-$ or US-4717234-$ or US-4718744-$ or US-4722081-$ or US-4740052-$).did. or (US-4741590-$ or US-4758719-$ or US-4759600-$ or US-4759599-$ or US-4762389-$ or US-4767178-$ or US-4773725-$ or US-4781429-$ or US-4783137-$ or US-4786135-$ or US-4787700-$ or US-4789216-$ or US-4793683-$ or US-4795231-$ or US-4805980-$ or US-4807957-$ or US-4813760-$ or US-4824196-$ or US-4834486-$ or US-4842361-$ or US-4844570-$ or US-4846544-$ or US-4848870-$ or US-4850536-$ or US-4852963-$ or US-4877303-$ or US-4892380-$).did. or (US-4898446-$ or US-4960317-$ or US-4964688-$ or US-4976510-$ or US-4986762-$ or US-4986622-$ or US-4991929-$ or US-4993803-$ or US-4995688-$ or US-4998797-$ or US-5013124-$ or US-5015060-$ or				

		US-5016970-$ or US-5018823-$ or US-5042891-$ or US-5048916-$ or US-5052774-$ or US-5058983-$ or US-5073042-$ or US-5077815-$ or US-5091991-$ or US-5091990-$ or US-5109453-$ or US-5115484-$ or US-5119455-$ or US-5124506-$ or US-5127073-$).did. or (US-5129024-$ or US-5133032-$ or US-5134677-$ or US-5134676-$ or US-5155795-$ or US-5159654-$ or US-5177808-$ or US-5179607-$ or US-5210815-$ or US-5214730-$ or US-5228104-$ or US-5233675-$ or US-5233674-$ or US-5239606-$ or US-5267342-$ or US-5274729-$ or US-5280552-$ or US-5282259-$ or US-5293581-$ or US-5297227-$ or US-5317663-$ or US-5323475-$ or US-5329541-$ or US-5333222-$ or US-5333221-$ or US-5359688-$ or US-5363460-$).did. or (US-5367594-$ or US-5366383-$ or US-5384885-$ or US-5386485-$ or US-5408557-$ or US-5418875-$ or US-5420951-$ or US-5444806-$ or US-5446817-$ or US-5450519-$ or US-5452391-$ or US-5485537-$ or US-5497444-$ or US-5506922-$ or US-5519799-$ or US-5521998-$ or US-5528711-$ or US-5530783-$ or US-5537501-$ or US-5542015-$ or US-5548674-$ or US-5550943-$ or US-5563978-$ or US-5563971-$ or US-5570445-$ or US-5574813-$ or US-5579429-$).did. or (US-5581644-$ or US-5588086-$ or US-5592323-$ or US-5600746-$ or US-5603631-$ or US-5607323-$ or US-5619610-$ or US-5633969-$ or US-5642450-$ or US-5647043-$ or US-5645449-$ or US-5661833-$ or US-5666449-$ or US-5664955-$ or US-5668904-$ or US-5671310-$ or US-5673346-$ or US-5680494-$ or US-5682449-$ or US-5687268-$ or US-5694507-$ or US-5694506-$ or US-5701380-$ or US-5721799-$ or US-5727102-$ or US-5732174-$ or US-5734770-$).did. or (US-5737464-$ or US-5751874-$ or US-5761359-$ or US-5764043-$ or US-5774611-$ or US-5774612-$ or US-5778122-$ or US-5781680-$ or US-5796896-$				

		or US-5799122-$ or US-5809191-$ or US-5815618-$ or US-5818993-$ or US-5825955-$ or US-5832158-$ or US-5838856-$ or US-5838855-$ or US-5845036-$ or US-5862282-$ or US-5867621-$ or US-5881191-$ or US-5887100-$ or US-5887098-$ or US-5892870-$ or US-5896477-$ or US-5909526-$ or US-5909298-$).did. or (US-5915058-$ or US-5923805-$ or US-5930426-$ or US-5930425-$ or US-5937121-$ or US-5940561-$ or US-5940559-$ or US-5949946-$ or US-5953474-$ or US-5953473-$ or US-5956444-$ or US-5960137-$ or US-5969294-$ or US-5971626-$ or US-5980117-$ or US-5987203-$ or US-5993071-$ or US-6004043-$ or US-6022149-$ or US-6027252-$ or US-6041155-$ or US-6048103-$ or US-6048102-$ or US-6053639-$ or US-6059461-$ or US-6064791-$ or US-6076973-$).did. or (US-6076975-$ or US-6081647-$ or US-6079881-$ or US-6088502-$ or US-6095694-$ or US-6104856-$ or US-6102581-$ or US-6108482-$ or US-6116790-$ or US-6116789-$ or US-6116101-$ or US-6132105-$ or US-6139346-$ or US-6142676-$ or US-6149315-$ or US-6154597-$ or US-6164835-$ or US-6164834-$ or US-6173099-$ or US-6179480-$ or US-6179475-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6190616-$ or US-6195477-$ or US-6193420-$).did. or (US-6196729-$ or US-6200040-$ or US-6206577-$ or US-6217226-$ or US-6220763-$ or US-6220762-$ or US-6224269-$ or US-6227719-$ or US-6227718-$ or US-6240229-$ or US-6238249-$ or US-6243526-$ or US-6247851-$ or US-6247849-$ or US-6256446-$ or US-6259839-$ or US-6264373-$ or US-6264372-$ or US-6267513-$ or US-6273618-$ or US-6290527-$ or US-6301004-$ or US-6302592-$ or US-6309111-$ or US-6318904-$ or US-6318903-$ or US-6334715-$).did. or (US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6354746-$ or US-6357932-$ or US-				

		6361218-$ or US-6364536-$ or US-6367986-$ or US-6367984-$ or US-6371659-$ or US-6377840-$ or US-6375363-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6389212-$ or US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6409391-$ or US-6412987-$ or US-6419810-$ or US-6422759-$ or US-6425692-$ or US-6425694-$ or US-6431762-$ or US-6437894-$).did. or (US-6435946-$ or US-6445867-$ or US-6456768-$ or US-6457876-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6466724-$ or US-6464406-$ or US-6467971-$ or US-6467970-$ or US-6471417-$ or US-6471412-$ or US-6474876-$ or US-6478472-$ or US-6481900-$ or US-6481899-$ or US-6485192-$ or US-6497518-$ or US-6497516-$ or US-6501900-$ or US-6508593-$ or US-6526210-$ or US-6524015-$ or US-6527450-$ or US-6533469-$ or US-6543941-$).did. or (US-6554482-$ or US-6558044-$ or US-6561699-$ or US-6572276-$ or US-6572273-$ or US-6582132-$ or US-6595696-$ or US-6601995-$ or US-6612750-$ or US-6619859-$ or US-6619856-$ or US-6632023-$ or US-6634794-$ or US-6644866-$ or US-6667803-$ or US-6695485-$ or US-6702477-$ or US-6702475-$ or US-6786647-$ or US-6789953-$ or US-6793399-$ or US-6840680-$ or US-6856748-$ or US-6895146-$ or US-7232261-$ or US-7435009-$ or US-7530845-$).did. or (US-7585118-$ or US-7588373-$ or US-7706657-$ or US-7738757-$ or US-7972066-$ or US-8070366-$ or US-8206040-$ or US-8517614-$ or US-8588571-$ or US-8953922-$ or US-9229177-$ or US-9229170-$ or US-9291781-$ or US-9316794-$ or US-9323007-$ or US-9448369-$ or US-9453972-$ or US-9482825-$ or US-9551831-$ or US-9625655-$ or US-9632267-$ or US-9638871-$ or US-9638868-$ or US-9645335-$ or US-9658407-$ or US-9671570-$ or US-9671568-$).did. or (US-9678282-$ or US-9696477-$ or				

		US-9722367-$ or US-9720184-$ or US-9726829-$ or US-9735523-$ or US-9733123-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9746625-$ or US-9746368-$ or US-9759874-$ or US-9759869-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9784928-$ or US-9798090-$ or US-9797806-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9817195-$ or US-9823428-$ or US-9829643-$ or US-9827438-$).did. or (US-9835807-$ or US-9841566-$ or US-9857545-$ or US-9857537-$ or US-9864151-$ or US-9869824-$ or US-9876309-$ or US-9874702-$ or US-9880365-$ or US-9880357-$ or US-9885841-$ or US-9893813-$ or US-9891392-$ or US-9891387-$ or US-9891385-$ or US-9897767-$ or US-9904021-$ or US-9904020-$ or US-9910228-$ or US-9910226-$ or US-9915793-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9939600-$ or US-9939590-$ or US-9948017-$).did. or (US-9946036-$ or US-10007069-$ or US-10018787-$).did. or (JP-2016095432-$ or JP-2016095410-$ or JP-2016122100-$ or JP-2016177309-$ or JP-2016188927-$ or JP-2017053937-$ or JP-2017090798-$ or JP-2017111444-$ or JP-2017134118-$ or JP-2017138535-$ or JP-2017151338-$ or JP-2017219768-$).did.				
S677	737	(US-20010041030-$ or US-20020025125-$ or US-20020106162-$ or US-20020114589-$ or US-20020159710-$ or US-20030031452-$ or US-20030044127-$ or US-20030044125-$ or US-20030180004-$ or US-20030223703-$ or US-20040008494-$ or US-20040017983-$ or US-20040017981-$ or US-20040038558-$ or US-20040052472-$ or US-20040062498-$ or US-20040105628-$ or US-20040131317-$ or US-20040223699-$ or US-20040228589-$ or US-20050036744-$ or US-20050053342-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 18:14

		20050111795-$ or US-20050123246-$ or US-20050135755-$ or US-20050135752-$).did. or (US-20050271328-$ or US-20060045430-$ or US-20060051028-$ or US-20060093282-$ or US-20060153504-$ or US-20060193562-$ or US-20060280409-$ or US-20060285807-$ or US-20070058907-$ or US-20070098327-$ or US-20070160327-$ or US-20080069501-$ or US-20080112672-$ or US-20080124031-$ or US-20080131055-$ or US-20080253719-$ or US-20090003772-$ or US-20090290839-$ or US-20090305542-$ or US-20100322561-$ or US-20110038590-$ or US-20110075971-$ or US-20110091159-$ or US-20110222819-$ or US-20110249942-$ or US-20120027355-$ or US-20120057824-$).did. or (US-20120076459-$ or US-20120082416-$ or US-20120099822-$ or US-20120141070-$ or US-20120251054-$ or US-20120251051-$ or US-20120263423-$ or US-20120263419-$ or US-20120308183-$ or US-20130051749-$ or US-20130064508-$ or US-20130077914-$ or US-20130121645-$ or US-20130129280-$ or US-20130183001-$ or US-20130216189-$ or US-20130230283-$ or US-20130259429-$ or US-20130272671-$ or US-20130308908-$ or US-20140056560-$ or US-20140064665-$ or US-20140064688-$ or US-20140072265-$ or US-20140086545-$ or US-20140147081-$ or US-20140205241-$).did. or (US-20140219614-$ or US-20140219624-$ or US-20140314385-$ or US-20140341510-$ or US-20150003785-$ or US-20150023637-$ or US-20150049989-$ or US-20150071591-$ or US-20150177463-$ or US-20150226926-$ or US-20150241644-$ or US-20150301286-$ or US-20150331201-$ or US-20150338583-$ or US-20150370017-$ or US-20150378112-$ or US-20160004018-$ or US-20160004016-$ or US-20160025937-$ or US-20160077287-$ or US-20160077284-$ or US-				

		20160109661-$ or US-20160131854-$ or US-20160131849-$ or US-20160161680-$ or US-20160178859-$ or US-20160259135-$).did. or (US-20160282566-$ or US-20160282562-$ or US-20160320571-$ or US-20160349464-$ or US-20170059784-$ or US-20170090128-$ or US-20170090127-$ or US-20170102506-$ or US-20170102504-$ or US-20170108653-$ or US-20170115457-$ or US-20170139150-$ or US-20170153398-$ or US-20170184798-$ or US-20170184790-$ or US-20170205587-$ or US-20170219779-$ or US-20170227720-$ or US-20170235060-$ or US-20170242200-$ or US-20170242199-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170261698-$ or US-20170269309-$ or US-20170276883-$).did. or (US-20170276881-$ or US-20170293088-$ or US-20170293087-$ or US-20170307831-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170357060-$ or US-20170357059-$ or US-20170363827-$ or US-20180003903-$ or US-20180011258-$ or US-20180011254-$ or US-20180031774-$ or US-20180052288-$ or US-20180077472-$ or US-20180081128-$ or US-20180081125-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180106973-$ or US-20180156988-$ or US-20180156985-$ or US-20180210154-$).did. or (US-4240695-$ or US-4320938-$ or US-4330172-$ or US-4477146-$ or US-4687291-$ or US-4737009-$ or US-4854664-$ or US-4856866-$ or US-4886335-$ or US-4915472-$ or US-4953929-$ or US-4955976-$ or US-5064268-$ or US-5076656-$ or US-5082346-$ or US-5082344-$ or US-5101463-$ or US-5134673-$ or US-5157749-$ or US-5166995-$ or US-5199093-$ or US-5259052-$ or US-5555332-$ or US-5666456-$ or US-5692080-$ or US-5867894-$).did. or (US-5870515-$				

		or US-5883995-$ or US-5920670-$ or US-5920669-$ or US-5984533-$ or US-6012852-$ or US-6095695-$ or US-6210045-$ or US-6250817-$ or US-6305849-$ or US-6318902-$ or US-6331079-$ or US-6379052-$ or US-6409392-$ or US-6422761-$ or US-6422760-$ or US-6450698-$ or US-6487343-$ or US-6491442-$ or US-6533465-$ or US-6554486-$ or US-6623172-$ or US-6688782-$ or US-6712521-$ or US-6764222-$ or US-6839583-$ or US-6848834-$).did. or (US-6944378-$ or US-7036996-$ or US-8388235-$ or US-9207454-$ or US-9316791-$ or US-9377591-$ or US-9389368-$ or US-9482820-$ or US-9606303-$ or US-9625657-$ or US-9664864-$ or US-9678283-$ or US-9678286-$ or US-9684134-$ or US-9696497-$ or US-9703062-$ or US-9709753-$ or US-9726830-$ or US-9733436-$ or US-9733434-$ or US-9798096-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9829650-$ or US-9835808-$ or US-9846283-$).did. or (US-9851512-$ or US-9891390-$ or US-9904019-$ or US-9910229-$ or US-9927582-$ or US-9939589-$ or US-9946037-$).did. or (IT-7819792-$ or FR-2363124-$ or IT-7925110-$ or GB-2057158-$ or FR-2487528-$ or GB-2081468-$ or EP-0061243-$ or DK-208682-$ or GB-8306227-$ or IT-8323399-$ or JP-S5856846-$ or EP-0125398-$ or FR-2535069-$ or WO-8600147-$ or EP-0249237-$ or EP-0262847-$ or EP-0262631-$ or DE-8626183-$ or WO-9015350-$ or EP-0408852-$ or GB-9103604-$ or GB-9106183-$ or CA-2030897-$ or DE-9107960-$ or GB-9206076-$ or CA-2057559-$).did. or (CA-2082276-$ or EP-0633485-$ or EP-0690319-$ or CA-2191600-$ or EP-0696748-$ or EP-0697608-$ or CN-1118443-$ or WO-9627811-$ or EP-0758099-$ or WO-9734176-$ or CA-2198522-$ or EP-0803750-$ or NL-1003147-$ or EP-0807837-$ or CA-2254335-$ or CA-2294930-$ or CA-2262351-$ or EP-0938003-$ or JP-2945144-$ or				

		CA-2324565-$ or GB-9919699-$ or EP-0992819-$ or CA-2284331-$ or GB-0007281-$ or CA-2288249-$ or DE-19728960-$ or EP-1033595-$).did. or (EP-1033594-$ or EP-1039324-$ or EP-1039322-$ or EP-1041416-$ or EP-1041414-$ or JP-3106420-$ or CA-2321428-$ or EP-1091225-$ or WO-0137010-$ or EP-1107031-$ or KR-20010062142-$ or WO-0155762-$ or EP-1124147-$ or WO-0161397-$ or WO-0181965-$ or CA-2350290-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or KR-20020000530-$ or KR-20020001574-$ or CN-1331421-$ or EP-1172672-$ or EP-1172673-$ or KR-20020006481-$ or KR-20020006480-$ or DE-20118858-$).did. or (CA-2418331-$ or KR-20020050140-$ or WO-02056060-$ or WO-02061481-$ or DE-10114144-$ or NL-1018440-$ or WO-03016975-$ or WO-03093883-$ or CA-2484569-$ or EP-1394584-$ or AU-2003291687-$ or EP-1530068-$ or CA-2503690-$ or CN-1677147-$ or CN-1707299-$ or WO-2008006402-$ or EP-1887395-$ or CN-101122658-$ or WO-2008029850-$ or CA-2662854-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or CA-2689768-$ or EP-2206458-$ or WO-2010137426-$ or CA-2762411-$).did. or (EP-2302431-$ or WO-2011139938-$ or WO-2011152874-$ or EP-2444827-$ or WO-2012054174-$ or WO-2012054174-$ or WO-2012151175-$ or GB-201218194-$ or CN-102870023-$ or WO-2013115791-$ or WO-2013115789-$ or WO-2013126068-$ or CA-2912155-$ or WO-2014009463-$ or WO-2014011898-$ or EP-2700992-$ or JP-5433802-$ or WO-2014049469-$ or WO-2014113753-$ or CA-2836675-$ or WO-2014143748-$ or WO-2014165175-$ or WO-2014197701-$ or CN-104241938-$ or CA-2917189-$ or EP-2840425-$ or EP-2843452-$).did. or (WO-				

		2015028433-$ or CA-2885821-$ or WO-2015068103-$ or CA-2932688-$ or GB-201507758-$ or WO-2015103783-$ or WO-2015116589-$ or CN-204595258-$ or WO-2015144883-$ or EP-2942653-$ or EP-2947485-$ or WO-2015190211-$ or WO-2016004347-$ or CN-105278047-$ or DE-202013012295-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or CA-2928026-$ or WO-2016043922-$ or JP-5905950-$ or WO-2016067668-$ or EP-3021145-$ or WO-2016082160-$ or WO-2016103821-$ or DE-202016103178-$ or EP-3054333-$).did. or (WO-2016161341-$ or WO-2017038704-$ or JP-6173629-$ or WO-2017180257-$ or CN-206584076-$ or EP-3258301-$ or WO-2018003776-$ or WO-2018004847-$).did. or (JP-54034251-$ or JP-55101904-$ or JP-56066811-$ or JP-56074211-$ or JP-59075218-$ or JP-04214510-$ or JP-04220604-$ or JP-05313040-$ or JP-08015541-$ or JP-09005575-$ or JP-09033756-$ or JP-10104469-$ or JP-11072659-$ or JP-2000089061-$ or JP-2000284146-$ or JP-2000292655-$ or JP-2000310724-$ or JP-2001013372-$ or JP-2001021764-$ or JP-2001242361-$ or JP-2009294343-$ or JP-2012053420-$ or JP-2012078513-$ or JP-2015022131-$).did. or (DE-2805949-$ or DE-2932986-$ or GB-2057158-$ or GB-2081468-$ or EP-61243-$ or GB-2098354-$ or DE-3208797-$ or EP-125398-$ or US-4496213-$ or WO-8600147-$ or EP-249237-$ or EP-262631-$ or US-4953929-$ or WO-9015350-$ or GB-2241794-$ or US-5064268-$ or WO-9117540-$ or EP-458608-$ or US-5101463-$ or EP-490698-$ or EP-505197-$ or EP-430107-$ or EP-660145-$ or EP-660144-$ or EP-663602-$ or EP-663601-$).did. or (WO-9600917-$ or EP-696748-$ or EP-697608-$ or WO-9627811-$ or EP-758099-$ or WO-9734176-$ or EP-803750-$ or US-5692080-$ or WO-9746900-$ or				

