Trials@uspto.gov
571-272-7822

Paper 9
Date: August 6, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

THE INTEGRATION GROUP OF AMERICAS, INC.,
Petitioner,

v.

SITEPRO, INC.,
Patent Owner.

IPR2024-00724 (Patent 8,649,909 B1), IPR2024-00737 (Patent 11,175,680 B2), IPR2024-00738 (Patent 9,342,078 B2), IPR2024-00739 (Patent 9,898,014 B2), IPR2024-00740 (Patent 11,726,504 B2), IPR2024-00741 (Patent 10,488,871 B2), and IPR2024-00742 (Patent 11,294,403 B2)[1]

Before WILLIAM V. SAINDON, KRISTEN L. DROESCH, LYNNE H. BROWNE, and KEVIN W CHERRY, *Administrative Patent Judges.*[2]

BROWNE, *Administrative Patent Judge*.

TERMINATION
Due to Settlement Prior to Institution of Trial
*35 U.S.C. § 317; 37 C.F.R. § 42.74*

[1] This Order is entered into each case. The parties are not authorized to use this joint heading and filing style in their papers.
[2] None of the above-listed proceedings have an expanded panel. Rather, the judges constitute the panels of all of these proceedings.

With the Board's authorization, the Parties filed a Joint Motion to Terminate the instant proceeding on the basis of a settlement reached by the Parties. *See* Paper 7[3] ("Mot."); 35 U.S.C. § 317(a); 37 C.F.R. §§ 42.72, 42.74. The Parties also filed a copy of their written Settlement Agreement (Exhibit 1010), along with a Joint Request (Paper 8) to treat the Agreement as business confidential information under 35 U.S.C. § 317(b) and 37 C.F.R. § 42.74(c).

Trial has not been instituted in these proceedings. In the Joint Motion to Terminate, the Parties represent that they have entered into an agreement that has settled their dispute. Mot. 2.

> As part of the Agreement, the parties have stipulated to dismiss, with prejudice, the only district court litigation between the parties involving the '909 patent, *SitePro, Inc. v. WaterBridge Resources, LLC, WaterBridge Operating, LLC*," *WaterBridge Holdings, LLC, WaterBridge Management, Inc., and the Integration Group of the Americas, Inc.* and all proceedings currently pending before the Patent Trial and Appeal Board.

*Id.* at 2–3.

The Parties further state that "the Agreement is filed separately and concurrently with this motion, as Exhibit 1010," and "there are no other agreements or understandings, oral or written, between them, including any collateral agreements, made in connection with, or in contemplation of, the

---

[3] For purposes of expediency, we cite to Papers and Exhibits filed in IPR2024-00724. Similar Papers and Exhibits were filed in IPR2024-00737, -00738, -00739, -00740, -00741, and -00742.

termination of this proceeding." Mot. 2. Under these circumstances, we determine that it is appropriate to terminate the instant proceeding.

In the Joint Request, the Parties request that the Settlement Agreement be treated as business confidential information and be kept separate from the file of the patents involved in these proceedings. Joint Request 1. After reviewing the Settlement Agreement between Petitioner and Patent Owner, we find that the Settlement Agreement contains business confidential information regarding the terms of settlement. We determine that good cause exists to treat the Settlement Agreement between Petitioner and Patent Owner as business confidential information pursuant to 35 U.S.C. § 317(b) and 37 C.F.R. § 42.74(c).

In consideration of the foregoing, it is hereby:

ORDERED that the Parties' request that the Settlement Agreement (Exhibit 1010) be treated as business confidential information, kept separate from the file of U.S. Patent No. 8,649,909 B1[4], and made available only to Federal Government agencies on written request, or to any person on a showing of good cause, under 35 U.S.C. § 317(b) and 37 C.F.R. § 42.74(c), is *granted*; and

FURTHER ORDERED that the joint motion to terminate is *granted* and the proceeding is hereby *terminated*.

[4] The same applies to each of the challenged patents in each of the other proceedings.

IPR2024-00724, Patent 8,649,909 B1
IPR2024-00737, Patent 11,175,680 B2
IPR2024-00738, Patent 9,342,078 B2
IPR2024-00739, Patent 9,898,014 B2
IPR2024-00740, Patent 11,726,504 B2
IPR2024-00741, Patent 10,488,871 B2
IPR2024-00742, Patent 11,294,403 B2

FOR PETITIONER:

Winston Huff
MUNSCH HARDT KOPF & HARR
whuff@munsch.com

FOR PATENT OWNER:

Babak Tehranchi
Marvin Tyler
Brianna Kadjo
Fareid Asphahani
Matthew Lutz
PERKINS COIE LLP
tehranchi-ptab@perkinscoie.com
tyler-ptab@perkinscoie.com
kadjo-ptab@perkinscoie.com
asphahani-ptab@perkinscoie.com
lutz-ptab@perkinscoie.com

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. | ISSUE DATE | PATENT NO. | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 16/656,319 | 11/16/2021 | 11175680 | 034392-0508266 | 2059 |

909 7590 10/27/2021

Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102

# 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 38 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 Patents Stakeholder Experience (OPSE), Stakeholder Support Division (SSD) at (571)-272-4200.

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

Aaron Phillips, Lubbock, TX;

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

SitePro, Inc., Lubbock, TX;

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.

# Issue Fee Transmittal Form

| Application Number | Filing Date | First Named Inventor | Atty. Docket No. | Confirmation No. |
|---|---|---|---|---|
| 16656319 | 17-Oct-2019 | Aaron Phillips | 034392-0508266 | 2059 |

**TITLE OF INVENTION :**

REMOTE CONTROL OF FLUID-HANDLING DEVICES

| Entity Status | Application Type | Art Unit | Class - Subclass | EXAMINER |
|---|---|---|---|---|
| Small | Utility under 35 USC 111(a) | 2116 | 083000 | |

| Issue Fee Due | Publication Due | Total Fee(s) Due | Date Due | Prev. Paid Fee |
|---|---|---|---|---|
| $600 | $0 | $600 | 22-Oct-2021 | $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 : |
|---|---|
| 909<br>Pillsbury Winthrop Shaw Pittman, LLP<br><br>PO Box 10500<br><br>McLean VA 22102<br>UNITED STATES<br>703-770-7900<br>docket_ip@pillsburylaw.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.