		WO-9857208-$ or WO-9947958-$ or GB-2341455-$ or EP-1041416-$ or EP-1041414-$ or EP-1091225-$ or WO-0140839-$ or EP-1107031-$ or EP-1124147-$ or WO-0181965-$ or US-20010041030-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or EP-1172673-$ or EP-1172672-$ or DE-20118858-$ or WO-02056060-$).did. or (US-6422760-$ or WO-02061481-$ or US-20030031437-$ or US-20030044125-$ or WO-03094297-$ or WO-03093883-$ or EP-1394584-$ or US-20040062498-$ or US-20040223699-$ or US-20040228589-$ or US-20050053342-$ or WO-2006022840-$ or US-20060153503-$ or US-20060165352-$ or US-20060193562-$ or EP-1752805-$ or US-20070058907-$ or US-20070077010-$ or US-20070098327-$ or US-20090041411-$ or US-20090060423-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or EP-2206458-$ or WO-2010137426-$ or EP-2302431-$).did. or (US-20110249942-$ or US-20110274437-$ or WO-2011152874-$ or KR-2012000895-$ or US-20120027355-$ or US-20120057824-$ or US-20120082416-$ or EP-2444827-$ or US-20120099822-$ or US-20120251051-$ or US-20120251054-$ or US-20120263419-$ or WO-2012151175-$ or US-20120308183-$ or CN-102870023-$ or TW-201309089-$ or US-20130051749-$ or WO-2013036843-$ or CN-103091793-$ or US-20130121645-$ or WO-2013115789-$ or WO-2013115791-$ or WO-2013122865-$ or WO-2013126068-$ or US-20130230283-$ or US-20130259429-$ or WO-2013155395-$).did. or (WO-2013177234-$ or WO-2014011898-$ or US-20140016901-$ or EP-2700992-$ or JP-5433802-$ or US-20140064688-$ or TW-474924-$ or WO-2014049469-$ or US-20140147081-$ or US-20140153879-$ or ES-1110405-$ or WO-2014113753-$ or EP-2759860-$ or				

		US-20140219624-$ or WO-2014143748-$ or WO-2014165175-$ or US-20140321808-$ or US-20140363131-$ or WO-2014197701-$ or EP-2818903-$ or WO-2015009435-$ or US-20150023637-$ or US-20150049989-$ or WO-2015028433-$ or WO-2015068103-$ or WO-2015070382-$ or US-20150162982-$).did. or (US-20150177463-$ or WO-2015103783-$ or WO-2015116589-$ or US-20150219864-$ or US-20150226926-$ or US-20150226925-$ or US-20150241644-$ or CN-104950402-$ or WO-2015144883-$ or US-20150286012-$ or DE-102015106225-$ or US-20150331201-$ or EP-2947485-$ or WO-2015190211-$ or US-20150378110-$ or US-20160004016-$ or US-20160004018-$ or US-20160025937-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or WO-2016033577-$ or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016043922-$ or JP-5905950-$).did. or (US-20160124158-$ or US-20160131854-$ or EP-3021145-$ or US-20160161680-$ or US-20160178852-$ or US-20160178859-$ or US-9377591-$ or US-9389368-$ or EP-3054333-$ or US-20160259135-$ or CN-105978629-$ or US-20160282566-$ or WO-2016161341-$ or US-20160306125-$ or US-9482820-$ or US-20160341908-$ or US-20160341911-$ or US-20160349466-$ or US-20160377819-$ or US-20170031106-$ or US-20170059784-$ or WO-2017038704-$ or US-20170090127-$ or US-20170102504-$ or US-20170115457-$ or US-20170139150-$ or US-20170139156-$).did. or (US-20170153398-$ or US-9678283-$ or US-20170184790-$ or US-9709753-$ or US-20170205587-$ or JP-6173629-$ or US-20170219779-$ or US-9726830-$ or US-20170227720-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-				

		$ or US-20170293088-$ or US-20170307830-$ or US-9804340-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170371109-$ or US-20180003903-$ or US-20180011258-$ or US-20180052288-$ or US-20180081128-$ or US-20180106973-$ or US-20180120519-$ or US-20180128988-$).did.				
S678	136	(US-20020176671-$ or US-20040017980-$ or US-20040126118-$ or US-20040197054-$ or US-20070172177-$ or US-20070286554-$ or US-20100008635-$ or US-20100129034-$ or US-20100290745-$ or US-20110116749-$ or US-20110222830-$ or US-20110229096-$ or US-20110229095-$ or US-20110225792-$ or US-20110255831-$ or US-20110262078-$ or US-20110262077-$ or US-20120014648-$ or US-20120063724-$ or US-20120275749-$ or US-20130136402-$ or US-20130315538-$ or US-20140286610-$ or US-20150016781-$ or US-20150110448-$ or US-20160124170-$).did. or (US-20160202429-$ or US-20170045691-$ or US-20170285277-$ or US-20170299820-$ or US-20180120519-$ or US-20180143380-$ or US-20180231722-$ or US-20180239093-$ or US-20180267255-$ or US-20180292618-$ or US-20180292612-$ or US-20180364421-$ or US-20190107679-$ or US-20190107678-$ or US-20190113691-$ or US-20190137701-$ or US-20190179085-$).did. or (US-5504825-$ or US-5613021-$ or US-5661826-$ or US-6045270-$ or US-6276840-$ or US-6293708-$ or US-6623170-$ or US-6796717-$ or US-6848840-$ or US-6866425-$ or US-6932514-$ or US-6944387-$ or US-6976793-$ or US-7094091-$ or US-7178994-$ or US-7182522-$ or US-7234874-$ or US-7241056-$ or US-7300216-$ or US-7536075-$ or US-7654748-$ or US-7891882-$ or US-7912336-$ or US-8052333-$ or US-8231282-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 18:14

		8235600-$).did. or (US-8262296-$ or US-8317407-$ or US-8346047-$ or US-8348519-$ or US-8348518-$ or US-8376634-$ or US-8406583-$ or US-8417074-$ or US-8494329-$ or US-8496384-$ or US-8529138-$ or US-8542972-$ or US-8550725-$ or US-8550724-$ or US-8579521-$ or US-8690593-$ or US-8714835-$ or US-8821038-$ or US-8821037-$ or US-8915653-$ or US-8958679-$ or US-9014527-$ or US-9031364-$ or US-9057848-$ or US-9146376-$ or US-9146360-$ or US-9417401-$).did. or (US-9513442-$ or US-9541711-$ or US-9557497-$ or US-9563025-$ or US-9606297-$ or US-9632255-$ or US-9645318-$ or US-9658409-$ or US-9684139-$ or US-9739949-$ or US-9753228-$ or US-9772464-$ or US-9857538-$ or US-9977199-$ or US-9989710-$ or US-10012801-$ or US-10054747-$ or US-10061090-$ or US-10067302-$ or US-10067300-$ or US-10088636-$ or US-10101539-$ or US-10139570-$ or US-10146014-$ or US-10156684-$ or US-10209473-$).did. or (WO-2010083369-$ or EP-2380054-$ or CN-102282495-$ or WO-2014152675-$ or WO-2015043158-$ or CN-104516073-$ or CN-102282495-$ or WO-2018125706-$).did. or (JP-57044113-$).did. or (US-20160327757-$ or US-20170299820-$ or WO-2018125706-$ or US-20190107679-$).did.				
S679	2,087	S675 S676 S677 S678	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:14
S680	56,021	(ferrule connector) with insert$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14

S681	66,377	G02B6/38$.cpc.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:14
S682	2,541	S680 and S681	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:14
S683	14,591	adapter with (groove channel) with (top bottom upper lower)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S684	102	S682 and S683	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S685	62	S684 not S679	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S686	1,186,315	(groove channel) with upper with lower	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S687	735,634	(groove channel) with top with bottom	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S688	447	S682 and (S686 S687)	US-PGPUB; USPAT; FPRS; EPO;	OR	OFF	2020/07/22 18:14

			JPO; DERWENT; IBM_TDB			
S689	325	S688 not (S679 S685)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S690	15,680	("ferrules" "connectors") with align$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S691	2,186	S681 and S690	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S692	353	S691 and (S686 S687)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:14
S693	167	S692 not (S679 S685 S689)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S694	11,374	G02B6/3825,3826.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 18:14
S695	441	S690 and S694	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2020/07/22 18:14

			DERWENT; IBM_TDB			
S696	206	S695 not (S679 S685 S689 S693)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S697	2,847	S679 S685 S689 S693 S696	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:14
S698	5	"51388255".FMID.	US-PGPUB; USPAT; FPRS; JPO	OR	ON	2020/07/22 18:51
S699	0	(13/795888).APP.	USPAT; USOCR	OR	ON	2020/07/22 18:52
S700	12,760	G02B6/3881,3885.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:53
S701	13,201	G02B6/3879,3825.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:53
S702	2,874	S701 and S700	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 18:53
S703	9	"48999326".FMID.	US-PGPUB; USPAT; FPRS; JPO	OR	ON	2020/07/22 18:53
S704	18	("20030108301" | "20030190130" | "20090274432" | "20100111484" | "20120251051" | "20130044978" | "20130051733" | "20140219609" |	US-PGPUB; USPAT; USOCR	OR	ON	2020/07/22 18:53

		"20140233893" | "5600747" | "5675682" | "5870515" | "6146023" | "6485189" | "6547585" | "6705765" | "6857900" | "8858089").PN.				
S705	2	"49235150".FMID.	US-PGPUB; USPAT; FPRS; JPO	OR	ON	2020/07/22 18:53
S706	2,998	S608 S614 S618 S622 S625 S628	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:18
S707	151	S706 not S697	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:19
S708	81	(US-20040101250-$ or US-20140205247-$ or US-20170160486-$ or US-20180239091-$).did. or (US-3999837-$ or US-4252407-$ or US-6116790-$ or US-6371659-$ or US-6461053-$ or US-6585423-$ or US-7001079-$ or US-9039298-$ or US-9823424-$).did. or (DE-2558445-$ or FR-2296862-$ or BR-7508734-$ or ES-444034-$ or GB-1503979-$ or IT-7869677-$ or CA-1043604-$ or BE-871785-$ or DK-522978-$ or NL-7811579-$ or DE-2849975-$ or GB-2009440-$ or FR-2435053-$ or FR-2446496-$ or CA-1097111-$ or IT-1050771-$ or FR-2446496-$ or FR-2435053-$ or CH-628152-$ or GB-2009440-$ or DE-3112078-$ or FR-2296862-$ or DE-2558445-$ or DE-3112078-$ or IT-1109638-$ or DE-2849975-$).did. or (DK-151733-$ or DK-151733-$ or DK-151733-$ or DE-19626036-$ or WO-9800741-$ or AU-2975197-$ or WO-9928774-$ or EP-0985161-$ or EP-1034445-$ or EP-1092995-$ or EP-1092995-$ or EP-1034445-$ or EP-0985161-$ or ES-2202617-$ or EP-1092995-$ or DE-60010402-$ or DE-60010402-$	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 19:24

		or JP-3984293-$ or EP-2138880-$ or JP-4514004-$ or WO-2016053853-$ or WO-2017065999-$ or WO-2017065999-$ or EP-3201668-$ or CN-108351473-$ or CN-208140982-$ or EP-3201668-$).did. or (JP-2001154062-$).did. or (DE-2558445-$ or BE-871785-$ or DE-19626036-$ or WO-9928774-$ or EP-1092995-$ or US-20140205247-$ or CN-104516061-$ or CN-104570229-$ or WO-2016053853-$ or WO-2017065999-$ or US-20180364421-$).did.				
S709	1,140	(US-20010010741-$ or US-20010016102-$ or US-20010033730-$ or US-20010038737-$ or US-20010043776-$ or US-20010048790-$ or US-20020006253-$ or US-20020012503-$ or US-20020012502-$ or US-20020012501-$ or US-20020012238-$ or US-20020025121-$ or US-20020025099-$ or US-20020028055-$ or US-20020031310-$ or US-20020031309-$ or US-20020061171-$ or US-20020064349-$ or US-20020081076-$ or US-20020090177-$ or US-20020094727-$ or US-20020106167-$ or US-20020114581-$ or US-20020118926-$ or US-20020126961-$ or US-20020131720-$).did. or (US-20020150344-$ or US-20020150343-$ or US-20020150353-$ or US-20020150346-$ or US-20020150345-$ or US-20020150342-$ or US-20020159745-$ or US-20020159714-$ or US-20020159712-$ or US-20020168149-$ or US-20020166226-$ or US-20020172469-$ or US-20020177364-$ or US-20020181888-$ or US-20020181884-$ or US-20020186934-$ or US-20020186742-$ or US-20020191881-$ or US-20020197017-$ or US-20020197018-$ or US-20030002816-$ or US-20030002808-$ or US-20030007739-$ or US-20030012512-$ or US-20030031449-$ or US-20030031422-$ or US-20030044122-$).did. or (US-20030044115-$ or US-20030053760-$ or US-20030063868-$ or US-	US-PGPUB; USPAT; JPO	OR	ON	2020/07/22 19:24

		20030063866-$ or US-20030063862-$ or US-20030068135-$ or US-20030072536-$ or US-20030081905-$ or US-20030087505-$ or US-20030091292-$ or US-20030095780-$ or US-20030095779-$ or US-20030103730-$ or US-20030108320-$ or US-20030113086-$ or US-20030128934-$ or US-20030142918-$ or US-20030147597-$ or US-20030147230-$ or US-20030156796-$ or US-20030169975-$ or US-20030169974-$ or US-20030174996-$ or US-20030174972-$ or US-20030174922-$ or US-20030180005-$ or US-20030185520-$).did. or (US-20030189214-$ or US-20030194188-$ or US-20030198029-$ or US-20030231838-$ or US-20040013369-$ or US-20040028340-$ or US-20040033050-$ or US-20040033028-$ or US-20040033027-$ or US-20040036987-$ or US-20040042710-$ or US-20040052471-$ or US-20040054761-$ or US-20040062488-$ or US-20040062486-$ or US-20040072454-$ or US-20040071438-$ or US-20040074852-$ or US-20040081418-$ or US-20040091228-$ or US-20040101253-$ or US-20040105325-$ or US-20040105278-$ or US-20040120652-$ or US-20040131315-$ or US-20040136656-$ or US-20040141692-$).did. or (US-20040151464-$ or US-20040151438-$ or US-20040156592-$ or US-20040161204-$ or US-20040165830-$ or US-20040179787-$ or US-20040184740-$ or US-20040182971-$ or US-20040197053-$ or US-20040202431-$ or US-20040208459-$ or US-20040223701-$ or US-20040240793-$ or US-20040247255-$ or US-20040264873-$ or US-20040266257-$ or US-20040264908-$ or US-20040264876-$ or US-20050008300-$ or US-20050013547-$ or US-20050041928-$ or US-20050069263-$ or US-20050074211-$ or US-20050094948-$ or US-20050094943-$ or US-20050112939-$ or US-20050111796-$).did. or (US-20050118880-$ or US-20050135753-				

		$ or US-20050141817-$ or US-20050185894-$ or US-20050207708-$ or US-20050215119-$ or US-20050220423-$ or US-20050220420-$ or US-20050226586-$ or US-20050232552-$ or US-20050238289-$ or US-20050281526-$ or US-20050281509-$ or US-20050286833-$ or US-20050286835-$ or US-20060013539-$ or US-20060056769-$ or US-20060072878-$ or US-20060083468-$ or US-20060083467-$ or US-20060088248-$ or US-20060093275-$ or US-20060098914-$ or US-20060133758-$ or US-20060140542-$ or US-20060147156-$ or US-20060147155-$).did. or (US-20060154529-$ or US-20060153503-$ or US-20060159401-$ or US-20060159399-$ or US-20060169856-$ or US-20060177182-$ or US-20060197943-$ or US-20060204200-$ or US-20060204180-$ or US-20060245711-$ or US-20060263011-$ or US-20060269205-$ or US-20060269206-$ or US-20060269212-$ or US-20070019913-$ or US-20070036487-$ or US-20070098330-$ or US-20070098329-$ or US-20070105452-$ or US-20070116414-$ or US-20070116411-$ or US-20070140623-$ or US-20070154135-$ or US-20070165984-$ or US-20070183780-$ or US-20070190834-$ or US-20070196053-$).did. or (US-20070196052-$ or US-20070201808-$ or US-20070201798-$ or US-20070212002-$ or US-20070223862-$ or US-20070230874-$ or US-20070263959-$ or US-20070280599-$ or US-20070285194-$ or US-20070297725-$ or US-20080008425-$ or US-20080013897-$ or US-20080013891-$ or US-20080019642-$ or US-20080019656-$ or US-20080044139-$ or US-20080050072-$ or US-20080085082-$ or US-20080095502-$ or US-20080095501-$ or US-20080100456-$ or US-20080170827-$ or US-20080175541-$ or US-20080175550-$ or US-20080175542-$ or US-20080175546-$ or US-20080175545-$).did. or (US-				

		20080175532-$ or US-20080193086-$ or US-20080205825-$ or US-20080240658-$ or US-20080269845-$ or US-20080267566-$ or US-20080273837-$ or US-20080279503-$ or US-20080304792-$ or US-20080310796-$ or US-20080310800-$ or US-20080310795-$ or US-20080317411-$ or US-20090010600-$ or US-20090028507-$ or US-20090034912-$ or US-20090047800-$ or US-20090046981-$ or US-20090060422-$ or US-20090060418-$ or US-20090074359-$ or US-20090103878-$ or US-20090116791-$ or US-20090148101-$ or US-20090156043-$ or US-20090185778-$ or US-20090202214-$).did. or (US-20090214164-$ or US-20090226141-$ or US-20090226137-$ or US-20090232455-$ or US-20090232454-$ or US-20090257722-$ or US-20090257719-$ or US-20090274431-$ or US-20090274432-$ or US-20090285534-$ or US-20090285530-$ or US-20090290838-$ or US-20090304335-$ or US-20100002999-$ or US-20100021111-$ or US-20100029117-$ or US-20100027944-$ or US-20100027943-$ or US-20100046893-$ or US-20100054665-$ or US-20100061681-$ or US-20100074616-$ or US-20100080513-$ or US-20100092134-$ or US-20100092131-$ or US-20100104355-$ or US-20100111484-$).did. or (US-20100129032-$ or US-20100129028-$ or US-20100135618-$ or US-20100141934-$ or US-20100146764-$ or US-20100158444-$ or US-20100183265-$ or US-20100202730-$ or US-20100202737-$ or US-20100209063-$ or US-20100209050-$ or US-20100215318-$ or US-20100215322-$ or US-20100226654-$ or US-20100232757-$ or US-20100239220-$ or US-20100239213-$ or US-20100247057-$ or US-20100247040-$ or US-20100260457-$ or US-20100266245-$ or US-20100272408-$ or US-20100278497-$ or US-20100278488-$ or US-20100284655-$ or US-20100296792-				