Doc Code: IFEE PTOL/85B-EFS

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 033975 . 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. PILLSBURY WINTHROP SHAW PITTMAN, LLP
2.
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 |
|---|---|---|---|---|
| SitePro, Inc. | Lubbock | TEXAS | 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** | /Joshua Tucker/ | **Date** | 10-19-2021 |
| **Name** | Joshua Tucker | **Registration Number** | 63809 |

WEB IFEE 1.0

# Electronic Patent Application Fee Transmittal

| | |
|---|---|
| **Application Number:** | 16656319 |
| **Filing Date:** | 17-Oct-2019 |
| **Title of Invention:** | REMOTE CONTROL OF FLUID-HANDLING DEVICES |
| **First Named Inventor/Applicant Name:** | Aaron Phillips |
| **Filer:** | Joshua L. Tucker/Amanda Childs |
| **Attorney Docket Number:** | 034392-0508266 |

Filed as Small 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 | 2501 | 1 | 600 | 600 |
| 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($) |
|---|---|---|---|---|
| **Post-Allowance-and-Post-Issuance:** | | | | |
| **Extension-of-Time:** | | | | |
| **Miscellaneous:** | | | | |
| | | **Total in USD ($)** | | **600** |

| Electronic Acknowledgement Receipt | |
|---|---|
| **EFS ID:** | 44012409 |
| **Application Number:** | 16656319 |
| **International Application Number:** | |
| **Confirmation Number:** | 2059 |
| **Title of Invention:** | REMOTE CONTROL OF FLUID-HANDLING DEVICES |
| **First Named Inventor/Applicant Name:** | Aaron Phillips |
| **Customer Number:** | 909 |
| **Filer:** | Joshua L. Tucker/Amanda Childs |
| **Filer Authorized By:** | Joshua L. Tucker |
| **Attorney Docket Number:** | 034392-0508266 |
| **Receipt Date:** | 19-OCT-2021 |
| **Filing Date:** | 17-OCT-2019 |
| **Time Stamp:** | 18:18:55 |
| **Application Type:** | Utility under 35 USC 111(a) |

## Payment information:

| | |
|---|---|
| Submitted with Payment | yes |
| Payment Type | DA |
| Payment was successfully received in RAM | $600 |
| RAM confirmation Number | E20210II18513009 |
| Deposit Account | 033975 |
| Authorized User | Amanda Childs |
| The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:<br>37 CFR 1.20 (Post Issuance fees)<br>37 CFR 1.21 (Miscellaneous fees and charges) | |

## 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 | 62820<br>cce06d40ae253eb5439ed9b21fe6dc9291bad684 | no | 2 |
| **Warnings:** | | | | | |
| **Information:** | | | | | |
| 2 | Fee Worksheet (SB06) | fee-info.pdf | 40354<br>f436d535ab76b3c3efae57e4065edf5164cda7da | no | 2 |
| **Warnings:** | | | | | |
| **Information:** | | | | | |
| | | **Total Files Size (in bytes):** | 103174 | | |

**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.**

Attorney Docket: 034392-0508266

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | |
|---|---|
| In re PATENT APPLICATION of: Aaron Phillips | Confirmation Number: 2059 |
| Application No.: 16/656,319 | Group Art Unit: 2116 |
| Filed: 17 October 2019 | Examiner: EVERETT, CHRISTOPHER E |

Title: REMOTE CONTROL OF FLUID-HANDLING DEVICES

**COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE**

**Mail Stop Issue Fee**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Applicant confirms with appreciation the receipt of the Notice of Allowability for this application.

Applicant recognizes that in accordance with M.P.E.P. § 1302.14, the statement of reasons for allowance need not set forth all of the details as to why the claims are allowed.

Consequently, Applicant may assert that the stated reasons for allowance are not the only reasons for which the claims are allowable. The claims may be allowable for other reasons as well.

In addition, Applicant does not concede that all of the limitations identified in the statement are necessary to distinguish the prior art of record or to satisfy the requirements of 35 U.S.C. § 112. In addition, the statement does not assert, and Applicant would not concede, that the stated reasons have any bearing on the patentability of claims in any other application directed to the disclosed subject matter.

In addition, Applicant notes that each dependent claim stands on its own and is allowable on its own merits. In particular, each dependent claim may be allowable on the basis of a combination of some of the features recited in the dependent claim and its base claim(s), which combination of features may not include all of the limitations identified in the reasons for allowance.

These comments are being filed concurrently with payment of the Issue Fee. Please charge any fees, if any, associated with the submission of this paper to Deposit Account Number 033975 (Ref. No. 034392-0508266). The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

Date: 12 October 2021

/Joshua Tucker/

Joshua Tucker
Registration No. 63,809
Pillsbury Winthrop Shaw Pittman LLP
P.O. Box 10500
McLean, VA 22102
Phone 512-580-9628

| Electronic Acknowledgement Receipt | |
|---|---|
| **EFS ID:** | 44012662 |
| **Application Number:** | 16656319 |
| **International Application Number:** | |
| **Confirmation Number:** | 2059 |
| **Title of Invention:** | REMOTE CONTROL OF FLUID-HANDLING DEVICES |
| **First Named Inventor/Applicant Name:** | Aaron Phillips |
| **Customer Number:** | 909 |
| **Filer:** | Joshua L. Tucker/Amanda Childs |
| **Filer Authorized By:** | Joshua L. Tucker |
| **Attorney Docket Number:** | 034392-0508266 |
| **Receipt Date:** | 12-OCT-2021 |
| **Filing Date:** | 17-OCT-2019 |
| **Time Stamp:** | 18:51:01 |
| **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 | Post Allowance Communication - Incoming | 034392-0508266-Comments.pdf | 107987<br>99641a67206346a1f2274f42b4448f4c8c5bc655 | no | 2 |