		$ or US-20100303408-$).did. or (US-20100322580-$ or US-20100322576-$ or US-20100322554-$ or US-20100329604-$ or US-20100329602-$ or US-20110019964-$ or US-20110038592-$ or US-20110038581-$ or US-20110044583-$ or US-20110058772-$ or US-20110075969-$ or US-20110081798-$ or US-20110081116-$ or US-20110085774-$ or US-20110085765-$ or US-20110091166-$ or US-20110091154-$ or US-20110103797-$ or US-20110116748-$ or US-20110123156-$ or US-20110129186-$ or US-20110142398-$ or US-20110150396-$ or US-20110158593-$ or US-20110158586-$ or US-20110170830-$ or US-20110176777-$).did. or (US-20110188809-$ or US-20110188000-$ or US-20110194828-$ or US-20110200286-$ or US-20110198324-$ or US-20110200294-$ or US-20110206335-$ or US-20110206325-$ or US-20110206324-$ or US-20110211792-$ or US-20110229094-$ or US-20110243508-$ or US-20110243505-$ or US-20110243504-$ or US-20110268391-$ or US-20110293223-$ or US-20110299814-$ or US-20110311186-$ or US-20110317976-$ or US-20120002928-$ or US-20120002925-$ or US-20120033918-$ or US-20120039569-$ or US-20120057831-$ or US-20120057830-$ or US-20120057827-$ or US-20120063735-$).did. or (US-20120069348-$ or US-20120099870-$ or US-20120106901-$ or US-20120114295-$ or US-20120128307-$ or US-20120141084-$ or US-20120155808-$ or US-20120163757-$ or US-20120170895-$ or US-20120195555-$ or US-20120219253-$ or US-20120224823-$ or US-20120237223-$ or US-20120237171-$ or US-20120243831-$ or US-20120243829-$ or US-20120251067-$ or US-20120252244-$ or US-20120251050-$ or US-20120257859-$ or US-20120263426-$ or US-20120294572-$ or US-20120301088-$ or US-20120301080-$ or US-				

		20120321269-$ or US-20120321266-$ or US-20120321254-$).did. or (US-20130011099-$ or US-20130064517-$ or US-20130071068-$ or US-20130071067-$ or US-20130084041-$ or US-20130094827-$ or US-20130094815-$ or US-20130094811-$ or US-20130101257-$ or US-20130108231-$ or US-20130121643-$ or US-20130129285-$ or US-20130156379-$ or US-20130156382-$ or US-20130163937-$ or US-20130163933-$ or US-20130170797-$ or US-20130170796-$ or US-20130183018-$ or US-20130195405-$ or US-20130195418-$ or US-20130209040-$ or US-20130209049-$ or US-20130209052-$ or US-20130209051-$ or US-20130209050-$ or US-20130209041-$).did. or (US-20130216186-$ or US-20130216188-$ or US-20130284844-$ or US-20130287358-$ or US-20130302004-$ or US-20130322828-$ or US-20130323940-$ or US-20130322826-$ or US-20130330957-$ or US-20130343764-$ or US-20130343707-$ or US-20140016902-$ or US-20140023322-$ or US-20140038462-$ or US-20140044394-$ or US-20140064690-$ or US-20140064664-$ or US-20140072297-$ or US-20140072263-$ or US-20140082913-$ or US-20140093210-$ or US-20140104808-$ or US-20140126875-$ or US-20140126874-$ or US-20140124140-$ or US-20140133821-$ or US-20140133803-$).did. or (US-20140141649-$ or US-20140147082-$ or US-20140161394-$ or US-20140161407-$ or US-20140161400-$ or US-20140169732-$ or US-20140178007-$ or US-20140205253-$ or US-20140205247-$ or US-20140219615-$ or US-20140220794-$ or US-20140219619-$ or US-20140241690-$ or US-20140241689-$ or US-20140241688-$ or US-20140241667-$ or US-20140273584-$ or US-20140270646-$ or US-20140294339-$ or US-20140308010-$ or US-20140308008-$ or US-20140321813-$ or US-20140321814-				

		$ or US-20140328063-$ or US-20140334790-$ or US-20140334780-$ or US-20140334778-$).did. or (US-20140348481-$ or US-20140348467-$ or US-20140355936-$ or US-20140376870-$ or US-20150003774-$ or US-20150012072-$ or US-20150030323-$ or US-20150050002-$ or US-20150055917-$ or US-20150055928-$ or US-20150063758-$ or US-20150060539-$ or US-20150078710-$ or US-20150139588-$ or US-20150147033-$ or US-20150147031-$ or US-20150153516-$ or US-20150177467-$ or US-20150185423-$ or US-20150192744-$ or US-20150205060-$ or US-20150205053-$ or US-20150212284-$ or US-20150212279-$ or US-20150219856-$ or US-20150219857-$ or US-20150226923-$).did. or (US-20150234131-$ or US-20150234128-$ or US-20150241650-$ or US-20150247977-$ or US-20150253183-$ or US-20150260927-$ or US-20150268424-$ or US-20150277057-$ or US-20150277061-$ or US-20150277058-$ or US-20150288449-$ or US-20150288447-$ or US-20150286014-$ or US-20150286013-$ or US-20150286011-$ or US-20150285999-$ or US-20150301288-$ or US-20150301293-$ or US-20150309279-$ or US-20150323752-$ or US-20150346452-$ or US-20150346449-$ or US-20150355417-$ or US-20150355414-$ or US-20150362678-$ or US-20150378117-$ or US-20150378111-$).did. or (US-20160004017-$ or US-20160011383-$ or US-20160011376-$ or US-20160018604-$ or US-20160018606-$ or US-20160033723-$ or US-20160041356-$ or US-20160047994-$ or US-20160062051-$ or US-20160070081-$ or US-20160085045-$ or US-20160085035-$ or US-20160085031-$ or US-20160091673-$ or US-20160111808-$ or US-20160109676-$ or US-20160116685-$ or US-20160116683-$ or US-20160116681-$ or US-20160131857-$ or US-20160139342-$ or US-				

		20160139339-$ or US-20160147022-$ or US-20160154190-$ or US-20160161679-$ or US-20160170152-$ or US-20160178860-$).did. or (US-20160178855-$ or US-20160187589-$ or US-20160195683-$ or US-20160195681-$ or US-20160209605-$ or US-20160216454-$ or US-20160216460-$ or US-20160223763-$ or US-20160238798-$ or US-20160238794-$ or US-20160238789-$ or US-20160246011-$ or US-20160252685-$ or US-20160266330-$ or US-20160266329-$ or US-20160266327-$ or US-20160274311-$ or US-20160291259-$ or US-20160306123-$ or US-20160306121-$ or US-20160313513-$ or US-20160320567-$ or US-20160320566-$ or US-20160327757-$ or US-20160324402-$ or US-20160356966-$ or US-20160365685-$).did. or (US-20160370549-$ or US-20160370548-$ or US-20170003459-$ or US-20170035275-$ or US-20170059782-$ or US-20170068063-$ or US-20170082806-$ or US-20170097485-$ or US-20170097471-$ or US-20170102507-$ or US-20170108659-$ or US-20170108430-$ or US-20170123171-$ or US-20170123163-$ or US-20170131481-$ or US-20170139158-$ or US-20170139157-$ or US-20170146749-$ or US-20170153394-$ or US-20170163573-$ or US-20170162978-$ or US-20170160500-$ or US-20170160496-$ or US-20170160486-$ or US-20170160478-$ or US-20170160477-$ or US-20170160476-$).did. or (US-20170168244-$ or US-20170176252-$ or US-20170184800-$ or US-20170192182-$ or US-20170199338-$ or US-20170199336-$ or US-20170205591-$ or US-20170205588-$ or US-20170212310-$ or US-20170212309-$ or US-20170222347-$ or US-20170227727-$ or US-20170227718-$ or US-20170235077-$ or US-20170242198-$ or US-20170242196-$ or US-20170248762-$ or US-20170254962-$ or US-20170254961-$ or US-20170254960-				

		$ or US-20170276887-$ or US-20170276886-$ or US-20170285272-$ or US-20170293091-$ or US-20170299821-$ or US-20170299818-$ or US-20170299817-$).did. or (US-20170307832-$ or US-20170307829-$ or US-20170315307-$ or US-20170315305-$ or US-20170315304-$ or US-20170315303-$ or US-20170331234-$ or US-20170336571-$ or US-20170343742-$ or US-20170343741-$ or US-20170341972-$ or US-20170351038-$ or US-20170351037-$ or US-20170359091-$ or US-20170363815-$ or US-20170363810-$ or US-20170363509-$ or US-20170371118-$ or US-20170371107-$ or US-20180003910-$ or US-20180011261-$ or US-20180017740-$ or US-20180024302-$ or US-20180024301-$ or US-20180024300-$ or US-20180024294-$ or US-20180031782-$).did. or (US-20180031775-$ or US-20180059338-$ or US-20180074277-$ or US-20180081127-$ or US-20180081122-$ or US-20180078781-$ or US-20180095232-$ or US-20180106975-$ or US-20180113268-$ or US-20180113259-$ or US-20180136410-$ or US-20180143384-$ or US-20180143381-$ or US-20180149813-$ or US-20180157002-$ or US-20180180819-$ or US-20180188460-$ or US-20180196204-$ or US-20180210155-$ or US-20180210153-$).did. or (US-3933409-$ or US-3999837-$ or US-4080044-$ or US-4087158-$ or US-4101198-$ or US-4140365-$ or US-4167304-$ or US-4168109-$ or US-4186996-$ or US-4201445-$ or US-4214812-$ or US-4218113-$ or US-4223976-$ or US-4252407-$ or US-4268115-$ or US-4268114-$ or US-4279469-$ or US-4291943-$ or US-4295707-$ or US-4327964-$ or US-4354731-$ or US-4368948-$ or US-4371233-$ or US-4387957-$ or US-4415232-$ or US-4422716-$).did. or (US-4444461-$ or US-4445753-$ or US-4447121-$ or US-4461539-$ or US-4466009-$ or US-4484796-$ or US-4487474-$				

		or US-4497536-$ or US-4526438-$ or US-4548467-$ or US-4614402-$ or US-4615581-$ or US-4645296-$ or US-4648688-$ or US-4666241-$ or US-4674831-$ or US-4681398-$ or US-4688887-$ or US-4699460-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4715674-$ or US-4717234-$ or US-4718744-$ or US-4722081-$ or US-4740052-$).did. or (US-4741590-$ or US-4758719-$ or US-4759600-$ or US-4759599-$ or US-4762389-$ or US-4767178-$ or US-4773725-$ or US-4781429-$ or US-4783137-$ or US-4786135-$ or US-4787700-$ or US-4789216-$ or US-4793683-$ or US-4795231-$ or US-4805980-$ or US-4807957-$ or US-4813760-$ or US-4824196-$ or US-4834486-$ or US-4842361-$ or US-4844570-$ or US-4846544-$ or US-4848870-$ or US-4850536-$ or US-4852963-$ or US-4877303-$ or US-4892380-$).did. or (US-4898446-$ or US-4960317-$ or US-4964688-$ or US-4976510-$ or US-4986762-$ or US-4986622-$ or US-4991929-$ or US-4993803-$ or US-4995688-$ or US-4998797-$ or US-5013124-$ or US-5015060-$ or US-5016970-$ or US-5018823-$ or US-5042891-$ or US-5048916-$ or US-5052774-$ or US-5058983-$ or US-5073042-$ or US-5077815-$ or US-5091991-$ or US-5091990-$ or US-5109453-$ or US-5115484-$ or US-5119455-$ or US-5124506-$ or US-5127073-$).did. or (US-5129024-$ or US-5133032-$ or US-5134677-$ or US-5134676-$ or US-5155795-$ or US-5159654-$ or US-5177808-$ or US-5179607-$ or US-5210815-$ or US-5214730-$ or US-5228104-$ or US-5233675-$ or US-5233674-$ or US-5239606-$ or US-5267342-$ or US-5274729-$ or US-5280552-$ or US-5282259-$ or US-5293581-$ or US-5297227-$ or US-5317663-$ or US-5323475-$ or US-5329541-$ or US-5333222-$ or US-5333221-$ or US-5359688-$ or US-5363460-$).did. or (US-5367594-$ or US-5366383-$ or US-5384885-$ or US-				

		5386485-$ or US-5408557-$ or US-5418875-$ or US-5420951-$ or US-5444806-$ or US-5446817-$ or US-5450519-$ or US-5452391-$ or US-5485537-$ or US-5497444-$ or US-5506922-$ or US-5519799-$ or US-5521998-$ or US-5528711-$ or US-5530783-$ or US-5537501-$ or US-5542015-$ or US-5548674-$ or US-5550943-$ or US-5563978-$ or US-5563971-$ or US-5570445-$ or US-5574813-$ or US-5579429-$).did. or (US-5581644-$ or US-5588086-$ or US-5592323-$ or US-5600746-$ or US-5603631-$ or US-5607323-$ or US-5619610-$ or US-5633969-$ or US-5642450-$ or US-5647043-$ or US-5645449-$ or US-5661833-$ or US-5666449-$ or US-5664955-$ or US-5668904-$ or US-5671310-$ or US-5673346-$ or US-5680494-$ or US-5682449-$ or US-5687268-$ or US-5694507-$ or US-5694506-$ or US-5701380-$ or US-5721799-$ or US-5727102-$ or US-5732174-$ or US-5734770-$).did. or (US-5737464-$ or US-5751874-$ or US-5761359-$ or US-5764043-$ or US-5774611-$ or US-5774612-$ or US-5778122-$ or US-5781680-$ or US-5796896-$ or US-5799122-$ or US-5809191-$ or US-5815618-$ or US-5818993-$ or US-5825955-$ or US-5832158-$ or US-5838856-$ or US-5838855-$ or US-5845036-$ or US-5862282-$ or US-5867621-$ or US-5881191-$ or US-5887100-$ or US-5887098-$ or US-5892870-$ or US-5896477-$ or US-5909526-$ or US-5909298-$).did. or (US-5915058-$ or US-5923805-$ or US-5930426-$ or US-5930425-$ or US-5937121-$ or US-5940561-$ or US-5940559-$ or US-5949946-$ or US-5953474-$ or US-5953473-$ or US-5956444-$ or US-5960137-$ or US-5969294-$ or US-5971626-$ or US-5980117-$ or US-5987203-$ or US-5993071-$ or US-6004043-$ or US-6022149-$ or US-6027252-$ or US-6041155-$ or US-6048103-$ or US-6048102-$ or US-6053639-$ or US-6059461-$ or US-6064791-$ or US-6076973-$).did. or				

		(US-6076975-$ or US-6081647-$ or US-6079881-$ or US-6088502-$ or US-6095694-$ or US-6104856-$ or US-6102581-$ or US-6108482-$ or US-6116790-$ or US-6116789-$ or US-6116101-$ or US-6132105-$ or US-6139346-$ or US-6142676-$ or US-6149315-$ or US-6154597-$ or US-6164835-$ or US-6164834-$ or US-6173099-$ or US-6179480-$ or US-6179475-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6190616-$ or US-6195477-$ or US-6193420-$).did. or (US-6196729-$ or US-6200040-$ or US-6206577-$ or US-6217226-$ or US-6220763-$ or US-6220762-$ or US-6224269-$ or US-6227719-$ or US-6227718-$ or US-6240229-$ or US-6238249-$ or US-6243526-$ or US-6247851-$ or US-6247849-$ or US-6256446-$ or US-6259839-$ or US-6264373-$ or US-6264372-$ or US-6267513-$ or US-6273618-$ or US-6290527-$ or US-6301004-$ or US-6302592-$ or US-6309111-$ or US-6318904-$ or US-6318903-$ or US-6334715-$).did. or (US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6354746-$ or US-6357932-$ or US-6361218-$ or US-6364536-$ or US-6367986-$ or US-6367984-$ or US-6371659-$ or US-6377840-$ or US-6375363-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6389212-$ or US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6409391-$ or US-6412987-$ or US-6419810-$ or US-6422759-$ or US-6425692-$ or US-6425694-$ or US-6431762-$ or US-6437894-$).did. or (US-6435946-$ or US-6445867-$ or US-6456768-$ or US-6457876-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6466724-$ or US-6464406-$ or US-6467971-$ or US-6467970-$ or US-6471417-$ or US-6471412-$ or US-6474876-$ or US-6478472-$ or US-6481900-$ or US-6481899-$ or US-6485192-$ or US-6497518-$ or US-6497516-$ or US-6501900-$ or US-6508593-$ or US-6526210-$ or US-6524015-$ or				

		US-6527450-$ or US-6533469-$ or US-6543941-$).did. or (US-6554482-$ or US-6558044-$ or US-6561699-$ or US-6572276-$ or US-6572273-$ or US-6582132-$ or US-6595696-$ or US-6601995-$ or US-6612750-$ or US-6619859-$ or US-6619856-$ or US-6632023-$ or US-6634794-$ or US-6644866-$ or US-6667803-$ or US-6695485-$ or US-6702477-$ or US-6702475-$ or US-6786647-$ or US-6789953-$ or US-6793399-$ or US-6840680-$ or US-6856748-$ or US-6895146-$ or US-7232261-$ or US-7435009-$ or US-7530845-$).did. or (US-7585118-$ or US-7588373-$ or US-7706657-$ or US-7738757-$ or US-7972066-$ or US-8070366-$ or US-8206040-$ or US-8517614-$ or US-8588571-$ or US-8953922-$ or US-9229177-$ or US-9229170-$ or US-9291781-$ or US-9316794-$ or US-9323007-$ or US-9448369-$ or US-9453972-$ or US-9482825-$ or US-9551831-$ or US-9625655-$ or US-9632267-$ or US-9638871-$ or US-9638868-$ or US-9645335-$ or US-9658407-$ or US-9671570-$ or US-9671568-$).did. or (US-9678282-$ or US-9696477-$ or US-9722367-$ or US-9720184-$ or US-9726829-$ or US-9735523-$ or US-9733123-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9746625-$ or US-9746368-$ or US-9759874-$ or US-9759869-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9784928-$ or US-9798090-$ or US-9797806-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9817195-$ or US-9823428-$ or US-9829643-$ or US-9827438-$).did. or (US-9835807-$ or US-9841566-$ or US-9857545-$ or US-9857537-$ or US-9864151-$ or US-9869824-$ or US-9876309-$ or US-9874702-$ or US-9880365-$ or US-9880357-$ or US-9885841-$ or US-9893813-$ or US-9891392-$ or US-9891387-$ or US-9891385-$ or US-9897767-$ or US-9904021-$ or US-9904020-$ or US-9910228-$ or US-9910226-$ or US-9915793-$				

		or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9939600-$ or US-9939590-$ or US-9948017-$).did. or (US-9946036-$ or US-10007069-$ or US-10018787-$).did. or (JP-2016095432-$ or JP-2016095410-$ or JP-2016122100-$ or JP-2016177309-$ or JP-2016188927-$ or JP-2017053937-$ or JP-2017090798-$ or JP-2017111444-$ or JP-2017134118-$ or JP-2017138535-$ or JP-2017151338-$ or JP-2017219768-$).did.				
S710	737	(US-20010041030-$ or US-20020025125-$ or US-20020106162-$ or US-20020114589-$ or US-20020159710-$ or US-20030031452-$ or US-20030044127-$ or US-20030044125-$ or US-20030180004-$ or US-20030223703-$ or US-20040008494-$ or US-20040017983-$ or US-20040017981-$ or US-20040038558-$ or US-20040052472-$ or US-20040062498-$ or US-20040105628-$ or US-20040131317-$ or US-20040223699-$ or US-20040228589-$ or US-20050036744-$ or US-20050053342-$ or US-20050111795-$ or US-20050123246-$ or US-20050135755-$ or US-20050135752-$).did. or (US-20050271328-$ or US-20060045430-$ or US-20060051028-$ or US-20060093282-$ or US-20060153504-$ or US-20060193562-$ or US-20060280409-$ or US-20060285807-$ or US-20070058907-$ or US-20070098327-$ or US-20070160327-$ or US-20080069501-$ or US-20080112672-$ or US-20080124031-$ or US-20080131055-$ or US-20080253719-$ or US-20090003772-$ or US-20090290839-$ or US-20090305542-$ or US-20100322561-$ or US-20110038590-$ or US-20110075971-$ or US-20110091159-$ or US-20110222819-$ or US-20110249942-$ or US-20120027355-$ or US-20120057824-$).did. or (US-20120076459-$ or US-20120082416-$ or US-20120099822-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 19:24

		20120141070-$ or US-20120251054-$ or US-20120251051-$ or US-20120263423-$ or US-20120263419-$ or US-20120308183-$ or US-20130051749-$ or US-20130064508-$ or US-20130077914-$ or US-20130121645-$ or US-20130129280-$ or US-20130183001-$ or US-20130216189-$ or US-20130230283-$ or US-20130259429-$ or US-20130272671-$ or US-20130308908-$ or US-20140056560-$ or US-20140064665-$ or US-20140064688-$ or US-20140072265-$ or US-20140086545-$ or US-20140147081-$ or US-20140205241-$).did. or (US-20140219614-$ or US-20140219624-$ or US-20140314385-$ or US-20140341510-$ or US-20150003785-$ or US-20150023637-$ or US-20150049989-$ or US-20150071591-$ or US-20150177463-$ or US-20150226926-$ or US-20150241644-$ or US-20150301286-$ or US-20150331201-$ or US-20150338583-$ or US-20150370017-$ or US-20150378112-$ or US-20160004018-$ or US-20160004016-$ or US-20160025937-$ or US-20160077287-$ or US-20160077284-$ or US-20160109661-$ or US-20160131854-$ or US-20160131849-$ or US-20160161680-$ or US-20160178859-$ or US-20160259135-$).did. or (US-20160282566-$ or US-20160282562-$ or US-20160320571-$ or US-20160349464-$ or US-20170059784-$ or US-20170090128-$ or US-20170090127-$ or US-20170102506-$ or US-20170102504-$ or US-20170108653-$ or US-20170115457-$ or US-20170139150-$ or US-20170153398-$ or US-20170184798-$ or US-20170184790-$ or US-20170205587-$ or US-20170219779-$ or US-20170227720-$ or US-20170235060-$ or US-20170242200-$ or US-20170242199-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170261698-$ or US-20170269309-$ or US-20170276883-$).did. or (US-20170276881-$ or US-20170293088-				

		$ or US-20170293087-$ or US-20170307831-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170357060-$ or US-20170357059-$ or US-20170363827-$ or US-20180003903-$ or US-20180011258-$ or US-20180011254-$ or US-20180031774-$ or US-20180052288-$ or US-20180077472-$ or US-20180081128-$ or US-20180081125-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180106973-$ or US-20180156988-$ or US-20180156985-$ or US-20180210154-$).did. or (US-4240695-$ or US-4320938-$ or US-4330172-$ or US-4477146-$ or US-4687291-$ or US-4737009-$ or US-4854664-$ or US-4856866-$ or US-4886335-$ or US-4915472-$ or US-4953929-$ or US-4955976-$ or US-5064268-$ or US-5076656-$ or US-5082346-$ or US-5082344-$ or US-5101463-$ or US-5134673-$ or US-5157749-$ or US-5166995-$ or US-5199093-$ or US-5259052-$ or US-5555332-$ or US-5666456-$ or US-5692080-$ or US-5867894-$).did. or (US-5870515-$ or US-5883995-$ or US-5920670-$ or US-5920669-$ or US-5984533-$ or US-6012852-$ or US-6095695-$ or US-6210045-$ or US-6250817-$ or US-6305849-$ or US-6318902-$ or US-6331079-$ or US-6379052-$ or US-6409392-$ or US-6422761-$ or US-6422760-$ or US-6450698-$ or US-6487343-$ or US-6491442-$ or US-6533465-$ or US-6554486-$ or US-6623172-$ or US-6688782-$ or US-6712521-$ or US-6764222-$ or US-6839583-$ or US-6848834-$).did. or (US-6944378-$ or US-7036996-$ or US-8388235-$ or US-9207454-$ or US-9316791-$ or US-9377591-$ or US-9389368-$ or US-9482820-$ or US-9606303-$ or US-9625657-$ or US-9664864-$ or US-9678283-$ or US-9678286-$ or US-9684134-$ or US-9696497-$ or US-9703062-$ or US-9709753-$ or US-9726830-$ or US-				

		9733434-$ or US-9798096-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9829650-$ or US-9835808-$ or US-9846283-$).did. or (US-9851512-$ or US-9891390-$ or US-9904019-$ or US-9910229-$ or US-9927582-$ or US-9939589-$ or US-9946037-$).did. or (IT-7819792-$ or FR-2363124-$ or IT-7925110-$ or GB-2057158-$ or FR-2487528-$ or GB-2081468-$ or EP-0061243-$ or DK-208682-$ or GB-8306227-$ or IT-8323399-$ or JP-S5856846-$ or EP-0125398-$ or FR-2535069-$ or WO-8600147-$ or EP-0249237-$ or EP-0262847-$ or EP-0262631-$ or DE-8626183-$ or WO-9015350-$ or EP-0408852-$ or GB-9103604-$ or GB-9106183-$ or CA-2030897-$ or DE-9107960-$ or GB-9206076-$ or CA-2057559-$).did. or (CA-2082276-$ or EP-0633485-$ or EP-0690319-$ or CA-2191600-$ or EP-0696748-$ or EP-0697608-$ or CN-1118443-$ or WO-9627811-$ or EP-0758099-$ or WO-9734176-$ or CA-2198522-$ or EP-0803750-$ or NL-1003147-$ or EP-0807837-$ or CA-2254335-$ or CA-2294930-$ or CA-2262351-$ or EP-0938003-$ or JP-2945144-$ or CA-2324565-$ or GB-9919699-$ or EP-0992819-$ or CA-2284331-$ or GB-0007281-$ or CA-2288249-$ or DE-19728960-$ or EP-1033595-$).did. or (EP-1033594-$ or EP-1039324-$ or EP-1039322-$ or EP-1041416-$ or EP-1041414-$ or JP-3106420-$ or CA-2321428-$ or EP-1091225-$ or WO-0137010-$ or EP-1107031-$ or KR-20010062142-$ or WO-0155762-$ or EP-1124147-$ or WO-0161397-$ or WO-0181965-$ or CA-2350290-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or KR-20020000530-$ or KR-20020001574-$ or CN-1331421-$ or EP-1172672-$ or EP-1172673-$ or KR-20020006481-$ or KR-20020006480-$ or DE-20118858-$).did. or (CA-2418331-$ or KR-20020050140-$ or WO-02056060-$ or WO-02061481-$ or DE-10114144-$ or NL-1018440-$ or WO-				

		03016975-$ or WO-03093883-$ or CA-2484569-$ or EP-1394584-$ or AU-2003291687-$ or EP-1530068-$ or CA-2503690-$ or CN-1677147-$ or CN-1707299-$ or WO-2008006402-$ or EP-1887395-$ or CN-101122658-$ or WO-2008029850-$ or CA-2662854-$ or WO-2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or CA-2689768-$ or EP-2206458-$ or WO-2010137426-$ or CA-2762411-$).did. or (EP-2302431-$ or WO-2011139938-$ or WO-2011152874-$ or EP-2444827-$ or WO-2012054174-$ or WO-2012054174-$ or WO-2012151175-$ or GB-201218194-$ or CN-102870023-$ or WO-2013115791-$ or WO-2013115789-$ or WO-2013126068-$ or CA-2912155-$ or WO-2014009463-$ or WO-2014011898-$ or EP-2700992-$ or JP-5433802-$ or WO-2014049469-$ or WO-2014113753-$ or CA-2836675-$ or WO-2014143748-$ or WO-2014165175-$ or WO-2014197701-$ or CN-104241938-$ or CA-2917189-$ or EP-2840425-$ or EP-2843452-$).did. or (WO-2015028433-$ or CA-2885821-$ or WO-2015068103-$ or CA-2932688-$ or GB-201507758-$ or WO-2015103783-$ or WO-2015116589-$ or CN-204595258-$ or WO-2015144883-$ or EP-2942653-$ or EP-2947485-$ or WO-2015190211-$ or WO-2016004347-$ or CN-105278047-$ or DE-202013012295-$ or CA-2859345-$ or JP-5860948-$ or WO-2016024014-$ or CA-2928026-$ or WO-2016043922-$ or JP-5905950-$ or WO-2016067668-$ or EP-3021145-$ or WO-2016082160-$ or WO-2016103821-$ or DE-202016103178-$ or EP-3054333-$).did. or (WO-2016161341-$ or WO-2017038704-$ or JP-6173629-$ or WO-2017180257-$ or CN-206584076-$ or EP-3258301-$ or WO-2018003776-$ or WO-2018004847-$).did. or (JP-54034251-$ or JP-55101904-$ or JP-				

		56066811-$ or JP-56074211-$ or JP-59075218-$ or JP-04214510-$ or JP-04220604-$ or JP-05313040-$ or JP-08015541-$ or JP-09005575-$ or JP-09033756-$ or JP-10104469-$ or JP-11072659-$ or JP-2000089061-$ or JP-2000284146-$ or JP-2000292655-$ or JP-2000310724-$ or JP-2001013372-$ or JP-2001021764-$ or JP-2001242361-$ or JP-2009294343-$ or JP-2012053420-$ or JP-2012078513-$ or JP-2015022131-$).did. or (DE-2805949-$ or DE-2932986-$ or GB-2057158-$ or GB-2081468-$ or EP-61243-$ or GB-2098354-$ or DE-3208797-$ or EP-125398-$ or US-4496213-$ or WO-8600147-$ or EP-249237-$ or EP-262631-$ or US-4953929-$ or WO-9015350-$ or GB-2241794-$ or US-5064268-$ or WO-9117540-$ or EP-458608-$ or US-5101463-$ or EP-490698-$ or EP-505197-$ or EP-430107-$ or EP-660145-$ or EP-660144-$ or EP-663602-$ or EP-663601-$).did. or (WO-9600917-$ or EP-696748-$ or EP-697608-$ or WO-9627811-$ or EP-758099-$ or WO-9734176-$ or EP-803750-$ or US-5692080-$ or WO-9746900-$ or WO-9857208-$ or WO-9947958-$ or GB-2341455-$ or EP-1041416-$ or EP-1041414-$ or EP-1091225-$ or WO-0140839-$ or EP-1107031-$ or EP-1124147-$ or WO-0181965-$ or US-20010041030-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or EP-1172673-$ or EP-1172672-$ or DE-20118858-$ or WO-02056060-$).did. or (US-6422760-$ or WO-02061481-$ or US-20030031437-$ or US-20030044125-$ or WO-03094297-$ or WO-03093883-$ or EP-1394584-$ or US-20040062498-$ or US-20040223699-$ or US-20040228589-$ or US-20050053342-$ or WO-2006022840-$ or US-20060153503-$ or US-20060165352-$ or US-20060193562-$ or EP-1752805-$ or US-20070058907-$ or US-20070077010-$ or US-20070098327-$ or US-20090041411-$ or US-20090060423-$ or WO-				

		2009110421-$ or WO-2010025180-$ or WO-2010068896-$ or EP-2206458-$ or WO-2010137426-$ or EP-2302431-$).did. or (US-20110249942-$ or US-20110274437-$ or WO-2011152874-$ or KR-2012000895-$ or US-20120027355-$ or US-20120057824-$ or US-20120082416-$ or EP-2444827-$ or US-20120099822-$ or US-20120251051-$ or US-20120251054-$ or US-20120263419-$ or WO-2012151175-$ or US-20120308183-$ or CN-102870023-$ or TW-201309089-$ or US-20130051749-$ or WO-2013036843-$ or CN-103091793-$ or US-20130121645-$ or WO-2013115789-$ or WO-2013115791-$ or WO-2013122865-$ or WO-2013126068-$ or US-20130230283-$ or US-20130259429-$ or WO-2013155395-$).did. or (WO-2013177234-$ or WO-2014011898-$ or US-20140016901-$ or EP-2700992-$ or JP-5433802-$ or US-20140064688-$ or TW-474924-$ or WO-2014049469-$ or US-20140147081-$ or US-20140153879-$ or ES-1110405-$ or WO-2014113753-$ or EP-2759860-$ or US-20140219624-$ or WO-2014143748-$ or WO-2014165175-$ or US-20140321808-$ or US-20140363131-$ or WO-2014197701-$ or EP-2818903-$ or WO-2015009435-$ or US-20150023637-$ or US-20150049989-$ or WO-2015028433-$ or WO-2015068103-$ or WO-2015070382-$ or US-20150162982-$).did. or (US-20150177463-$ or WO-2015103783-$ or WO-2015116589-$ or US-20150219864-$ or US-20150226926-$ or US-20150226925-$ or US-20150241644-$ or CN-104950402-$ or WO-2015144883-$ or US-20150286012-$ or DE-102015106225-$ or US-20150331201-$ or EP-2947485-$ or WO-2015190211-$ or US-20150378110-$ or US-20160004016-$ or US-20160004018-$ or US-20160025937-$ or CA-2859345-$ or				

		JP-5860948-$ or WO-2016024014-$ or WO-2016033577-$ or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016043922-$ or JP-5905950-$).did. or (US-20160124158-$ or US-20160131854-$ or EP-3021145-$ or US-20160161680-$ or US-20160178852-$ or US-20160178859-$ or US-9377591-$ or US-9389368-$ or EP-3054333-$ or US-20160259135-$ or CN-105978629-$ or US-20160282566-$ or WO-2016161341-$ or US-20160306125-$ or US-9482820-$ or US-20160341908-$ or US-20160341911-$ or US-20160349466-$ or US-20160377819-$ or US-20170031106-$ or US-20170059784-$ or WO-2017038704-$ or US-20170090127-$ or US-20170102504-$ or US-20170115457-$ or US-20170139150-$ or US-20170139156-$).did. or (US-20170153398-$ or US-9678283-$ or US-20170184790-$ or US-9709753-$ or US-20170205587-$ or JP-6173629-$ or US-20170219779-$ or US-9726830-$ or US-20170227720-$ or US-20170254967-$ or US-20170254966-$ or US-20170261699-$ or US-20170293088-$ or US-20170307830-$ or US-9804340-$ or US-20170329090-$ or US-20170336577-$ or US-20170343760-$ or US-20170371109-$ or US-20180003903-$ or US-20180011258-$ or US-20180052288-$ or US-20180081128-$ or US-20180106973-$ or US-20180120519-$ or US-20180128988-$).did.				
S711	136	(US-20020176671-$ or US-20040017980-$ or US-20040126118-$ or US-20040197054-$ or US-20070172177-$ or US-20070286554-$ or US-20100008635-$ or US-20100129034-$ or US-20100290745-$ or US-20110116749-$ or US-20110222830-$ or US-20110229096-$ or US-20110229095-$ or US-20110225792-$ or US-20110255831-$ or US-20110262078-$ or US-20110262077-$ or US-20120014648-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/22 19:24

		$ or US-20120063724-$ or US-20120275749-$ or US-20130136402-$ or US-20130315538-$ or US-20140286610-$ or US-20150016781-$ or US-20150110448-$ or US-20160124170-$).did. or (US-20160202429-$ or US-20170045691-$ or US-20170285277-$ or US-20170299820-$ or US-20180120519-$ or US-20180143380-$ or US-20180231722-$ or US-20180239093-$ or US-20180267255-$ or US-20180292618-$ or US-20180292612-$ or US-20180364421-$ or US-20190107679-$ or US-20190107678-$ or US-20190113691-$ or US-20190137701-$ or US-20190179085-$).did. or (US-5504825-$ or US-5613021-$ or US-5661826-$ or US-6045270-$ or US-6276840-$ or US-6293708-$ or US-6623170-$ or US-6796717-$ or US-6848840-$ or US-6866425-$ or US-6932514-$ or US-6944387-$ or US-6976793-$ or US-7094091-$ or US-7178994-$ or US-7182522-$ or US-7234874-$ or US-7241056-$ or US-7300216-$ or US-7536075-$ or US-7654748-$ or US-7891882-$ or US-7912336-$ or US-8052333-$ or US-8231282-$ or US-8235600-$).did. or (US-8262296-$ or US-8317407-$ or US-8346047-$ or US-8348519-$ or US-8348518-$ or US-8376634-$ or US-8406583-$ or US-8417074-$ or US-8494329-$ or US-8496384-$ or US-8529138-$ or US-8542972-$ or US-8550725-$ or US-8550724-$ or US-8579521-$ or US-8690593-$ or US-8714835-$ or US-8821038-$ or US-8821037-$ or US-8915653-$ or US-8958679-$ or US-9014527-$ or US-9031364-$ or US-9057848-$ or US-9146376-$ or US-9146360-$ or US-9417401-$).did. or (US-9513442-$ or US-9541711-$ or US-9557497-$ or US-9563025-$ or US-9606297-$ or US-9632255-$ or US-9645318-$ or US-9658409-$ or US-9684139-$ or US-9739949-$ or US-9753228-$ or US-9772464-$ or US-9857538-$ or US-9977199-$ or US-9989710-$ or US-10012801-$ or US-10054747-$ or				

		US-10061090-$ or US-10067302-$ or US-10067300-$ or US-10088636-$ or US-10101539-$ or US-10139570-$ or US-10146014-$ or US-10156684-$ or US-10209473-$).did. or (WO-2010083369-$ or EP-2380054-$ or CN-102282495-$ or WO-2014152675-$ or WO-2015043158-$ or CN-104516073-$ or CN-102282495-$ or WO-2018125706-$).did. or (JP-57044113-$).did. or (US-20160327757-$ or US-20170299820-$ or WO-2018125706-$ or US-20190107679-$).did.				
S712	2,087	S708 S709 S710 S711	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 19:24
S713	56,021	(ferrule connector) with insert$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S714	66,377	G02B6/38$.cpc.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 19:24
S715	2,541	S713 and S714	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 19:24
S716	14,591	adapter with (groove channel) with (top bottom upper lower)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S717	102	S715 and S716	US-PGPUB; USPAT;	OR	ON	2020/07/22 19:24

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S718	62	S717 not S712	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S719	1,186,315	(groove channel) with upper with lower	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S720	735,634	(groove channel) with top with bottom	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S721	447	S715 and (S719 S720)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 19:24
S722	325	S721 not (S712 S718)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S723	15,680	("ferrules" "connectors") with align$4 with (groove channel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S724	2,186	S714 and S723	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2020/07/22 19:24