**Warnings:**

| Information: | |
|---|---|
| Total Files Size (in bytes): | 107987 |

**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

# NOTICE OF ALLOWANCE AND FEE(S) DUE

909 7590 07/22/2021
Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102

| EXAMINER |
|---|
| EVERETT, CHRISTOPHER E |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2116 | |

DATE MAILED: 07/22/2021

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 16/656,319 | 10/17/2019 | Aaron Phillips | 034392-0508266 | 2059 |

TITLE OF INVENTION: REMOTE CONTROL OF FLUID-HANDLING DEVICES

| APPLN. TYPE | ENTITY STATUS | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|---|---|---|---|---|---|---|
| nonprovisional | SMALL | $600 | $0.00 | $0.00 | $600 | 10/22/2021 |

**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.**



PTOL-85 (Rev. 02/11)

## 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)

909 7590 07/22/2021
Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102

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. |
|---|---|---|---|---|
| 16/656,319 | 10/17/2019 | Aaron Phillips | 034392-0508266 | 2059 |

TITLE OF INVENTION: REMOTE CONTROL OF FLUID-HANDLING DEVICES

| APPLN. TYPE | ENTITY STATUS | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|---|---|---|---|---|---|---|
| nonprovisional | SMALL | $600 | $0.00 | $0.00 | $600 | 10/22/2021 |

| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|---|---|---|
| EVERETT, CHRISTOPHER E | 2116 | 700-083000 |

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
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. |
|---|---|---|---|---|
| 16/656,319 | 10/17/2019 | Aaron Phillips | 034392-0508266 | 2059 |

909 7590 07/22/2021

Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102

| EXAMINER | |
|---|---|
| EVERETT, CHRISTOPHER E | |
| ART UNIT | PAPER NUMBER |
| 2116 | |

DATE MAILED: 07/22/2021

**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.



PTOL-85 (Rev. 02/11)

## 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 regulation.

| *Notice of Allowability* | **Application No.** 16/656,319 | **Applicant(s)** Phillips, Aaron | |
|---|---|---|---|
| | **Examiner** CHRISTOPHER E EVERETT | **Art Unit** 2116 | **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 6/23/2021.
   ☐ 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 21-40 . 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 _____.

/Christopher E. Everett/
Primary Examiner, Art Unit 2116

## DETAILED ACTION

1. The Office Action is responsive to the communication filed on 6/23/2021.

2. Claims 21-40 are pending.

### *Notice of Pre-AIA or AIA Status*

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

### *Response to Amendment*

4. The double patenting rejection to claims 1-20 is now moot and the rejection has been removed.

### *Allowable Subject Matter*

5. Claims 21-40 are allowed.

6. The following is an examiner's statement of reasons for allowance:

Claims 21-39

Regarding claim 21, the prior art as described in the prosecution history describes:

> 21. (new) A non-transitory, machine-readable medium comprising instructions to effectuate operations, the operations comprising:

However, regarding claim 21, the prior art as described in the prosecution history does not describe:

> receiving, with a server, a command comprising a target value of a fluid-handling device from a computing device via a control interface, wherein the command is received in association with a record stored on a datastore;
>
> determining, with the server, a network address of a network based on the record, wherein the network address identifies a controller of the fluid-handling device, and wherein the controller accesses a sensor to measure a fluid being handled by the fluid-handling device and an actuator of the fluid-handling device;
>
> sending, with the server, the target value to the network address via the network;
>
> receiving, with the controller, a measurement of the fluid by the sensor;
>
> determining, with the controller, whether the measurement satisfies the target value;
>
> in response to a determination that the measurement does not satisfy the target value, obtaining, with the controller, a set point based on the command; and
>
> controlling, with the controller, the actuator based on the set point.

Dependent claims 22-39 depend from independent claim 21 and are allowable for the same reasons as described above.

Claim 40

Independent claim 40 is substantially similar to independent claim 21 and is allowable for the same reasons as outlined above with respect to claim 21.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER E EVERETT whose telephone number is (571)272-2851. The examiner can normally be reached on Monday-Friday 8:00 am to 5:00 pm (Eastern).

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, Kenneth Lo can be reached on 571-272-9774. 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.

/Christopher E. Everett/
Primary Examiner, Art Unit 2116

| Search Notes | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|---|---|---|
| | 16/656,319 | Phillips, Aaron |
| | Examiner | Art Unit |
| | CHRISTOPHER E EVERETT | 2116 |

| CPC - Searched* | | |
|---|---|---|
| Symbol | Date | Examiner |
| G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472 | 02/18/2021 | CEE |

| 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.

| Search Notes | | |
|---|---|---|
| Search Notes | Date | Examiner |
| Search of G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472 using text searches | 02/18/2021 | CEE |
| Search of 700/1,282,275,281,42 using text searches | 02/18/2021 | CEE |
| Review of file histories and search histories for parent application nos . 13/708557; 14/147190; 14/984422; 15/867077 | 02/18/2021 | CEE |
| Search of DAV using inventor search | 02/18/2021 | CEE |
| Search of PE2E Search using inventor, applicant, and text searches | 02/18/2021 | CEE |
| Search of Google patent using text searches | 02/18/2021 | CEE |
| Search of Google scholar using text searches | 02/18/2021 | CEE |
| Update of PE2E Search and subclass search as described above | 07/14/2021 | CEE |
| Search of Google patent using text searches | 07/14/2021 | CEE |
| Search of Google scholar using text searches | 07/14/2021 | CEE |

| /Christopher E. Everett/<br>Primary Examiner, Art Unit 2116 | |
|---|---|

| Search Notes | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|---|---|---|
| | 16/656,319 | Phillips, Aaron |
| | Examiner | Art Unit |
| | CHRISTOPHER E EVERETT | 2116 |