			JPO; DERWENT; IBM_TDB			
S725	353	S724 and (S719 S720)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 19:24
S726	167	S725 not (S712 S718 S722)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S727	11,374	G02B6/3825,3826.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 19:24
S728	441	S723 and S727	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/07/22 19:24
S729	206	S728 not (S712 S718 S722 S726)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S730	26,017	("ferrules" "connectors") with align$4 with (groove channel slot)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S731	705	S730 and S727	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2020/07/22 19:24

			DERWENT; IBM_TDB			
S732	151	S731 not (S712 S718 S722 S726 S729)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S733	2,998	S712 S718 S722 S726 S729 S732	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S734	2,792	G02B6/3831.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S735	2,427	S734 not S733	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S736	38	("20010026661" | "20020167793" | "20040228582" | "20050095899" | "20060140543" | "20080032536" | "20080248691" | "20080311781" | "20110059642" | "20120190230" | "20120257865" | "4186997" | "4376565" | "4448467" | "4580868" | "4645295" | "4711511" | "4904199" | "4979792" | "4986769" | "5166995" | "5183408" | "5265181" | "5289554" | "6149313" | "6257917" | "6538882" | "6634796" | "6910911" | "6994478" | "7182523" | "7325975" | "7374347" | "7476118" | "7674046" | "8167638" | "8262403" | "8724955").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2020/07/22 19:24
S737	2,864	ferrule with (mt$2 mpo)	US-PGPUB; USPAT; USOCR;	OR	ON	2020/07/22 19:24

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S738	129	S735 and S737	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S739	2,107,838	(slot groove channel key$4) with (upper lower top bottom) with (center central$4 middle through)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S740	42	S735 and S739	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S741	40	S740 not (S738)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S742	9,201,619	(slot groove channel key$4) with (upper lower top bottom center central$4 middle through)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S743	416	S735 and S742	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S744	291	S743 not (S738 S741)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24

S745	460	S738 S741 S744	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S746	20,748	(multiple plural$4) adj2 (key$4 key$way) with (surface top bottom side wall)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S747	15,013	G02B6/3825-3831.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S748	28	S746 and S747	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S749	15	S748 not (S736 S745)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S750	505	S736 S745 S749	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S751	12,760	G02B6/3881,3885.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S752	13,201	G02B6/3879,3825.cpc.	US-PGPUB; USPAT; USOCR;	OR	ON	2020/07/22 19:24

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S753	2,874	S752 and S751	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S754	1,736	S753 not (S733 S735 S750)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S755	7,188	S733 S735 S750 S754	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:24
S756	4,202	S735 S750 S754	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:29
S757	2,427	S735	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:29
S758	2,241	S750 S754	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:29
S759	2,427	S735 not S733	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2020/07/22 19:30

			JPO; DERWENT; IBM_TDB			
S760	1,775	S758 not S757	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:31
S761	18	("20030108301" | "20030190130" | "20090274432" | "20100111484" | "20120251051" | "20130044978" | "20130051733" | "20140219609" | "20140233893" | "5600747" | "5675682" | "5870515" | "6146023" | "6485189" | "6547585" | "6705765" | "6857900" | "8858089").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2020/07/22 19:44
S762	2	"49235150".FMID.	US-PGPUB; USPAT; FPRS; JPO	OR	ON	2020/07/22 19:44
S763	12,760	G02B6/3881,3885.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:44
S764	13,201	G02B6/3879,3825.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:44
S765	23,087	S764 S763	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:44
S766	533	gang$4 with (adapter adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:44

S767	75	S765 and S766	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:44
S768	146,261	G02B6/38$3.cpc. G02B6/42$3.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:44
S769	92	S766 and S768	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:44
S770	17	S769 not S767	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:44
S771	110	S761 S762 S767 S770	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/07/22 19:44
S772	55	(US-20140241689-$ or US-20200057205-$ or US-20200070211-$ or US-20190377139-$ or US-20190346644-$ or US-20190331862-$ or US-20190285806-$ or US-20190278028-$ or US-20190101703-$ or US-20180031783-$ or US-20160062050-$ or US-20160035201-$ or US-20150241650-$ or US-20150063758-$ or US-20140348481-$ or US-20140348467-$ or US-20140241688-$ or US-20140233893-$ or US-20140219609-$ or US-20130272671-$ or US-20130259429-$ or US-20130051733-$ or US-20130044978-$ or US-20120251051-$ or US-20110038592-$ or US-	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/23 11:13

		20100322580-$).did. or (US-20100199447-$ or US-20100111484-$ or US-20100054665-$ or US-20090274432-$ or US-20080273837-$ or US-20050163431-$ or US-20050111810-$ or US-20050111809-$ or US-20030190130-$ or US-20030108301-$).did. or (US-8858089-$ or US-6857900-$ or US-6705765-$ or US-6547585-$ or US-6485189-$ or US-6412986-$ or US-6146023-$ or US-6041155-$ or US-5870515-$ or US-5675682-$ or US-5600747-$).did. or (US-10459172-$ or US-20150063758-$ or US-20140348467-$ or US-20140348481-$ or US-20140241688-$ or US-20140241689-$ or WO-2013155395-$ or US-20130259429-$).did.				
S773	623	(US-20150260936-$ or US-20190324218-$ or US-20150219864-$ or US-20160170154-$ or US-20200150353-$ or US-20180267258-$ or US-20200132941-$ or US-20180335577-$ or US-20200116950-$ or US-20190181586-$ or US-20200088955-$ or US-20200081194-$ or US-20200057204-$ or US-20200057199-$ or US-20200049902-$ or US-20190129104-$ or US-20190377138-$ or US-20190369335-$ or US-20190353865-$ or US-20190346635-$ or US-20190346634-$ or US-20180217339-$ or US-20190331862-$ or US-20190302371-$ or US-20190190199-$ or US-20160195682-$).did. or (US-20190271815-$ or US-20190243084-$ or US-20090238522-$ or US-20190243075-$ or US-20190235174-$ or US-20180292617-$ or US-20190200103-$ or US-20190187383-$ or US-20170227719-$ or US-20190113693-$ or US-20190113692-$ or US-20190113689-$ or US-20190101706-$ or US-20190101705-$ or US-20190101704-$ or US-20190079252-$ or US-20190072729-$ or US-20190064452-$ or US-20190049678-$ or US-20190041587-$ or US-20190025526-$ or US-20170371109-$ or US-20180356600-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/23 11:13

		$ or US-20180335571-$ or US-20180329154-$ or US-20180314018-$ or US-20140321808-$).did. or (US-20170045702-$ or US-20180306984-$ or US-20180299624-$ or US-20180284357-$ or US-20180267256-$ or US-20130089293-$ or US-20180136416-$ or US-20180100982-$ or US-20180081129-$ or US-20180052287-$ or US-20170293090-$ or US-20170205590-$ or US-20160062050-$ or US-20160320572-$ or US-20160341905-$ or US-20160306125-$ or US-20150162982-$ or US-20160223757-$ or US-20150063815-$ or US-20140363131-$ or US-20140321810-$ or US-20140301701-$ or US-20140241671-$ or US-20120257865-$ or US-20080311781-$ or US-20110274437-$ or US-20120128302-$).did. or (US-20120099819-$ or US-20120057824-$ or US-20110091158-$ or US-20110059642-$ or US-20100310213-$ or US-20100226610-$ or US-20100104355-$ or US-20070077010-$ or US-20080248691-$ or US-20080175543-$ or US-20080131055-$ or US-20070292082-$ or US-20080037934-$ or US-20080032536-$ or US-20070116412-$ or US-20050226567-$ or US-20050164536-$ or US-20050163429-$ or US-20050095899-$ or US-20050018973-$ or US-20040228582-$ or US-20030031448-$ or US-20030031437-$ or US-20030012520-$ or US-20020167793-$).did. or (US-10571641-$ or US-10539745-$ or US-10527803-$ or US-10514518-$ or US-10429592-$ or US-10401574-$ or US-10302874-$ or US-10234635-$ or US-10133009-$ or US-10120140-$ or US-10120138-$ or US-10101570-$ or US-10094768-$ or US-9971103-$ or US-9678294-$ or US-9658405-$ or US-9645323-$ or US-9606300-$ or US-9581767-$ or US-9557508-$ or US-9557491-$ or US-9551835-$ or US-9482840-$ or US-9482823-$ or US-9448368-$ or US-9366829-$).did. or (US-9335488-$ or US-9291785-$ or US-				

		9274300-$ or US-9110249-$ or US-9103990-$ or US-9057845-$ or US-9052475-$ or US-9033588-$ or US-9022666-$ or US-8985862-$ or US-8979388-$ or US-8845206-$ or US-8821036-$ or US-8801297-$ or US-8573854-$ or US-8419291-$ or US-8406588-$ or US-8202009-$ or US-8157455-$ or US-8104973-$ or US-8009959-$ or US-7980769-$ or US-7887243-$ or US-7758255-$ or US-7744285-$ or US-7717625-$ or US-7374347-$).did. or (US-7336884-$ or US-7261471-$ or US-7234876-$ or US-7111990-$ or US-7090407-$ or US-7073953-$ or US-6994478-$ or US-6945702-$ or US-6920255-$ or US-6872006-$ or US-6866424-$ or US-6832858-$ or US-6805493-$ or US-6789950-$ or US-6769814-$ or US-6762941-$ or US-6761488-$ or US-6572276-$ or US-6554486-$ or US-6513989-$ or US-6459843-$ or US-6435728-$ or US-6434316-$ or US-6434315-$ or US-6398422-$ or US-6364539-$ or US-6357928-$).did. or (US-6351590-$ or US-6264374-$ or US-6259856-$ or US-6257917-$ or US-6256448-$ or US-6203208-$ or US-6149313-$ or US-6146023-$ or US-6139194-$ or US-5963698-$ or US-5600747-$ or US-5511138-$ or US-5428702-$ or US-5335301-$ or US-5265181-$ or US-5216732-$ or US-5183408-$ or US-5166995-$ or US-4986769-$ or US-4950048-$ or US-4904199-$ or US-4711511-$ or US-4657338-$ or US-4580868-$ or US-4478485-$ or US-4448467-$ or US-4376565-$).did. or (US-4186997-$).did. or (WO-2019012006-$ or CA-2864886-$ or WO-2020047283-$ or WO-2017147401-$ or WO-2018183496-$ or GB-201311768-$ or GB-201906387-$ or CN-110618492-$ or WO-2018140873-$ or AU-2015318357-$ or WO-2019222189-$ or WO-2016077167-$ or CN-105425341-$ or WO-2012106510-$ or WO-2019200066-$ or WO-2016086881-$ or WO-2019125963-$ or WO-2016053673-$ or FR-				

		3021415-$ or WO-2019089220-$ or WO-2019060293-$ or WO-2017139430-$ or EP-3330758-$ or WO-2019036297-$ or WO-2018169759-$ or WO-2016049208-$).did. or (CA-2869770-$ or WO-2018045232-$ or WO-2015029585-$ or CN-105283786-$ or WO-2017123460-$ or JP-5805344-$ or CN-205992071-$ or WO-2016068966-$ or WO-2015191024-$ or WO-2011019581-$ or EP-2818903-$ or WO-2014116785-$ or WO-2013049082-$ or CA-2546593-$ or WO-2008045560-$ or WO-2011130445-$ or CA-2304082-$ or WO-2010103465-$ or EP-2251724-$ or AU-2002243312-$ or WO-9909442-$ or CN-1231430-$ or CA-2537354-$ or EP-1221630-$ or WO-0008503-$ or CA-2276631-$ or EP-1229366-$).did. or (EP-1879060-$ or CA-2594549-$ or CN-1258011-$ or WO-2005022228-$ or WO-2004008214-$ or WO-2004107001-$ or EP-1334394-$ or WO-2006007120-$ or CA-2276627-$ or EP-1415186-$ or WO-2005047946-$ or EP-1257012-$ or EP-1299758-$ or CA-2283016-$ or WO-9746900-$ or WO-9857208-$ or CA-2339502-$ or CA-2327007-$ or CA-2136212-$ or CN-1231429-$ or EP-0927899-$ or EP-0927898-$ or WO-0075701-$ or AU-1587897-$ or CA-2288247-$ or EP-1273944-$ or CA-2068453-$).did. or (GB-9011424-$ or WO-0182374-$ or EP-0927895-$ or CA-2312241-$ or MX-9202155-$ or CA-2330965-$ or DE-19846731-$ or EP-1039323-$ or FR-2752951-$ or WO-9964917-$ or GB-9622511-$ or EP-0961142-$ or CA-2237481-$ or WO-9931539-$ or EP-0821253-$ or CA-2222237-$ or EP-0323920-$ or EP-0490698-$ or CA-1299407-$ or AU-1019788-$ or WO-9308493-$ or FR-2648240-$ or DE-9108955-$ or GB-8614272-$ or CA-1239820-$ or DE-3633340-$ or IT-7925047-$).did. or (GB-8332694-$ or EP-0109870-$ or DE-2933790-$ or DE-3021001-$ or GB-2058392-$).did. or (JP-2016009081-$ or JP-				

		2016122050-$ or JP-2016085422-$ or JP-10050400-$ or JP-2002048946-$ or JP-08110439-$ or JP-09145959-$ or JP-10311934-$ or JP-09145957-$ or JP-07248434-$ or JP-01177508-$ or JP-59157605-$ or JP-56060409-$).did. or (US-20200174200-$ or US-20200166717-$ or US-20200142140-$ or US-20200124802-$ or US-20190384018-$ or US-20190339464-$ or US-20190339470-$ or US-20190324218-$ or US-20190302376-$ or US-20190285811-$ or US-20190243076-$ or US-20190235174-$ or CN-110031940-$ or US-20190219776-$ or US-20190212504-$ or US-20190200103-$ or US-20190190199-$ or US-20190179089-$ or US-20190179086-$ or US-20190179088-$ or US-20190181586-$ or US-20190154928-$ or US-20190129104-$ or US-20190101704-$ or US-20190101705-$ or WO-2019060293-$).did. or (US-20200088955-$ or US-10234635-$ or US-20190079252-$ or US-10222562-$ or KR-2019006212-$ or WO-2019012006-$ or US-20190025526-$ or US-20190011645-$ or US-20190064452-$ or US-20180356600-$ or KR-2018129442-$ or US-20180329154-$ or US-20180335571-$ or US-20180335577-$ or US-20180335581-$ or US-10107967-$ or US-20180314014-$ or US-20180306997-$ or US-10107972-$ or US-20180299624-$ or US-10101570-$ or US-20180292617-$ or WO-2018183496-$ or US-20180267255-$ or US-20180239093-$ or US-20180217338-$ or US-20180217339-$).did. or (US-20180210155-$ or US-10018787-$ or US-20180188455-$ or CN-108227089-$ or US-20180156988-$ or US-9989712-$ or US-20190113692-$ or US-20180136416-$ or WO-2018085767-$ or US-9933582-$ or US-20180077472-$ or WO-2018045232-$ or WO-2018045234-$ or US-20180011261-$ or US-20170357060-$ or EP-3258301-$ or US-9823428-$				

		or US-20170299831-$ or US-20170293089-$ or WO-2017172600-$ or US-20170285277-$ or WO-2017160697-$ or WO-2017147401-$ or CN-106918869-$ or US-20170242199-$ or WO-2017136437-$ or US-20170227719-$).did. or (JP-2017134310-$ or US-20170212316-$ or US-20170205591-$ or US-20170192182-$ or WO-2017066139-$ or US-20170045702-$ or US-20170045695-$ or US-20170003456-$ or US-20160349464-$ or US-9482823-$ or US-9482825-$ or US-20160306124-$ or EP-3078999-$ or US-20160282562-$ or US-9448369-$ or WO-2016137934-$ or US-20160238789-$ or WO-2016123128-$ or US-20160223757-$ or US-20160223763-$ or US-20160195682-$ or WO-2016104132-$ or US-20160161681-$ or WO-2016086881-$ or WO-2016082160-$ or US-20160139345-$ or EP-3021144-$).did. or (EP-3021146-$ or WO-2016068966-$ or US-20160109676-$ or WO-2016053852-$ or WO-2016053673-$ or WO-2016049208-$ or US-20160091673-$ or US-20160085045-$ or US-20160077284-$ or WO-2016039383-$ or US-20150370017-$ or WO-2015191024-$ or US-20160370549-$ or US-20150355417-$ or JP-5805344-$ or US-20150309279-$ or WO-2015158564-$ or WO-2015150149-$ or US-20150253518-$ or AU-2014101479-$ or US-20150131946-$ or WO-2015047380-$ or WO-2015029585-$ or WO-2014186436-$ or US-20140314385-$ or US-20140294339-$ or US-20140241667-$).did. or (US-20140219615-$ or US-20140205241-$ or AU-2014100325-$ or CN-103645545-$ or US-20140072265-$ or US-20180100982-$ or US-20130302004-$ or WO-2013126429-$ or US-20130209041-$ or US-20130170796-$ or US-20130170797-$ or WO-2013077969-$ or US-20130089293-$ or WO-2013019622-$ or WO-2013019189-$ or US-20120263423-$ or WO-				

		2012106510-$ or WO-2012106513-$ or WO-2012106518-$ or JP-2012120095-$ or US-20120141070-$ or US-20110243504-$ or US-20110150396-$ or US-20110081798-$ or US-20110044590-$ or WO-2011019581-$ or KR-2011002571-$).did. or (US-20100322554-$ or US-20100310213-$ or WO-2010138446-$ or EP-2251724-$ or US-20100135618-$ or US-20100074616-$ or US-20090290838-$ or US-20090238522-$ or WO-2009023673-$ or EP-1990665-$ or US-20080253719-$ or WO-2008045560-$ or EP-1887395-$ or US-20070160327-$ or US-20050271328-$ or US-20050226567-$ or WO-2005022229-$ or WO-2005022228-$ or WO-2005022227-$ or US-20040223701-$ or US-20040105628-$ or US-20040062486-$ or WO-2004008214-$ or US-20040008494-$ or KR-2003071425-$ or US-20030044127-$ or KR-2003012941-$).did. or (US-20030031448-$ or US-20030031419-$ or EP-1257012-$ or KR-2002019797-$ or WO-0219002-$ or WO-0216989-$ or WO-0216530-$ or WO-0182374-$ or EP-1150149-$ or CA-2339502-$ or WO-0155762-$ or EP-1116974-$ or WO-0137010-$ or WO-0075701-$ or WO-0070381-$ or EP-1054278-$ or EP-1039322-$ or JP-2000199833-$ or EP-1016886-$ or EP-1014126-$ or EP-997753-$ or WO-0008503-$ or EP-969299-$ or EP-969298-$ or WO-9964917-$ or EP-961142-$ or WO-9957786-$).did. or (EP-949522-$ or EP-927899-$ or EP-927898-$ or WO-9931539-$ or US-5915058-$ or WO-9928773-$ or US-5909526-$ or EP-916974-$ or WO-9909442-$ or US-5867621-$ or WO-9859271-$ or US-5778122-$ or EP-821253-$ or US-5666456-$ or JP-09145959-$ or GB-2306696-$ or US-5555332-$ or EP-712015-$ or US-5519799-$ or WO-9323777-$ or EP-514722-$ or US-5134673-$ or EP-323920-$ or EP-277390-$ or GB-2176629-$ or GB-2151040-$ or GB-2058392-$).did. or (EP-8329-$).did.			