| Interference Search | | | |
|---|---|---|---|
| **US Class/CPC Symbol** | **US Subclass/CPC Group** | **Date** | **Examiner** |
| | Search of USPAT and USPGPUB using text searches | 07/14/2021 | CEE |

| | |
|---|---|
| /Christopher E. Everett/<br>Primary Examiner, Art Unit 2116 | |

| Issue Classification | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|---|---|---|
| | 16/656,319 | Phillips, Aaron |
| | **Examiner** | **Art Unit** |
| | CHRISTOPHER E EVERETT | 2116 |

| CPC | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Symbol** | | | | | | **Type** | **Version** |
| G05D | / | 7 | / | 0676 | | F | 2013-01-01 |
| E21B | / | 47 | / | 00 | | I | 2013-01-01 |
| G05B | / | 9 | / | 02 | | I | 2013-01-01 |
| G05B | / | 19 | / | 0428 | | I | 2013-01-01 |
| G06F | / | 3 | / | 0484 | | I | 2013-01-01 |
| H04L | / | 67 | / | 02 | | I | 2013-01-01 |
| G05B | / | 2219 | / | 25204 | | A | 2013-01-01 |
| G05B | / | 2219 | / | 31369 | | A | 2013-01-01 |
| G05B | / | 2219 | / | 23472 | | A | 2013-01-01 |
| G05B | / | 2219 | / | 24015 | | A | 2013-01-01 |

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

| NONE | | **Total Claims Allowed:** | |
|---|---|---|---|
| (Assistant Examiner) | (Date) | 20 | |
| /Christopher E. Everett/<br>Primary Examiner, Art Unit 2116 | 14 July 2021 | O.G. Print Claim(s) | O.G. Print Figure |
| (Primary Examiner) | (Date) | 1 | 1 |

U.S. Patent and Trademark Office — Part of Paper No.: 20210714

| Issue Classification | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|---|---|---|
| | 16/656,319 | Phillips, Aaron |
| | Examiner | Art Unit |
| | CHRISTOPHER E EVERETT | 2116 |

| INTERNATIONAL CLASSIFICATION | | | | |
|---|---|---|---|---|
| CLAIMED | | | | |
| G05B19/042 | / | 19 | / | 042 |

| NON-CLAIMED | | | | |
|---|---|---|---|---|
| | / | | / | |

| US ORIGINAL CLASSIFICATION | |
|---|---|
| CLASS | SUBCLASS |
| | |

| CROSS REFERENCES(S) | | | | | | |
|---|---|---|---|---|---|---|
| CLASS | SUBCLASS (ONE SUBCLASS PER BLOCK) | | | | | |
| | | | | | | |

| NONE | | Total Claims Allowed: | |
|---|---|---|---|
| (Assistant Examiner) | (Date) | 20 | |
| /Christopher E. Everett/<br>Primary Examiner, Art Unit 2116 | 14 July 2021 | O.G. Print Claim(s) | O.G. Print Figure |
| (Primary Examiner) | (Date) | 1 | 1 |

U.S. Patent and Trademark Office — Part of Paper No.: 20210714

| Issue Classification | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|---|---|---|
| | 16/656,319 | Phillips, Aaron |
| | Examiner | Art Unit |
| | CHRISTOPHER E EVERETT | 2116 |

☑ 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) | 20 | |
| /Christopher E. Everett/<br>Primary Examiner, Art Unit 2116 | 14 July 2021 | O.G. Print Claim(s) | O.G. Print Figure |
| (Primary Examiner) | (Date) | 1 | 1 |

U.S. Patent and Trademark Office — Part of Paper No.: 20210714

# Web Search History

| date, time | web site | search string |
|---|---|---|
| 7/14/2021 2:00:46 PM | Google Patents (old) | remote control of fluid actuator |
| 7/14/2021 2:00:49 PM | Google Scholar | remote control of fluid actuator |
| 7/14/2021 2:03:12 PM | Google Patents (old) | remote control of fluid actuator using set points and network |
| 7/14/2021 2:03:15 PM | Google Scholar | remote control of fluid actuator using set points and network |
| 7/14/2021 2:05:02 PM | Google Patents (old) | remote control of fluid actuator using set points and network address |
| 7/14/2021 2:05:06 PM | Google Scholar | remote control of fluid actuator using set points and network address |

## PE2E SEARCH - Search History (Prior Art)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | British Equivalents | Time Stamp |
|---|---|---|---|---|---|---|---|
| L1 | 11 | ("20020161685"\|"20020169645"\|"20030004624"\|"20030182463"\|"20040088115"\|"20040231851"\|"20050108504"\|"20060240818"\|"20080208475"\|"20100295673"\|"20120316658").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 08:35 AM |
| L2 | 34 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2013/02/22 08:35 AM |
| L3 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2013/02/22 08:35 AM |
| L4 | 0 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2013/02/22 08:36 AM |
| L5 | 5 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2013/02/22 08:39 AM |
| L6 | 1 | ("20060149476").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 08:39 AM |
| L7 | 1 | ("20060271299").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 08:40 AM |
| L8 | 1 | ("20030065447").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 08:40 AM |
| L9 | 1 | ("4594665").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 08:40 AM |
| L10 | 1 | ("20050092523").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 08:42 AM |
| L11 | 1 | ("20060047527").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 08:42 AM |
| L12 | 53 | L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 08:54 AM |
| L13 | 17 | (US-20090260829-$ or US-20020112860-$ or US-20040262008-$ or US-20070107903-$ or US-20040251030-$).did. or (US-7000693-$ or US-6420976-$ or US-7967066-$ or US-RE41173-$ or US-7148812-$ or US-6768700-$ or US-7845404-$ or US-6913083-$ or US-4636934-$ or US-5732776-$ or US-4052703-$ or US-7958938-$ or US-4755943-$).did. | (EPO; JPO; DERWENT) | OR | ON | ON | 2013/02/22 09:01 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L14 | 1 | ("7261162").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 09:05 AM |
| L15 | 62 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2013/02/22 09:05 AM |
| L16 | 1 | ("20040262008").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 09:05 AM |
| L17 | 1 | ("7148812").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 09:08 AM |
| L18 | 1 | ("7958938").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 09:08 AM |
| L19 | 1 | ("7967066").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 09:08 AM |
| L20 | 1 | ("7845404").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 09:08 AM |
| L21 | 1 | ("6913083").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 09:09 AM |
| L22 | 1 | ("20020112860").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 09:09 AM |
| L23 | 1 | ("5732776").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 09:10 AM |
| L24 | 1 | ("4052703").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/22 09:11 AM |
| L25 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/25 03:50 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L26 | 0 | L25 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/25 03:50 PM |
| L27 | 7 | L25 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/25 03:51 PM |
| L28 | 4518 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/25 03:52 PM |
| L29 | 2295 | L28 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/25 03:53 PM |
| L30 | 839 | L29 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/25 03:53 PM |
| L31 | 239 | L30 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/25 03:54 PM |
| L32 | 2 | L31 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/25 03:54 PM |
| L33 | 4284 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:07 AM |
| L34 | 5841 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:07 AM |
| L35 | 18470 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:07 AM |
| L36 | 767 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:07 AM |
| L37 | 463 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:08 AM |
| L38 | 29579 | L33 L34 L35 L36 L37 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:08 AM |
| L39 | 168445 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:08 AM |
| L40 | 2119066 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:10 AM |
| L41 | 1404 | L38 and L39 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:10 AM |
| L42 | 1837654 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:11 AM |
| L43 | 579 | L41 and (internet network (web adj2 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | server)) | | | | | |
| L44 | 15604 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:12 AM |
| L45 | 642 | L40 and L41 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:12 AM |
| L46 | 315 | L45 and L42 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:12 AM |
| L47 | 337 | L39 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:12 AM |
| L48 | 6 | L46 and L47 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:12 AM |
| L49 | 2 | ("2010/0147510").URPN. | (USPAT) | OR | ON | ON | 2013/02/26 10:13 AM |
| L50 | 62 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2013/02/26 10:14 AM |
| L51 | 11 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2013/02/26 10:18 AM |
| L52 | 10 | L39 and L44 and L38 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:21 AM |
| L53 | 337 | L39 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:22 AM |
| L54 | 203 | L53 and (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:22 AM |
| L55 | 387 | (local autonomous | (US-PGPUB; USPAT; | OR | ON | ON | 2013/02/26 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | independent) and L45 | EPO) | | | | 10:25 AM |
| L56 | 381 | L55 not L54 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:25 AM |
| L57 | 501662 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:28 AM |
| L58 | 8886 | L57 and L39 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:29 AM |
| L59 | 106 | L58 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/02/26 10:29 AM |
| L60 | 44 | ("20030004624"\|"20040088115"\|"20100147510"\|"5732776"\|"7931090"\|"7967066"\|"8312320"\|"20130144531"\|"8301386"\|"20050108504"\|"20100295673"\|"20110231024"\|"6061603"\|"8386059"\|"20100098507"\|"20030182463"\|"4052703"\|"6192980"\|"7958938"\|"8373418"\|"20130024026"\|"20040231851"\|"20060240818"\|"7148812"\|"7289994"\|"20120316658"\|"20040262008"\|"7921916"\|"8131510"\|"8290737"\|"20100326654"\|"20020161685"\|"20090149969"\|"7845404"\|"8179279"\|"20020112860"\|"20050096846"\|"5149443"\|"6801135"\|"6913083"\|"20130008645"\|"20020169645"\|"20080208475"\|"7591308").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/11 01:22 PM |
| L61 | 37 | (US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020161685-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 07:58 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$).did. or (WO-2008124765-$).did. | | | | | |
| L62 | 0 | L61 and oscillate | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 07:58 AM |
| L63 | 1 | L61 and (stuck adj3 valve) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 07:59 AM |
| L64 | 4400 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:10 AM |
| L65 | 5969 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:10 AM |
| L66 | 19220 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:10 AM |
| L67 | 804 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:10 AM |
| L68 | 475 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:10 AM |
| L69 | 30612 | L64 L65 L66 L67 L68 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:10 AM |
| L70 | 172242 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:10 AM |
| L71 | 241 | L69 and L70 and "240" | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:10 AM |
| L72 | 2175607 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:11 AM |
| L73 | 664 | L69 and L70 and L72 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:11 AM |
| L74 | 6 | L73 and (inoperative in-operative stuck) adj3 (valve part) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:11 AM |
| L75 | 94 | L70 and (stuck) adj3 (valve) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:14 AM |
| L76 | 94 | L70 and ((stuck) adj3 | (US-PGPUB; USPAT; | OR | ON | ON | 2013/06/12 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (valve)) | EPO) | | | | 08:14 AM |
| L77 | 109 | L70 and ((frozen froze stuck) adj3 (valve)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:19 AM |
| L78 | 12 | ((move jerk oscillate move) near2 ((frozen froze stuck) adj3 (valve))) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:21 AM |
| L79 | 1 | ("4823749").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 08:22 AM |
| L80 | 1 | ("20010032518").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 10:53 AM |
| L81 | 35 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2013/06/12 11:14 AM |
| L82 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2013/06/12 11:14 AM |
| L83 | 0 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2013/06/12 11:14 AM |
| L84 | 5 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2013/06/12 11:14 AM |
| L85 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L86 | 0 | L85 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L87 | 7 | L85 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L88 | 4795 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L89 | 2432 | L88 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L90 | 889 | L89 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L91 | 246 | L90 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L92 | 2 | L91 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L93 | 1458 | L69 and L70 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L94 | 1900176 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L95 | 16083 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L96 | 664 | L72 and L93 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L97 | 327 | L96 and L94 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L98 | 343 | L70 and L95 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L99 | 6 | L97 and L98 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L100 | 10 | L70 and L95 and L69 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L101 | 528886 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L102 | 9459 | L101 and L70 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L103 | 110 | L102 and L95 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L104 | 158 | L81 L82 L83 L84 L86 L87 L92 L99 L100 L103 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/06/12 11:14 AM |
| L105 | 16 | ("2004/0262008").URPN. | (USPAT) | OR | ON | ON | 2013/10/25 12:32 PM |