S774	735	(US-20180321449-$ or US-20190004252-$ or US-20170059785-$ or US-20190137700-$ or US-20130158512-$ or US-20180364422-$ or US-20150378113-$ or US-20200012052-$ or US-20100054668-$ or US-20060093274-$ or US-20140029900-$ or US-20190004251-$ or US-20190258010-$ or US-20140153878-$ or US-20180128988-$ or US-20190170931-$ or US-20140153879-$ or US-20190137697-$ or US-20190137695-$ or US-20160349458-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20170176691-$ or US-20100322563-$).did. or (US-20190033531-$ or US-20170261696-$ or US-20180364436-$ or US-20180364424-$ or US-20180364423-$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180217336-$ or US-20110058774-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180120517-$ or US-20170363818-$ or US-20160274314-$ or US-20170205586-$ or US-20140169727-$ or US-20160223774-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170176692-$ or US-20120093462-$ or US-20170068064-$ or US-20170063464-$ or US-20170023746-$).did. or (US-20110299266-$ or US-20140016901-$ or US-20160327756-$ or US-20160306122-$ or US-20150260924-$ or US-20160282565-$ or US-20160202428-$ or US-20140205257-$ or US-20160091674-$ or US-20150277059-$ or US-20150260923-$ or US-20150198774-$ or US-20140037253-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20120155803-$ or US-20140168987-$ or US-20140161392-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/23 11:14

		$ or US-20110064361-$).did. or (US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20110229092-$ or US-20110229083-$ or US-20080226235-$ or US-20080273840-$ or US-20100178014-$ or US-20100178010-$ or US-20040157499-$ or US-20080013889-$ or US-20100027942-$ or US-20090135429-$ or US-20020126960-$ or US-20060127028-$ or US-20080317415-$ or US-20080090433-$ or US-20060257075-$ or US-20080124033-$ or US-20060083466-$ or US-20070292084-$ or US-20060018603-$ or US-20060204178-$ or US-20070031103-$ or US-20060275007-$ or US-20060257076-$).did. or (US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060063436-$ or US-20060045428-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20020176960-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20020142634-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$ or US-20190219775-$ or US-20200200977-$ or US-20200183092-$).did. or (US-20200150374-$ or US-20200124805-$ or US-20200081193-$ or US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-$).did. or (US-10324264-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$				

		or US-7857523-$ or US-7572063-$ or US-5971625-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6179476-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$).did. or (US-6364537-$ or US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-5717533-$ or US-5212752-$ or US-6179477-$ or US-6130977-$ or US-5546281-$ or US-6062739-$ or US-5970598-$ or US-5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$).did. or (US-5577146-$ or US-5436994-$ or US-5121454-$ or US-5400428-$ or US-5396572-$ or US-5265182-$ or US-5329604-$ or US-5261019-$ or US-5289554-$ or US-5276755-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$ or US-5067783-$).did. or (US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$ or US-4728171-$).did. or (US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-				

		4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$ or US-10670824-$ or US-10444442-$).did. or (CA-3068131-$ or EP-3180644-$ or WO-2016140710-$ or WO-2018009426-$ or WO-2015070382-$ or EP-3123221-$ or WO-2019246241-$ or EP-3579031-$ or GB-201905648-$ or CN-105683795-$ or WO-2018044728-$ or WO-2019086961-$ or EP-2852856-$ or WO-2017182535-$ or EP-3330757-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$ or CN-107636504-$ or CN-206479676-$ or WO-2016174980-$ or AU-2004274992-$ or CA-2866107-$ or WO-2012015713-$ or FR-2997767-$ or CN-102520489-$).did. or (CN-102445735-$ or CN-103676018-$ or AU-2006295165-$ or WO-2015120031-$ or GB-9525323-$ or GB-201220748-$ or CN-102385113-$ or WO-2014054357-$ or CA-2593676-$ or DE-102010021179-$ or GB-201004720-$ or EP-1762871-$ or DE-112006003952-$ or CA-2441872-$ or DE-60026115-$ or WO-2008033262-$ or KR-20040020797-$ or EP-1783524-$ or KR-100452879-$ or WO-9723794-$ or DE-19601949-$ or CA-2302068-$ or DE-20111078-$ or DE-10031931-$ or DE-19834723-$ or MX-9201992-$ or DE-19525739-$).did. or (DE-29614436-$ or DE-3914978-$ or EP-0339876-$ or EP-0546936-$ or CH-687105-$ or GB-9408857-$ or EP-0324272-$ or FR-2707402-$ or IT-MI913184-$ or WO-9415232-$ or EP-0183820-$ or GB-9025881-$ or EP-0253426-$ or DE-4203966-$ or GB-9103982-$ or CH-676513-$ or DE-9012174-$ or DE-9010357-$ or EP-0154781-$ or DE-8911081-$ or DE-8911080-$ or EP-0292024-$ or KR-870005264-$ or				

		EP-0166636-$ or DE-8901052-$ or DE-8900623-$ or DE-8812341-$).did. or (DE-3737842-$ or FR-2528984-$ or DE-3701421-$ or EP-0249406-$ or EP-0098190-$ or EP-0098205-$ or EP-0153249-$ or DE-2932986-$ or GB-2086602-$ or DE-2832839-$ or EP-0045271-$ or FR-2502798-$ or AU-3682878-$ or WO-8002213-$ or GB-1450760-$ or GB-1526682-$ or FR-2316611-$ or FR-2268370-$ or WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$).did. or (JP-2005258017-$ or JP-2000241670-$ or JP-03059503-$ or JP-61028909-$ or JP-61129605-$ or JP-59036207-$ or JP-58190910-$ or JP-59038707-$ or JP-56062212-$ or JP-2002098860-$ or JP-05215939-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-56137322-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$ or JP-2019184942-$).did. or (US-20190369336-$ or EP-3579031-$ or CN-110376684-$ or US-20190162914-$ or US-20190162917-$ or US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or CN-108983368-$ or US-20180372962-$ or US-20180364422-$ or KR-2018131725-$).did. or (US-20180341069-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or CN-207965228-$ or CN-207965231-$ or US-				

		20180292612-$ or CN-108508541-$ or CN-108490551-$ or CN-108279462-$ or JP-6363784-$ or US-20180203196-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or WO-2018057615-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018006987-$ or WO-2018008399-$ or CN-107479141-$).did. or (EP-3249434-$ or WO-2017182535-$ or KR-2017103050-$ or US-20170264045-$ or US-20180231722-$ or US-20170261698-$ or US-20170261696-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017095928-$ or WO-2017106514-$ or US-20170176691-$ or US-20170176692-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$).did. or (US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or CN-104914515-$ or WO-2015142551-$ or US-20150260923-$ or WO-2015126470-$ or WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$).did. or (US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$				

		or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$ or WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$).did. or (US-20060204178-$ or US-20060153504-$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$ or US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$).did. or (EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9637793-$ or DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$).did. or (EP-440447-$ or EP-420490-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or EP-335531-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$ or EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-				

		220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$).did. or (EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$ or GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$ or US-20200209492-$ or US-20200200977-$ or US-20200200979-$ or US-20200183093-$ or US-20200166716-$ or US-20200150374-$ or US-20200142141-$ or US-20200124805-$ or US-20200116949-$ or US-20200116952-$).did. or (US-20200116953-$ or US-20200116954-$ or US-20200110224-$ or US-20200103598-$ or US-20200103599-$ or US-20200096709-$ or US-20200096710-$ or US-20200096708-$ or US-20200081198-$ or US-20200057205-$ or US-20200049899-$ or US-20200033539-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$).did. or (EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190219775-$ or US-20190204513-$ or US-20200081193-$ or US-20200012053-$ or US-20200003961-$ or US-20190227240-$).did.				
S775	2,182	(US-20200225425-$ or US-20200225424-$ or US-20200225422-$ or US-20190056557-$ or US-20190179086-$ or US-20190064447-$ or US-20180217337-$ or US-20200183093-$ or US-20160018593-$ or US-20200166716-$ or US-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/23 11:15

		20110222819-$ or US-20170285282-$ or US-20180246282-$ or US-20160259135-$ or US-20180143384-$ or US-20200142133-$ or US-20190041584-$ or US-20200132934-$ or US-20200116957-$ or US-20200110224-$ or US-20200096708-$ or US-20200088954-$ or US-20160274311-$ or US-20200088949-$ or US-20200073059-$ or US-20200018909-$).did. or (US-20160124160-$ or US-20190146160-$ or US-20140064665-$ or US-20170139158-$ or US-20190377139-$ or US-20160209599-$ or US-20160025942-$ or US-20140072265-$ or US-20180329158-$ or US-20180011254-$ or US-20080175541-$ or US-20190018201-$ or US-20180267255-$ or US-20180081127-$ or US-20170373756-$ or US-20160216454-$ or US-20170219779-$ or US-20090148101-$ or US-20180252872-$ or US-20190187392-$ or US-20190179085-$ or US-20130216186-$ or US-20190170957-$ or US-20180156985-$ or US-20190154924-$ or US-20160327757-$ or US-20190113691-$).did. or (US-20160161680-$ or US-20190101709-$ or US-20190086617-$ or US-20190033533-$ or US-20190025523-$ or US-20190025522-$ or US-20190004261-$ or US-20180364421-$ or US-20180348443-$ or US-20180341072-$ or US-20160018604-$ or US-20180329155-$ or US-20180329153-$ or US-20180292618-$ or US-20180292612-$ or US-20160139346-$ or US-20160349464-$ or US-20180239091-$ or US-20180231730-$ or US-20160209610-$ or US-20180231722-$ or US-20170219789-$ or US-20160131857-$ or US-20180217338-$ or US-20180210155-$ or US-20180210154-$ or US-20180210153-$).did. or (US-20180196204-$ or US-20180196202-$ or US-20180188460-$ or US-20180180819-$ or US-20180172942-$ or US-20180164510-$ or US-20180157002-$ or US-20180156988-$ or US-20180149813-$ or US-				

		20180143381-$ or US-20180136410-$ or US-20180128991-$ or US-20150036980-$ or US-20180113268-$ or US-20180113259-$ or US-20180106975-$ or US-20180106973-$ or US-20180095232-$ or US-20180088289-$ or US-20180088288-$ or US-20180088287-$ or US-20180088286-$ or US-20180088283-$ or US-20180081139-$ or US-20180081128-$ or US-20180081125-$ or US-20180081122-$).did. or (US-20180078781-$ or US-20180077472-$ or US-20180074277-$ or US-20180059338-$ or US-20180052288-$ or US-20150362681-$ or US-20180031782-$ or US-20180031775-$ or US-20180031774-$ or US-20180024302-$ or US-20180024301-$ or US-20180024300-$ or US-20180024294-$ or US-20180017740-$ or US-20180013228-$ or US-20180013227-$ or US-20180011261-$ or US-20180011258-$ or US-20180003910-$ or US-20180003903-$ or US-20170371118-$ or US-20170371116-$ or US-20170371107-$ or US-20170363829-$ or US-20170363827-$ or US-20170363815-$ or US-20170363810-$).did. or (US-20170363509-$ or US-20170359091-$ or US-20170357060-$ or US-20170357059-$ or US-20170351038-$ or US-20170351037-$ or US-20170343760-$ or US-20170343742-$ or US-20170343741-$ or US-20170341972-$ or US-20170336577-$ or US-20170336571-$ or US-20170331234-$ or US-20170329090-$ or US-20170315308-$ or US-20170315307-$ or US-20170315305-$ or US-20170315304-$ or US-20170315303-$ or US-20170307832-$ or US-20170307831-$ or US-20170307829-$ or US-20170303772-$ or US-20170299821-$ or US-20170299818-$ or US-20170299817-$ or US-20170299816-$).did. or (US-20170293091-$ or US-20170293089-$ or US-20170293088-$ or US-20170293087-$ or US-20140133808-$ or US-20170285272-$ or US-20170276887-$ or US-20170276886-				

		$ or US-20170276883-$ or US-20170276881-$ or US-20170269312-$ or US-20170269309-$ or US-20170261699-$ or US-20170261698-$ or US-20170254967-$ or US-20170254966-$ or US-20170254962-$ or US-20170254961-$ or US-20170254960-$ or US-20170248762-$ or US-20170242200-$ or US-20170242199-$ or US-20170242198-$ or US-20170242196-$ or US-20170235077-$ or US-20170235060-$ or US-20170227727-$).did. or (US-20170227720-$ or US-20170227718-$ or US-20170222347-$ or US-20170212310-$ or US-20170212309-$ or US-20170205591-$ or US-20170205588-$ or US-20170205587-$ or US-20170199338-$ or US-20170199336-$ or US-20170192182-$ or US-20170184800-$ or US-20170184798-$ or US-20170184790-$ or US-20170176252-$ or US-20130266268-$ or US-20170168244-$ or US-20170163573-$ or US-20170162978-$ or US-20170160500-$ or US-20170160496-$ or US-20170160494-$ or US-20170160486-$ or US-20170160478-$ or US-20170160477-$ or US-20170160476-$ or US-20170153398-$).did. or (US-20170153394-$ or US-20170146749-$ or US-20170139157-$ or US-20170139150-$ or US-20170138131-$ or US-20170131481-$ or US-20170123171-$ or US-20170123163-$ or US-20170115457-$ or US-20170108659-$ or US-20160004017-$ or US-20170108653-$ or US-20170108430-$ or US-20170102507-$ or US-20170102506-$ or US-20170102504-$ or US-20170097485-$ or US-20140219624-$ or US-20170097471-$ or US-20170090128-$ or US-20170090127-$ or US-20170082806-$ or US-20170068063-$ or US-20170059784-$ or US-20170059782-$ or US-20170045701-$ or US-20170045698-$).did. or (US-20170045691-$ or US-20170035275-$ or US-20150331201-$ or US-20170003459-$ or US-20160370549-$ or US-20160370548-$ or US-				

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		$ or US-20150370017-$ or US-20150362682-$ or US-20150362678-$ or US-20150355417-$ or US-20150355414-$ or US-20150346452-$ or US-20150346449-$ or US-20150346434-$ or US-20150338583-$ or US-20150323752-$ or US-20150309279-$ or US-20150301293-$ or US-20150301290-$ or US-20150301288-$ or US-20150301286-$ or US-20150277066-$ or US-20150288449-$ or US-20150288447-$ or US-20150286014-$ or US-20150286013-$ or US-20150286011-$ or US-20150285999-$).did. or (US-20150280355-$ or US-20150277062-$ or US-20150277061-$ or US-20150277058-$ or US-20150277057-$ or US-20150268424-$ or US-20150260927-$ or US-20150260926-$ or US-20130183001-$ or US-20130156379-$ or US-20150253183-$ or US-20150247977-$ or US-20150241650-$ or US-20150241644-$ or US-20150241642-$ or US-20150241635-$ or US-20150234131-$ or US-20150234128-$ or US-20150226926-$ or US-20150226923-$ or US-20150219857-$ or US-20150219856-$ or US-20150212284-$ or US-20150212279-$ or US-20150205060-$ or US-20150205053-$ or US-20010043777-$).did. or (US-20150198766-$ or US-20150192744-$ or US-20150185423-$ or US-20150177467-$ or US-20140270652-$ or US-20150177463-$ or US-20150160420-$ or US-20150153516-$ or US-20150147036-$ or US-20150147033-$ or US-20150147031-$ or US-20150139589-$ or US-20150139588-$ or US-20100202730-$ or US-20150093077-$ or US-20150078710-$ or US-20150071591-$ or US-20150063761-$ or US-20150063758-$ or US-20150060539-$ or US-20150055928-$ or US-20150055917-$ or US-20150050002-$ or US-20150049989-$ or US-20150030323-$ or US-20150023637-$ or US-20150023634-$).did. or (US-20150016781-$ or US-20150012072-$ or US-20100069721-$ or US-				

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		20020012238-$ or US-20020006253-$ or US-20020003932-$ or US-20010048790-$ or US-20010043776-$ or US-20010041030-$ or US-20010038737-$ or US-20010033730-$ or US-20010016102-$).did. or (US-20010010741-$ or US-20190204513-$ or US-20200064561-$ or US-20200057208-$ or US-20200041730-$ or US-20190235182-$ or US-20190391350-$ or US-20190384017-$ or US-20190353852-$ or US-20190346631-$ or US-20190317281-$ or US-20190310432-$ or US-20190278039-$ or US-20190278025-$ or US-20190271816-$ or US-20190250340-$ or US-20190243083-$ or US-20190235178-$ or US-20190227244-$ or US-20190219772-$).did. or (US-10718914-$ or US-10718911-$ or US-10718909-$ or US-10705306-$ or US-10295760-$ or US-10261275-$ or US-10156683-$ or US-10146014-$ or US-10107967-$ or US-10067302-$ or US-10067300-$ or US-10018787-$ or US-10007069-$ or US-9989710-$ or US-9948017-$ or US-9946038-$ or US-9946037-$ or US-9946036-$ or US-9939600-$ or US-9939590-$ or US-9939589-$ or US-9933586-$ or US-9933583-$ or US-9933582-$ or US-9927582-$ or US-9915793-$).did. or (US-9910229-$ or US-9910228-$ or US-9910226-$ or US-9904021-$ or US-9904020-$ or US-9904019-$ or US-9897767-$ or US-9893813-$ or US-9891392-$ or US-9891390-$ or US-9891387-$ or US-9891385-$ or US-9885841-$ or US-9880365-$ or US-9880357-$ or US-9876309-$ or US-9874702-$ or US-9869826-$ or US-9869824-$ or US-9864151-$ or US-9857545-$ or US-9857537-$ or US-9851512-$ or US-9846283-$ or US-9841566-$ or US-9835808-$ or US-9835807-$).did. or (US-9829650-$ or US-9829643-$ or US-9827438-$ or US-9823428-$ or US-9817195-$ or US-9810860-$ or US-9810858-$ or US-9810856-$ or US-9804342-$ or US-9804340-$ or US-9804337-$ or US-9798096-$ or				