| L106 | 9 | ("20040262008" \| "20050035875" \| "4701756" \| "5959547" \| "6229453" \| "6816082").PN. OR ("7148812").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2013/10/25 12:39 PM |
| L107 | 1 | ("5959547").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:45 PM |
| L108 | 4578 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L109 | 6150 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L110 | 20349 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L111 | 850 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L112 | 486 | 340/853.3,853.2,856.3. | (US-PGPUB; USPAT; | OR | ON | ON | 2013/10/25 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | ccls. | EPO) | | | | 12:46 PM |
| L113 | 32148 | L108 L109 L110 L111 L112 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L114 | 177528 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L115 | 2253717 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L116 | 36 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2013/10/25 12:46 PM |
| L117 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2013/10/25 12:46 PM |
| L118 | 0 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2013/10/25 12:46 PM |
| L119 | 5 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2013/10/25 12:46 PM |
| L120 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L121 | 0 | L120 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L122 | 7 | L120 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L123 | 4935 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L124 | 2501 | L123 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L125 | 917 | L124 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L126 | 257 | L125 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L127 | 2 | L126 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L128 | 1540 | L113 and L114 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L129 | 1987225 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L130 | 16785 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L131 | 707 | L115 and L128 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L132 | 351 | L131 and L129 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L133 | 357 | L114 and L130 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L134 | 6 | L132 and L133 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L135 | 10 | L114 and L130 and L113 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L136 | 553323 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L137 | 9948 | L136 and L114 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L138 | 117 | L137 and L130 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L139 | 166 | L116 L117 L118 L119 L121 L122 L127 L134 L135 L138 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L140 | 166 | L139 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2013/10/25 12:46 PM |
| L144 | 4914 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L145 | 6494 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L146 | 22712 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L147 | 948 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L148 | 511 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L149 | 35297 | L144 L145 L146 L147 L148 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L150 | 188122 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L151 | 2416039 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L152 | 38 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2014/07/22 04:19 PM |
| L153 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2014/07/22 04:19 PM |
| L154 | 2 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2014/07/22 04:19 PM |
| L155 | 5 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2014/07/22 04:19 PM |
| L156 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L157 | 0 | L156 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L158 | 7 | L156 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L159 | 5262 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L160 | 2663 | L159 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L161 | 969 | L160 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L162 | 268 | L161 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L163 | 4 | L162 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L164 | 1686 | L149 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L165 | 2171012 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L166 | 18312 | (local autonomous | (US-PGPUB; USPAT; | OR | ON | ON | 2014/07/22 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | EPO) | | | | 04:19 PM |
| L167 | 776 | L151 and L164 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L168 | 390 | L167 and L165 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L169 | 383 | L150 and L166 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L170 | 8 | L168 and L169 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L171 | 12 | L150 and L166 and L149 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L172 | 605853 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L173 | 10936 | L172 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L174 | 129 | L173 and L166 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L175 | 178 | L152 L153 L154 L155 L157 L158 L163 L170 L171 L174 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L176 | 178 | L175 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L177 | 178 | L176 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:19 PM |
| L178 | 2489 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:20 PM |
| L179 | 645 | L178 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:28 PM |
| L180 | 452 | L179 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:28 PM |
| L182 | 15 | L180 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:28 PM |
| L183 | 16 | L178 and L166 and L165 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:29 PM |
| L184 | 204 | L182 L183 L177 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2014/07/22 04:29 PM |
| L185 | 23 | ("4007450" \| "4888726" \| "5560005" \| "5724575" \| "5828851" \| "5838563" \| "5845230" \| "5956483" \| "6000045" \| "6131120" \| "6263487" \| "6701437" \| "6799077").PN. OR ("7289994").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2015/02/23 04:41 PM |
| L186 | 1 | ("20090055029").PN. | (US-PGPUB; USPAT; | OR | ON | ON | 2015/03/06 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 02:23 PM |
| L187 | 46 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 02:45 PM |
| L188 | 2 | L187 and pid | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 02:45 PM |
| L189 | 5307 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L190 | 6733 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L191 | 24915 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L192 | 1044 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L193 | 530 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L194 | 38241 | L189 L190 L191 L192 L193 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L195 | 197343 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L196 | 2561451 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L197 | 39 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2015/03/06 04:10 PM |
| L198 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2015/03/06 04:10 PM |
| L199 | 2 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2015/03/06 04:10 PM |
| L200 | 6 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2015/03/06 04:10 PM |
| L201 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L202 | 0 | L201 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L203 | 7 | L201 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L204 | 5538 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L205 | 2804 | L204 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L206 | 1031 | L205 and (oil near2 | (US-PGPUB; USPAT; | OR | ON | ON | 2015/03/06 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | well) | EPO) | | | | 04:10 PM |
| L207 | 287 | L206 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L208 | 4 | L207 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L209 | 1822 | L194 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L210 | 2334181 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L211 | 19758 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L212 | 846 | L196 and L209 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L213 | 432 | L212 and L210 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L214 | 411 | L195 and L211 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L215 | 10 | L213 and L214 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L216 | 17 | L195 and L211 and L194 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L217 | 652812 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L218 | 11860 | L217 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L219 | 139 | L218 and L211 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L220 | 192 | L197 L198 L199 L200 L202 L203 L208 L215 L216 L219 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L221 | 192 | L220 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L222 | 192 | L221 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L223 | 2737 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L224 | 706 | L223 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L225 | 492 | L224 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L226 | 16 | L225 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L227 | 16 | L223 and L211 and L210 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L228 | 219 | L226 L227 L222 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L229 | 219 | L228 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/03/06 04:10 PM |
| L230 | 5577 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L231 | 6864 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L232 | 25873 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L233 | 1107 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L234 | 547 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L235 | 39674 | L230 L231 L232 L233 L234 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L236 | 205047 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L237 | 2685982 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L238 | 43 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2015/09/21 08:46 AM |
| L239 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2015/09/21 08:46 AM |
| L240 | 3 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2015/09/21 08:46 AM |
| L241 | 6 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2015/09/21 08:46 AM |
| L242 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | $).did. | | | | | |
| L243 | 0 | L242 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L244 | 7 | L242 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L245 | 5794 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L246 | 2926 | L245 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L247 | 1087 | L246 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L248 | 297 | L247 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L249 | 4 | L248 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L250 | 1898 | L235 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L251 | 2471267 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L252 | 21038 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L253 | 891 | L237 and L250 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L254 | 452 | L253 and L251 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L255 | 430 | L236 and L252 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L256 | 10 | L254 and L255 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L257 | 17 | L236 and L252 and L235 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L258 | 692562 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L259 | 12566 | L258 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L260 | 153 | L259 and L252 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L261 | 210 | L238 L239 L240 L241 L243 L244 L249 L256 L257 L260 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L262 | 210 | L261 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L263 | 210 | L262 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L264 | 2965 | G05D7/0676;G05B9/02; | (US-PGPUB; USPAT; | OR | ON | ON | 2015/09/21 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | E21B47/00;G05B2219/23472.cpc. | EPO) | | | | 08:46 AM |
| L265 | 752 | L264 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L266 | 523 | L265 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L267 | 16 | L266 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L268 | 18 | L264 and L252 and L251 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L269 | 239 | L267 L268 L263 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L270 | 239 | L269 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L271 | 239 | L270 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2015/09/21 08:46 AM |
| L276 | 6137 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L277 | 7043 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L278 | 26619 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L279 | 1160 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L280 | 554 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L281 | 41214 | L276 L277 L278 L279 L280 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L282 | 223345 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L283 | 2986529 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L284 | 60 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2016/12/07 04:13 PM |
| L285 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2016/12/07 04:13 PM |
| L286 | 7 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2016/12/07 04:13 PM |
| L287 | 7 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2016/12/07 04:13 PM |
| L288 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L289 | 0 | L288 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L290 | 7 | L288 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L291 | 6407 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L292 | 3258 | L291 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L293 | 1220 | L292 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L294 | 338 | L293 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L295 | 6 | L294 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L296 | 2046 | L281 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L297 | 2802086 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L298 | 24197 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L299 | 976 | L283 and L296 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L300 | 511 | L299 and L297 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L301 | 499 | L282 and L298 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L302 | 15 | L300 and L301 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L303 | 22 | L282 and L298 and L281 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L304 | 788452 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L305 | 14396 | L304 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L306 | 185 | L305 and L298 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L307 | 262 | L284 L285 L286 L287 L289 L290 L295 L302 L303 L306 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L308 | 262 | L307 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L309 | 262 | L308 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L310 | 3692 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L311 | 1005 | L310 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L312 | 680 | L311 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L313 | 20 | L312 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L314 | 22 | L310 and L298 and L297 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L315 | 293 | L313 L314 L309 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L316 | 293 | L315 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L317 | 293 | L316 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L318 | 293 | L317 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L319 | 81003 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |
| L320 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:13 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L321 | 4 | L320 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:19 PM |
| L322 | 2 | ("20020018399").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:26 PM |
| L323 | 13 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2016/12/07 04:27 PM |
| L324 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/07 04:28 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L325 | 29 | L324 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:28 PM |
| L326 | 12 | L325 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:29 PM |
| L327 | 2 | ("7096092").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | OFF | OFF | 2016/12/07 04:29 PM |
| L328 | 1 | ("6967589").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:31 PM |
| L329 | 91 | ("5438329" \| "5717718" \| "5963650" \| "6062095" \| "6169488" \| "6305471" \| "6356205" \| "6369715" \| "6574652" \| "6693553" \| "6795319").PN. OR ("6967589").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2016/12/07 04:32 PM |
| L330 | 47 | L329 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:33 PM |
| L331 | 23 | L330 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:33 PM |
| L332 | 2 | ("20090055029").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/07 04:34 PM |
| L333 | 2 | ("20100033318").PN. | (US-PGPUB; USPAT; | OR | ON | ON | 2016/12/07 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | FPRS; EPO) | | | | 04:35 PM |
| L334 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/08 12:05 PM |
| L335 | 20 | L334 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 12:05 PM |
| L336 | 13 | L335 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 12:22 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L337 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | (US-PGPUB; USPAT) | OR | ON | ON | 2016/12/08 12:28 PM |
| L338 | 24 | L337 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:31 PM |
| L339 | 17 | L337 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:31 PM |
| L340 | 13 | L338 and L339 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:32 PM |
| L341 | 2230 | (web html) near4 (control controlling) near4 (actuator | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:48 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | controller valve) | | | | | |
| L342 | 6137 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/08 01:48 PM |
| L343 | 7043 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/08 01:48 PM |
| L344 | 26619 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/08 01:48 PM |
| L345 | 1160 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/08 01:48 PM |
| L346 | 554 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/08 01:48 PM |
| L347 | 41214 | L342 L343 L344 L345 L346 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/08 01:48 PM |
| L348 | 81068 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:48 PM |
| L349 | 120388 | L348 L347 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:48 PM |
| L350 | 155 | L341 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:49 PM |
| L351 | 145 | L349 and L341 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:53 PM |
| L352 | 387 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:53 PM |
| L353 | 20 | L349 and L352 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:54 PM |
| L354 | 19 | L352 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:54 PM |
| L355 | 34 | L353 L354 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 01:54 PM |
| L356 | 2 | ("20020018399").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/08 02:01 PM |
| L357 | 1 | ("5805926").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 08:48 AM |
| L358 | 2 | ("20030052180").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 08:55 AM |
| L359 | 1 | ("6967589").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 10:24 AM |
| L360 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2016/12/09 11:51 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L361 | 2 | L360 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 11:51 AM |
| L362 | 2 | L360 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 11:51 AM |
| L363 | 8 | L360 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 11:52 AM |
| L364 | 6 | L360 and (carrier) | (US-PGPUB; USPAT; | OR | ON | ON | 2016/12/09 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | FPRS; EPO) | | | | 11:52 AM |
| L365 | 2 | L360 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 11:52 AM |
| L366 | 1 | ("20020156837").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 12:11 PM |