		US-9798090-$ or US-9797806-$ or US-9784928-$ or US-9778425-$ or US-9772457-$ or US-9772456-$ or US-9772453-$ or US-9759874-$ or US-9759869-$ or US-9746625-$ or US-9746368-$ or US-9739955-$ or US-9739952-$ or US-9739951-$ or US-9735523-$).did. or (US-9733436-$ or US-9733434-$ or US-9733123-$ or US-9726830-$ or US-9726829-$ or US-9722367-$ or US-9720184-$ or US-9709753-$ or US-9703062-$ or US-9696497-$ or US-9696477-$ or US-9684134-$ or US-9678286-$ or US-9678283-$ or US-9678282-$ or US-9671570-$ or US-9671568-$ or US-9664864-$ or US-9658407-$ or US-9645335-$ or US-9645326-$ or US-9638871-$ or US-9638868-$ or US-9632267-$ or US-9625658-$ or US-9625657-$ or US-9625655-$).did. or (US-9606303-$ or US-9551831-$ or US-9482825-$ or US-9453972-$ or US-9448369-$ or US-9389368-$ or US-9377591-$ or US-9323007-$ or US-9316794-$ or US-9316791-$ or US-9291781-$ or US-9229177-$ or US-9229170-$ or US-9207454-$ or US-9002168-$ or US-8953922-$ or US-8814443-$ or US-8757893-$ or US-8588571-$ or US-8517614-$ or US-8459879-$ or US-8388235-$ or US-8206040-$ or US-8070366-$ or US-7972066-$ or US-7738757-$ or US-7712970-$).did. or (US-7706657-$ or US-7630609-$ or US-7588373-$ or US-7585118-$ or US-7530845-$ or US-7412148-$ or US-7232261-$ or US-7229220-$ or US-7192198-$ or US-7052186-$ or US-7036996-$ or US-6944378-$ or US-6895146-$ or US-6856748-$ or US-6848834-$ or US-6840680-$ or US-6839583-$ or US-6830382-$ or US-6817777-$ or US-6793399-$ or US-6789953-$ or US-6786647-$ or US-6712521-$ or US-6702475-$ or US-6695485-$ or US-6688782-$ or US-6667803-$).did. or (US-6644866-$ or US-6634794-$ or US-6632023-$ or US-6623172-$ or US-6619859-$ or US-6619856-$ or US-6612750-$ or US-6601995-$ or US-6599032-$				

		or US-6595696-$ or US-6582132-$ or US-6572276-$ or US-6572273-$ or US-6561699-$ or US-6558044-$ or US-6554486-$ or US-6554482-$ or US-6543941-$ or US-6533469-$ or US-6533465-$ or US-6527450-$ or US-6526210-$ or US-6524015-$ or US-6510267-$ or US-6508593-$ or US-6501900-$ or US-6498882-$).did. or (US-6497518-$ or US-6497516-$ or US-6226429-$ or US-6491442-$ or US-6487343-$ or US-6485192-$ or US-6481900-$ or US-6481899-$ or US-6474876-$ or US-6471417-$ or US-6471412-$ or US-6467971-$ or US-6467970-$ or US-6466724-$ or US-6464406-$ or US-6461055-$ or US-6461054-$ or US-6461053-$ or US-6457876-$ or US-6456768-$ or US-6450698-$ or US-6447172-$ or US-6445867-$ or US-6437894-$ or US-6435946-$ or US-6431762-$ or US-6425694-$).did. or (US-6425692-$ or US-6422761-$ or US-6422760-$ or US-6422759-$ or US-6419810-$ or US-6412987-$ or US-6412986-$ or US-6409394-$ or US-6409392-$ or US-6409391-$ or US-6402393-$ or US-6402390-$ or US-6402388-$ or US-6389212-$ or US-6386768-$ or US-6384896-$ or US-6382843-$ or US-6382839-$ or US-6379052-$ or US-6377840-$ or US-6375363-$ or US-6305849-$ or US-6371659-$ or US-6371657-$ or US-6367986-$ or US-6367984-$ or US-6364536-$).did. or (US-6361218-$ or US-6357932-$ or US-6357931-$ or US-6354746-$ or US-6352372-$ or US-6349164-$ or US-6347889-$ or US-6347888-$ or US-6343950-$ or US-6334715-$ or US-6331079-$ or US-6328481-$ or US-6318904-$ or US-6318903-$ or US-6318902-$ or US-6089759-$ or US-6309111-$ or US-6302592-$ or US-6301004-$ or US-6095695-$ or US-6293706-$ or US-6290527-$ or US-6283640-$ or US-6045270-$ or US-6273618-$ or US-6267513-$ or US-6264375-$).did. or (US-6264373-$ or US-6264372-$ or US-6259839-$ or US-6256446-$ or US-6250817-$ or US-				

		6247851-$ or US-6247849-$ or US-6243526-$ or US-6243518-$ or US-6240235-$ or US-6240229-$ or US-6238249-$ or US-6234681-$ or US-6231244-$ or US-6227719-$ or US-6227718-$ or US-6224269-$ or US-6220763-$ or US-6220762-$ or US-6219479-$ or US-6217226-$ or US-6215944-$ or US-6210045-$ or US-6206577-$ or US-6200040-$ or US-6196729-$ or US-6195477-$).did. or (US-6193420-$ or US-6190616-$ or US-6188827-$ or US-6188825-$ or US-6186670-$ or US-6179480-$ or US-6179475-$ or US-6173099-$ or US-6164835-$ or US-6164834-$ or US-6154597-$ or US-6149315-$ or US-6149313-$ or US-6142676-$ or US-6139346-$ or US-6132105-$ or US-6116789-$ or US-6116101-$ or US-6108482-$ or US-6104856-$ or US-6102581-$ or US-6095694-$ or US-6088502-$ or US-6081647-$ or US-6079881-$ or US-6076975-$ or US-6064791-$).did. or (US-6059461-$ or US-6053639-$ or US-6048103-$ or US-6048102-$ or US-6045269-$ or US-6041155-$ or US-6027252-$ or US-6024498-$ or US-6022149-$ or US-6017154-$ or US-6012852-$ or US-6007256-$ or US-6004043-$ or US-6004042-$ or US-5993071-$ or US-5987203-$ or US-5984533-$ or US-5980117-$ or US-5971626-$ or US-5969294-$ or US-5963689-$ or US-5960137-$ or US-5956444-$ or US-5953474-$ or US-5953473-$ or US-5949946-$ or US-5862289-$).did. or (US-5940561-$ or US-5940559-$ or US-5937121-$ or US-5930426-$ or US-5930425-$ or US-5923805-$ or US-5921796-$ or US-5920670-$ or US-5920669-$ or US-5915058-$ or US-5909526-$ or US-5909298-$ or US-5742720-$ or US-5737463-$ or US-5896477-$ or US-5892870-$ or US-5887100-$ or US-5887098-$ or US-5881191-$ or US-5870515-$ or US-5867894-$ or US-5867621-$ or US-5862282-$ or US-5845036-$ or US-5727097-$ or US-5838856-$ or US-5838855-$).did. or (US-5832158-$ or US-5825955-$ or				

		US-5818993-$ or US-5815621-$ or US-5815618-$ or US-5809191-$ or US-5799122-$ or US-5796896-$ or US-5781680-$ or US-5778123-$ or US-5778122-$ or US-5774612-$ or US-5774611-$ or US-5768738-$ or US-5548677-$ or US-5764043-$ or US-5761359-$ or US-5751874-$ or US-5748818-$ or US-5737464-$ or US-5734770-$ or US-5732174-$ or US-5732173-$ or US-5727102-$ or US-5721799-$ or US-5701380-$ or US-5694507-$).did. or (US-5694506-$ or US-5692089-$ or US-5692080-$ or US-5687268-$ or US-5682449-$ or US-5680494-$ or US-5673346-$ or US-5671310-$ or US-5668904-$ or US-5666456-$ or US-5666449-$ or US-5664955-$ or US-5661833-$ or US-5581644-$ or US-5651084-$ or US-5647043-$ or US-5645449-$ or US-5642450-$ or US-5633969-$ or US-5620634-$ or US-5619610-$ or US-5386485-$ or US-5611017-$ or US-5611010-$ or US-5607323-$ or US-5603631-$ or US-5602951-$).did. or (US-5600749-$ or US-5600746-$ or US-5325454-$ or US-5592323-$ or US-5588086-$ or US-5588079-$ or US-5579429-$ or US-5574817-$ or US-5574813-$ or US-5570445-$ or US-5563978-$ or US-5563974-$ or US-5563971-$ or US-5555332-$ or US-5550943-$ or US-5548674-$ or US-5542015-$ or US-5537501-$ or US-5530783-$ or US-5528711-$ or US-5521998-$ or US-5521997-$ or US-5519799-$ or US-5506922-$ or US-5499310-$ or US-5497444-$ or US-5485537-$).did. or (US-5483608-$ or US-5473717-$ or US-5452391-$ or US-5450519-$ or US-5446817-$ or US-5444806-$ or US-5420951-$ or US-5418875-$ or US-5339376-$ or US-5414786-$ or US-5408557-$ or US-5367595-$ or US-5384885-$ or US-5379360-$ or US-5372758-$ or US-5367594-$ or US-5366383-$ or US-5363460-$ or US-5359688-$ or US-5339377-$ or US-5335301-$ or US-5333225-$ or US-5333222-$ or US-5333221-$ or US-5329541-$ or US-5323475-$ or				

		US-5317663-$).did. or (US-5315679-$ or US-5315678-$ or US-5305409-$ or US-5297227-$ or US-5293581-$ or US-5282259-$ or US-5280552-$ or US-5274729-$ or US-5267342-$ or US-5265181-$ or US-5259052-$ or US-5239606-$ or US-5233675-$ or US-5233674-$ or US-5231685-$ or US-5228104-$ or US-5222168-$ or US-5214730-$ or US-5210815-$ or US-5199093-$ or US-5179607-$ or US-5177808-$ or US-5166995-$ or US-5159654-$ or US-5157749-$ or US-5155795-$ or US-5134677-$).did. or (US-5134676-$ or US-5134673-$ or US-5133032-$ or US-5129024-$ or US-5127073-$ or US-5124506-$ or US-5119455-$ or US-5115484-$ or US-5109468-$ or US-5109453-$ or US-5101463-$ or US-5091991-$ or US-5091990-$ or US-5082346-$ or US-5082344-$ or US-5077815-$ or US-5076656-$ or US-5073042-$ or US-5064268-$ or US-5058983-$ or US-5052774-$ or US-5048916-$ or US-5042891-$ or US-5018823-$ or US-5016972-$ or US-5016970-$ or US-5015060-$).did. or (US-5013124-$ or US-4998797-$ or US-4998796-$ or US-4995688-$ or US-4993803-$ or US-4991929-$ or US-4986762-$ or US-4986622-$ or US-4976510-$ or US-4973127-$ or US-4973126-$ or US-4964688-$ or US-4960317-$ or US-4955976-$ or US-4953929-$ or US-4944079-$ or US-4921325-$ or US-4915472-$ or US-4900118-$ or US-4898446-$ or US-4892380-$ or US-4886335-$ or US-4877303-$ or US-4856866-$ or US-4854664-$ or US-4852963-$ or US-4850671-$).did. or (US-4850536-$ or US-4848870-$ or US-4846544-$ or US-4844570-$ or US-4842361-$ or US-4834486-$ or US-4830456-$ or US-4824196-$ or US-4818058-$ or US-4813760-$ or US-4807957-$ or US-4805980-$ or US-4795231-$ or US-4793683-$ or US-4789216-$ or US-4787700-$ or US-4786135-$ or US-4784456-$ or US-4783137-$ or US-4781429-$ or US-4773725-$ or US-4767178-$ or US-4762389-$				

		or US-4762387-$ or US-4759600-$ or US-4759599-$ or US-4758719-$).did. or (US-4741590-$ or US-4740052-$ or US-4737009-$ or US-4722081-$ or US-4718744-$ or US-4717234-$ or US-4715674-$ or US-4714318-$ or US-4714317-$ or US-4714315-$ or US-4699460-$ or US-4688887-$ or US-4687291-$ or US-4681398-$ or US-4674831-$ or US-4666241-$ or US-4648688-$ or US-4645296-$ or US-4615581-$ or US-4614402-$ or US-4579418-$ or US-4575183-$ or US-4548467-$ or US-4526438-$ or US-4515434-$ or US-4506946-$ or US-4497536-$).did. or (US-4487474-$ or US-4486072-$ or US-4484796-$ or US-4477146-$ or US-4466009-$ or US-4464817-$ or US-4461539-$ or US-4447121-$ or US-4445753-$ or US-4444461-$ or US-4422716-$ or US-4415232-$ or US-4387957-$ or US-4385801-$ or US-4371233-$ or US-4368948-$ or US-4354731-$ or US-4341439-$ or US-4330172-$ or US-4327964-$ or US-4320938-$ or US-4310218-$ or US-4295707-$ or US-4291943-$ or US-4279469-$ or US-4268115-$ or US-4268114-$).did. or (US-4252407-$ or US-4240695-$ or US-4223976-$ or US-4218113-$ or US-4214812-$ or US-4201445-$ or US-4201444-$ or US-4186997-$ or US-4186996-$ or US-4168109-$ or US-4167304-$ or US-4160580-$ or US-4140365-$ or US-4101198-$ or US-4087158-$ or US-4080044-$ or US-3999837-$ or US-3933409-$ or US-10545295-$ or US-10502903-$ or US-10401575-$ or US-10353155-$).did. or (EP-3258301-$ or EP-3054333-$ or CA-2885821-$ or EP-2444827-$ or WO-2018004847-$ or JP-6173629-$ or WO-2015043158-$ or CN-206584076-$ or WO-2016161341-$ or DE-202016103178-$ or WO-2016082160-$ or EP-3021145-$ or JP-5905950-$ or CA-2689768-$ or CA-2928026-$ or CA-2762411-$ or CA-2859345-$ or DE-202013012295-$ or WO-2016004347-$ or WO-2015190211-$ or EP-2942653-$ or				

		CN-204595258-$ or WO-2015116589-$ or WO-2015103783-$ or GB-201507758-$ or CA-2932688-$).did. or (WO-2015068103-$ or EP-2843452-$ or WO-2014143748-$ or JP-5433802-$ or CN-102870023-$ or WO-2012151175-$ or WO-2014049469-$ or WO-2014009463-$ or CA-2912155-$ or WO-2013126068-$ or WO-2013115791-$ or WO-2013115789-$ or CA-2662854-$ or WO-2011152874-$ or GB-201218194-$ or CN-102456976-$ or WO-2011139938-$ or WO-2011044724-$ or CN-101122658-$ or CN-101931134-$ or WO-2010068896-$ or WO-2010025180-$ or EP-2138880-$ or WO-2009110421-$ or CA-2503690-$ or WO-2008006402-$ or CN-1331421-$).did. or (EP-1168016-$ or EP-1172672-$ or EP-1530068-$ or CA-2321428-$ or AU-2003291687-$ or JP-3106420-$ or EP-1168018-$ or CA-2191600-$ or WO-03093883-$ or CA-2484569-$ or DE-10114144-$ or CN-1118443-$ or WO-03016975-$ or NL-1018440-$ or CA-2284331-$ or EP-0690319-$ or CA-2030897-$ or WO-0155762-$ or CA-2418331-$ or DE-20118858-$ or EP-1124147-$ or EP-1172673-$ or WO-0137010-$ or CA-2198522-$ or WO-0161397-$ or EP-1039324-$ or EP-1039322-$).did. or (EP-1033595-$ or EP-1033594-$ or GB-0007281-$ or EP-0992819-$ or GB-9919699-$ or CA-2262351-$ or CA-2294930-$ or EP-0696748-$ or WO-9734176-$ or CA-2171494-$ or WO-9627811-$ or EP-0633485-$ or EP-0249237-$ or EP-0262847-$ or CA-2082276-$ or GB-9106183-$ or DE-9107960-$ or GB-9103604-$ or WO-9015350-$ or DE-8626183-$ or EP-0262631-$ or EP-0061243-$ or WO-8600147-$ or DE-3112078-$ or GB-2081468-$ or IT-8323399-$ or IT-8323399-$).did. or (GB-2057158-$ or GB-8306227-$ or DK-208682-$ or FR-2487528-$ or FR-2435053-$ or BE-871785-$ or CA-1097111-$ or IT-7925110-$ or FR-2363124-$ or BE-871785-$ or CA-1043604-$ or				

		WO-2019190616-$ or CN-110068899-$).did. or (JP-09033756-$ or JP-04214510-$ or JP-11072659-$ or JP-04220604-$ or JP-56074211-$ or JP-2017138535-$ or JP-05313040-$ or JP-62111222-$ or JP-59140411-$ or JP-59075218-$ or JP-57044113-$ or JP-56066811-$ or JP-55101904-$ or JP-54034251-$).did. or (US-20190107679-$ or US-20180224615-$ or WO-2018125706-$ or US-20180156985-$ or US-20180128988-$ or US-20180120519-$ or US-20180106973-$ or US-20180081128-$ or US-20180052288-$ or US-20180011258-$ or US-20180003903-$ or US-20180364421-$ or US-20170371109-$ or CN-107450131-$ or US-20170336577-$ or US-20170343760-$ or US-9804340-$ or US-20170307830-$ or FR-3050286-$ or US-20170299820-$ or US-20170293088-$ or US-20170261699-$ or US-20170254967-$ or US-20170254966-$ or US-20170227720-$ or US-9726830-$).did. or (US-20170219779-$ or JP-6173629-$ or US-20170205587-$ or US-9709753-$ or US-20170184790-$ or US-9678283-$ or US-20170153398-$ or US-20170139150-$ or US-20170139156-$ or US-20170102504-$ or US-20170115457-$ or WO-2017065999-$ or US-20170090127-$ or WO-2017038704-$ or US-20170059784-$ or US-20170031106-$ or US-20160377819-$ or US-20160349466-$ or US-20160341908-$ or US-20160341911-$ or WO-2016182556-$ or US-20160327757-$ or US-9482820-$ or WO-2016161341-$ or US-20160282566-$ or CN-105978629-$ or US-20160259135-$).did. or (US-20170329090-$ or EP-3054333-$ or US-9389368-$ or WO-2016105567-$ or US-9377591-$ or US-20160178852-$ or US-20160178859-$ or US-20160161680-$ or EP-3021145-$ or US-20160131854-$ or US-20160124158-$ or JP-5905950-$ or WO-2016053853-$ or WO-2016043922-$ or WO-2016033577-$				

		or WO-2016033578-$ or WO-2016033579-$ or WO-2016033580-$ or WO-2016024014-$ or JP-5860948-$ or CA-2859345-$ or US-20160025937-$ or US-20160004016-$ or US-20160004018-$ or US-20150378110-$ or WO-2015190211-$ or EP-2947485-$).did. or (US-20150331201-$ or CN-104950402-$ or DE-102015106225-$ or US-20160306125-$ or US-20150286012-$ or WO-2015144883-$ or US-20150241644-$ or US-20150226926-$ or US-20150226925-$ or WO-2015116589-$ or US-20150219864-$ or WO-2015103783-$ or CN-104570229-$ or CN-104516061-$ or US-20150177463-$ or US-20150162982-$ or WO-2015070382-$ or WO-2015068103-$ or WO-2015028433-$ or US-20150049989-$ or WO-2015009435-$ or US-20150023637-$ or EP-2818903-$ or US-20140363131-$ or WO-2014197701-$ or US-20140321808-$ or WO-2014165175-$).did. or (WO-2014143748-$ or US-20140219624-$ or EP-2759860-$ or WO-2014113753-$ or US-20140205247-$ or US-20140199034-$ or US-20140153879-$ or US-20140147081-$ or ES-1110405-$ or WO-2014049469-$ or TW-474924-$ or US-20140064688-$ or JP-5433802-$ or EP-2700992-$ or WO-2014011898-$ or US-20140016901-$ or WO-2014011283-$ or WO-2013177234-$ or WO-2013155395-$ or US-20130259429-$ or US-20130230283-$ or WO-2013126068-$ or WO-2013122865-$ or WO-2013117598-$ or WO-2013115789-$ or WO-2013115791-$ or US-20130121645-$).did. or (CN-103091793-$ or WO-2013036843-$ or US-20130051749-$ or TW-201309089-$ or CN-102870023-$ or US-20120308183-$ or WO-2012151175-$ or US-20120263419-$ or US-20120251051-$ or US-20120251054-$ or TW-201233549-$ or US-20120099822-$ or EP-2444827-$ or US-20120082416-$ or				

		US-20120057824-$ or KR-2012000895-$ or US-20120027355-$ or KR-2012000895-$ or WO-2011152874-$ or US-20110274437-$ or US-20110249942-$ or EP-2302431-$ or WO-2010137426-$ or EP-2206458-$ or WO-2010068896-$ or US-7712970-$ or WO-2010025180-$).did. or (US-20100040330-$ or WO-2009110421-$ or US-20090060423-$ or US-20090041411-$ or US-7435009-$ or US-20070098327-$ or US-20070077010-$ or US-20070058907-$ or EP-1752805-$ or US-20060193562-$ or US-20060165352-$ or US-20060153503-$ or WO-2006022840-$ or US-20050053342-$ or US-20040228589-$ or US-20040223699-$ or US-20040062498-$ or EP-1394584-$ or WO-03094297-$ or WO-03093883-$ or US-20030044125-$ or US-20030031437-$ or WO-02061481-$ or US-6422760-$ or WO-02056060-$ or DE-20118858-$ or EP-1172673-$).did. or (EP-1172672-$ or EP-1168020-$ or EP-1168018-$ or EP-1168016-$ or US-20010041030-$ or WO-0181965-$ or EP-1124147-$ or EP-1107031-$ or WO-0140839-$ or EP-1092995-$ or EP-1091225-$ or EP-1041416-$ or EP-1041414-$ or EP-1020745-$ or EP-1016885-$ or EP-1010999-$ or GB-2341455-$ or WO-9947958-$ or US-5940561-$ or WO-9928774-$ or WO-9857208-$ or DE-19626036-$ or WO-9746900-$ or US-5692080-$ or EP-803750-$ or WO-9734176-$ or WO-9723794-$).did. or (EP-758099-$ or WO-9634176-$ or WO-9627811-$ or JP-08201656-$ or WO-9616080-$ or EP-697608-$ or EP-696748-$ or WO-9600917-$ or EP-663602-$ or EP-663601-$ or EP-660145-$ or EP-660144-$ or EP-505197-$ or EP-490698-$ or US-5101463-$ or EP-458608-$ or WO-9117540-$ or US-5064268-$ or GB-2241794-$ or EP-430107-$ or WO-9015350-$ or US-4953929-$ or EP-262631-$ or EP-249237-$ or WO-8600147-$ or US-				

		4496213-$ or EP-125398-$).did. or (DE-3208797-$ or GB-2098354-$ or EP-61243-$ or GB-2081468-$ or GB-2057158-$ or DE-2932986-$ or BE-871785-$ or DE-2805949-$ or DE-2558445-$ or US-10502903-$).did.				
S776	13	(US-20160161680-$ or US-20170227720-$ or US-20060275007-$ or US-20010026661-$ or US-20080131055-$ or US-20140241689-$).did. or (US-5921796-$ or US-6293708-$ or US-5123071-$ or US-9310569-$ or US-4645295-$ or US-9366829-$).did. or (CN-202600189-$).did.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/23 11:15
S777	7,352	(G02B6/3885 OR G02B6/3879).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/07/23 11:23
S778	1,848	(G02B6/3879).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/07/23 11:23
S779	6,000	(G02B6/3885).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/07/23 11:24
S780	1,297	S778 not (S772 S773 S774 S775)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/07/23 11:24
S781	695	(US-20200064562-$ or US-20200026019-$ or US-20200012053-$ or US-20200003961-$ or US-20190339458-$ or US-20190324215-$ or US-20190302374-$ or US-20190278032-$ or US-20190235183-$ or US-20190227241-$ or US-20190227240-$ or US-20190227237-$ or US-20190219775-$ or US-20190170931-$ or US-20190137700-$ or US-20190137697-$ or US-20190137695-$ or US-20190121032-$ or US-20190086615-$ or US-20190079249-$ or US-20190064448-$ or US-20190033531-$ or US-20190004252-$ or US-20190004251-$ or US-20180364422-$ or US-20180364436-$).did. or (US-20180364424-$ or US-20180364423-	US-PGPUB; USPAT; FPRS; JPO; DERWENT	OR	ON	2020/07/23 11:26

		$ or US-20180348447-$ or US-20180335576-$ or US-20180329150-$ or US-20180321449-$ or US-20180217336-$ or US-20180136417-$ or US-20180136414-$ or US-20180136412-$ or US-20180128988-$ or US-20170363818-$ or US-20170261696-$ or US-20170264045-$ or US-20170254964-$ or US-20170242210-$ or US-20170205586-$ or US-20170176691-$ or US-20170176692-$ or US-20170068064-$ or US-20170059785-$ or US-20170063464-$ or US-20170023746-$ or US-20160349458-$ or US-20160327756-$ or US-20160306122-$ or US-20160282565-$).did. or (US-20160274314-$ or US-20160223774-$ or US-20160202428-$ or US-20160091674-$ or US-20150378113-$ or US-20150277059-$ or US-20150260924-$ or US-20150260923-$ or US-20150198774-$ or US-20150110443-$ or US-20150010276-$ or US-20140334779-$ or US-20140205257-$ or US-20140169727-$ or US-20140168987-$ or US-20140161392-$ or US-20140153878-$ or US-20140153879-$ or US-20140147078-$ or US-20140140660-$ or US-20140120746-$ or US-20140114198-$ or US-20140037253-$ or US-20140029900-$ or US-20140022627-$ or US-20140016901-$ or US-20140003771-$).did. or (US-20130322825-$ or US-20130158512-$ or US-20130136398-$ or US-20130084044-$ or US-20130039013-$ or US-20120251058-$ or US-20120155803-$ or US-20120093462-$ or US-20110299266-$ or US-20110229092-$ or US-20110229083-$ or US-20110064361-$ or US-20110058774-$ or US-20100322563-$ or US-20100178014-$ or US-20100178010-$ or US-20100054668-$ or US-20100027942-$ or US-20090135429-$ or US-20080317415-$ or US-20080273840-$ or US-20080226235-$ or US-20080124033-$ or US-20080090433-$ or US-20080013889-$ or US-20070292084-$ or US-20070031103-$).did. or (US-				

		20060275007-$ or US-20060257075-$ or US-20060257076-$ or US-20060204178-$ or US-20060171640-$ or US-20060171639-$ or US-20060140543-$ or US-20060127028-$ or US-20060093274-$ or US-20060083466-$ or US-20060063436-$ or US-20060045428-$ or US-20060018603-$ or US-20050271338-$ or US-20050202701-$ or US-20050191010-$ or US-20050157987-$ or US-20050058401-$ or US-20040264877-$ or US-20040247251-$ or US-20040184741-$ or US-20040157499-$ or US-20040028343-$ or US-20030185521-$ or US-20030128935-$ or US-20020176960-$ or US-20020142634-$).did. or (US-20020126960-$ or US-20020097964-$ or US-20020009905-$ or US-20010026662-$ or US-20010026661-$ or US-20010019654-$ or US-20010012428-$).did. or (US-10444442-$ or US-10317627-$ or US-10042129-$ or US-10025038-$ or US-9977197-$ or US-9927581-$ or US-9195013-$ or US-9086546-$ or US-8824841-$ or US-8676022-$ or US-8408815-$ or US-8388234-$ or US-7985027-$ or US-7857523-$ or US-7572063-$ or US-7284912-$ or US-7008117-$ or US-6672771-$ or US-6661961-$ or US-6464402-$ or US-6454464-$ or US-6419400-$ or US-6416334-$ or US-6386766-$ or US-6382842-$ or US-6364537-$).did. or (US-6357930-$ or US-6351593-$ or US-6296399-$ or US-6287018-$ or US-6254278-$ or US-6179476-$ or US-6179477-$ or US-6130977-$ or US-6062739-$ or US-5971625-$ or US-5970598-$ or US-5892871-$ or US-5864468-$ or US-5821510-$ or US-5800198-$ or US-5796897-$ or US-5734558-$ or US-5729644-$ or US-5719977-$ or US-5717533-$ or US-5717801-$ or US-5682451-$ or US-5658159-$ or US-5633970-$ or US-5619604-$ or US-5613025-$ or US-5577146-$).did. or (US-5546281-$ or US-5436994-$ or US-5400428-$ or US-5396572-$ or US-5329604-$ or US-5289554-$ or				

		US-5276755-$ or US-5265182-$ or US-5261019-$ or US-5242315-$ or US-5241618-$ or US-5214732-$ or US-5214731-$ or US-5212752-$ or US-5212753-$ or US-5187768-$ or US-5181267-$ or US-5167542-$ or US-5159652-$ or US-5129023-$ or US-5123071-$ or US-5121454-$ or US-5113463-$ or US-5109452-$ or US-5096276-$ or US-5091987-$ or US-5082378-$).did. or (US-5067783-$ or US-5066096-$ or US-5041025-$ or US-5028114-$ or US-5018822-$ or US-5016968-$ or US-4984867-$ or US-4982083-$ or US-4979792-$ or US-4953941-$ or US-4952798-$ or US-4902094-$ or US-4902092-$ or US-4900125-$ or US-4898449-$ or US-4887875-$ or US-4881792-$ or US-4875753-$ or US-4867525-$ or US-4820185-$ or US-4801191-$ or US-4792205-$ or US-4787706-$ or US-4775327-$ or US-4762388-$ or US-4744621-$ or US-4737004-$).did. or (US-4728171-$ or US-4712864-$ or US-4705352-$ or US-4699458-$ or US-4696540-$ or US-4693550-$ or US-4687288-$ or US-4684205-$ or US-4645295-$ or US-4634214-$ or US-4611887-$ or US-4607911-$ or US-4568145-$ or US-4529263-$ or US-4496213-$ or US-4493529-$ or US-4432603-$ or US-4309071-$ or US-4296999-$ or US-4272154-$ or US-4258977-$ or US-4233724-$ or US-4142776-$ or US-4140366-$ or US-3902785-$).did. or (WO-2019195106-$ or DE-202019103581-$ or WO-2019136047-$ or WO-2019086961-$ or WO-2019006195-$ or WO-2019006176-$ or CN-108693606-$ or EP-3330757-$ or WO-2018044728-$ or EP-3278153-$ or CN-107636504-$ or WO-2018009426-$ or WO-2017182535-$ or CN-206479676-$ or EP-3180644-$ or EP-3123221-$ or WO-2016174980-$ or WO-2016140710-$ or CN-105683795-$ or WO-2015120031-$ or WO-2015070382-$ or EP-2852856-$ or WO-2015009435-$ or FR-2997767-$ or				

		WO-2014054357-$ or CN-103676018-$).did. or (CA-2866107-$ or GB-201220748-$ or CN-102520489-$ or CN-102445735-$ or CN-102385113-$ or WO-2012015713-$ or DE-102010021179-$ or GB-201004720-$ or DE-112006003952-$ or CA-2593676-$ or WO-2008033262-$ or EP-1783524-$ or AU-2006295165-$ or EP-1762871-$ or DE-60026115-$ or KR-100452879-$ or AU-2004274992-$ or CA-2441872-$ or KR-20040020797-$ or CN-1334472-$ or DE-20111078-$ or DE-10031931-$ or CA-2302068-$ or DE-19834723-$ or WO-9723794-$ or DE-29614436-$ or DE-19525739-$).did. or (CH-687105-$ or DE-19601949-$ or GB-9525323-$ or FR-2707402-$ or WO-9415232-$ or GB-9408857-$ or EP-0546936-$ or MX-9201992-$ or DE-4203966-$ or IT-MI913184-$ or GB-9103982-$ or CH-676513-$ or GB-9025881-$ or DE-3914978-$ or DE-9012174-$ or DE-9010357-$ or DE-8911081-$ or DE-8911080-$ or EP-0339876-$ or EP-0324272-$ or DE-8901052-$ or DE-8900623-$ or EP-0292024-$ or DE-8812341-$ or DE-3737842-$ or DE-3701421-$ or EP-0253426-$).did. or (EP-0249406-$ or KR-870005264-$ or EP-0183820-$ or EP-0166636-$ or EP-0154781-$ or EP-0153249-$ or EP-0098190-$ or EP-0098205-$ or FR-2528984-$ or FR-2502798-$ or GB-2086602-$ or EP-0045271-$ or WO-8002213-$ or DE-2932986-$ or DE-2832839-$ or AU-3682878-$ or GB-1526682-$ or FR-2316611-$ or GB-1450760-$ or FR-2268370-$).did. or (JP-2019184942-$ or JP-2005258017-$ or JP-2000241670-$ or JP-05215939-$ or JP-03059503-$ or JP-63256908-$ or JP-63250614-$ or JP-62007009-$ or JP-61129605-$ or JP-61028909-$ or JP-60196706-$ or JP-59195609-$ or JP-59176714-$ or JP-59136709-$ or JP-59038707-$ or JP-59036207-$ or JP-58190910-$ or JP-58118614-$ or JP-58038913-$ or JP-57099605-$ or JP-57074714-$ or JP-				

		56137322-$ or JP-56062212-$ or JP-56052712-$ or JP-55143514-$ or JP-55143513-$).did. or (JP-55113009-$ or JP-55017156-$ or JP-53117437-$ or JP-53113562-$).did. or (US-20200033539-$ or US-20200012053-$ or US-20200003961-$ or US-20190384017-$ or US-20190361182-$ or US-20190339459-$ or US-20190339460-$ or US-20190339461-$ or US-20190339463-$ or EP-3564721-$ or US-20190324215-$ or US-20190317281-$ or KR-2019115580-$ or US-20190302374-$ or US-20190278032-$ or US-20190250338-$ or US-20190235178-$ or US-20190235181-$ or EP-3518011-$ or US-20190227237-$ or US-20190227241-$ or US-20190227240-$ or US-20190219775-$ or US-20190204513-$ or US-20190162914-$ or US-20190162917-$).did. or (US-20190154924-$ or WO-2019086961-$ or US-20190137700-$ or US-20190137695-$ or US-20190121032-$ or WO-2019054849-$ or US-20190086615-$ or US-20190079249-$ or US-20190072724-$ or US-20190049670-$ or US-20190033532-$ or WO-2019006176-$ or US-20190004251-$ or US-20190004252-$ or US-20190004255-$ or US-20190004256-$ or US-20190004258-$ or US-20180372962-$ or US-20180364422-$ or CN-108983368-$ or KR-2018131725-$ or US-20180329149-$ or US-20180329150-$ or US-20180329158-$ or CN-108646355-$ or US-20180292612-$ or CN-108490551-$).did. or (US-20180231722-$ or JP-6363784-$ or US-20180203196-$ or CN-108279462-$ or US-20180164504-$ or US-20180164511-$ or US-20180136412-$ or US-20180136417-$ or US-20180128987-$ or US-9927581-$ or WO-2018044728-$ or CN-107656339-$ or WO-2018017458-$ or US-20180011254-$ or WO-2018008399-$ or CN-107479141-$ or EP-3249434-$ or WO-2017182535-$ or US-				

		20170264045-$ or US-20170261698-$ or US-20170261696-$ or KR-2017103050-$ or US-20170242210-$ or WO-2017131717-$ or US-20170199339-$ or CN-106908906-$ or WO-2017106514-$).did. or (US-20170176691-$ or US-20170176692-$ or WO-2017095928-$ or US-20170146748-$ or WO-2017077050-$ or WO-2017075093-$ or KR-1716872-$ or US-20170063464-$ or US-20170059786-$ or US-20170052325-$ or US-20170023746-$ or US-20160341907-$ or WO-2016174980-$ or US-20160282565-$ or DE-202016103178-$ or US-20160223768-$ or US-20160202428-$ or WO-2016084113-$ or US-20160154186-$ or CN-105576433-$ or US-20160091674-$ or US-20160062053-$ or US-20150378113-$ or WO-2015142551-$ or US-20150260923-$ or CN-104914515-$ or WO-2015126470-$).did. or (WO-2015114480-$ or US-20150198774-$ or WO-2015093520-$ or US-20150131944-$ or US-20150110443-$ or EP-2821830-$ or US-20140233892-$ or US-20140219610-$ or US-20140161392-$ or US-20140153878-$ or US-20140147078-$ or WO-2014078261-$ or FR-2997767-$ or US-20140029900-$ or US-20140022627-$ or US-20140003771-$ or US-20130322825-$ or US-20130202254-$ or WO-2013049494-$ or JP-2013045047-$ or US-20120315000-$ or WO-2012157276-$ or CN-102520489-$ or WO-2012078697-$ or WO-2012078701-$ or US-20120093462-$ or WO-2012029013-$).did. or (WO-2012015713-$ or WO-2012015734-$ or WO-2011116167-$ or CN-102122031-$ or US-20110058774-$ or US-20100322563-$ or US-20090135429-$ or US-20090098760-$ or DE-102007023250-$ or WO-2008112183-$ or US-20080124033-$ or US-20080112672-$ or EP-1762871-$ or WO-2006130549-$ or US-20060257075-$ or US-20060204178-$ or US-20060153504-				

		$ or WO-2006069093-$ or WO-2006069092-$ or WO-2006069045-$ or US-20060140543-$ or US-20060127028-$ or US-20060063436-$ or WO-2006017334-$ or US-20050271338-$ or EP-1574886-$ or US-20050191010-$).did. or (US-20050176308-$ or KR-2005072532-$ or WO-2005029147-$ or US-20040157499-$ or US-20030180004-$ or JP-2003098385-$ or US-20020126960-$ or EP-1203974-$ or WO-0225340-$ or US-6351593-$ or EP-1143276-$ or EP-1143275-$ or WO-0159493-$ or WO-0127660-$ or EP-1072914-$ or EP-1065543-$ or EP-1065542-$ or EP-1041417-$ or EP-1030202-$ or JP-2000089061-$ or EP-982609-$ or WO-0005610-$ or EP-973052-$ or EP-938003-$ or EP-819960-$ or WO-9723794-$ or WO-9637793-$).did. or (DE-19525739-$ or GB-2297007-$ or EP-719058-$ or WO-9419716-$ or US-5335301-$ or US-5329604-$ or WO-9415232-$ or EP-574686-$ or EP-546936-$ or US-5212752-$ or US-5129023-$ or DE-4041425-$ or EP-420490-$ or EP-335531-$ or EP-467631-$ or EP-462907-$ or US-5067783-$ or EP-448162-$ or EP-440447-$ or DE-4003597-$ or WO-9007139-$ or EP-351803-$ or EP-339876-$ or US-4867525-$ or EP-324272-$ or DE-3900091-$ or US-4820185-$).did. or (EP-292024-$ or WO-8805925-$ or EP-253426-$ or EP-246165-$ or EP-243962-$ or EP-220439-$ or EP-216470-$ or GB-2174821-$ or WO-8606504-$ or EP-184908-$ or WO-8600423-$ or EP-166636-$ or EP-156608-$ or EP-153249-$ or DE-3344864-$ or EP-118804-$ or EP-98205-$ or EP-98190-$ or EP-97575-$ or EP-73023-$ or EP-64618-$ or GB-2086602-$ or EP-45271-$ or GB-2069175-$ or WO-8002213-$ or EP-10505-$ or DE-2922705-$).did. or (GB-2019028-$ or US-4167303-$ or DE-2806138-$ or DE-2742084-$ or GB-1450760-$ or DE-2440609-$).did.				

S782	1,297	S780 not S781	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/07/23 11:26
S783	5,237	(G02B6/3825).CPC.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/07/23 11:43
S784	2,666	S783 not (S772 S773 S774 S775 S782)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/07/23 11:52
S785	1	("10156684").PN.	US-PGPUB; USPAT	OR	OFF	2020/07/23 13:13

EAST Search History (Interference)

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