| L367 | 1 | ("6799195").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | OFF | OFF | 2016/12/09 12:15 PM |
| L368 | 2 | ("20110051645").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 12:34 PM |
| L369 | 3 | ("5546301").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 12:55 PM |
| L370 | 127 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2016/12/09 12:55 PM |
| L371 | 21 | L370 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 12:55 PM |
| L372 | 38793 | (thread near4 (actuator sensor gui synchronize data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 01:00 PM |
| L373 | 6873 | (thread near4 (actuator sensor gui synchronize data)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 01:00 PM |
| L374 | 6416 | (thread near4 (actuator sensor gui synchronize data)).clm. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 01:00 PM |
| L375 | 38793 | L372 L373 L374 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 01:00 PM |
| L376 | 11652 | L373 L374 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 01:01 PM |
| L377 | 625 | L375 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 01:01 PM |
| L378 | 157 | L376 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 01:01 PM |
| L379 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 01:02 PM |
| L380 | 144 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 01:02 PM |
| L381 | 10 | L380 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2016/12/09 01:02 PM |
| L382 | 10 | ("6249241"\|"5819271"\|"6810386"\|"5805082"\|"5875305"\|"6208938").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 12:39 PM |
| L383 | 1 | ("6665568").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:01 PM |
| L384 | 10 | ("5973696" \| "5982362" \| "6138150" \| "6170007" \| "6201996" \| "6311101").PN. OR ("6665568").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2017/03/23 02:15 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L385 | 6148 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L386 | 7044 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L387 | 26644 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L388 | 1160 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L389 | 554 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L390 | 41251 | L385 L386 L387 L388 L389 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L391 | 227637 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L392 | 3060500 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L393 | 62 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2017/03/23 02:18 PM |
| L394 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2017/03/23 02:18 PM |
| L395 | 9 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2017/03/23 02:18 PM |
| L396 | 8 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2017/03/23 02:18 PM |
| L397 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L398 | 0 | L397 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L399 | 7 | L397 and (oil near2 | (US-PGPUB; USPAT; | OR | ON | ON | 2017/03/23 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | water) | EPO) | | | | 02:18 PM |
| L400 | 6555 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L401 | 3329 | L400 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L402 | 1245 | L401 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L403 | 342 | L402 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L404 | 6 | L403 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L405 | 2046 | L390 and L391 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L406 | 2883167 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L407 | 24993 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L408 | 976 | L392 and L405 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L409 | 511 | L408 and L406 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L410 | 514 | L391 and L407 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L411 | 15 | L409 and L410 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L412 | 22 | L391 and L407 and L390 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L413 | 812457 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L414 | 14890 | L413 and L391 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L415 | 190 | L414 and L407 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L416 | 269 | L393 L394 L395 L396 L398 L399 L404 L411 L412 L415 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L417 | 3859 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L418 | 22 | L417 and L407 and L406 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L419 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L420 | 4 | L419 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L421 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L422 | 29 | L421 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L423 | 12 | L422 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L424 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L425 | 20 | L424 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L426 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or | (US-PGPUB; USPAT) | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L427 | 24 | L426 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L428 | 17 | L426 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L429 | 13 | L427 and L428 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L430 | 6148 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L431 | 7044 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L432 | 26644 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L433 | 1160 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L434 | 554 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L435 | 41251 | L430 L431 L432 L433 L434 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L436 | 86021 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | G05B2219/23472).cpc. | | | | | |
| L437 | 125354 | L436 L435 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L438 | 394 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L439 | 20 | L437 and L438 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L440 | 19 | L438 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L441 | 34 | L439 L440 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L442 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L443 | 2 | L442 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L444 | 8 | L442 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L445 | 6 | L442 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L446 | 2 | L442 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L447 | 129 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2017/03/23 02:18 PM |
| L448 | 21 | L447 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L449 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L450 | 146 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L451 | 10 | L450 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L452 | 405 | L416 L449 L451 L448 L443 L444 L445 L446 L441 L440 L439 L429 L428 L427 L425 L420 L422 L423 L418 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/03/23 02:18 PM |
| L453 | 6153 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L454 | 7048 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L455 | 26662 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L456 | 1163 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L457 | 554 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L458 | 41281 | L453 L454 L455 L456 L457 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L459 | 235216 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | station) | | | | | |
| L460 | 3192542 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L461 | 65 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2017/09/26 08:06 AM |
| L462 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2017/09/26 08:06 AM |
| L463 | 11 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2017/09/26 08:06 AM |
| L464 | 8 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2017/09/26 08:06 AM |
| L465 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L466 | 0 | L465 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L467 | 7 | L465 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L468 | 6830 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L469 | 3457 | L468 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L470 | 1296 | L469 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L471 | 352 | L470 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L472 | 6 | L471 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L473 | 2051 | L458 and L459 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L474 | 3028538 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L475 | 26427 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L476 | 977 | L460 and L473 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L477 | 513 | L476 and L474 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L478 | 540 | L459 and L475 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L479 | 15 | L477 and L478 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L480 | 22 | L459 and L475 and L458 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L481 | 855191 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L482 | 15715 | L481 and L459 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L483 | 201 | L482 and L475 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L484 | 283 | L461 L462 L463 L464 L466 L467 L472 L479 L480 L483 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L485 | 4113 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L486 | 22 | L485 and L475 and L474 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L487 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L488 | 4 | L487 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L489 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L490 | 29 | L489 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L491 | 12 | L490 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L492 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L493 | 20 | L492 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L494 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US- | (US-PGPUB; USPAT) | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L495 | 24 | L494 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L496 | 17 | L494 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L497 | 13 | L495 and L496 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L498 | 6153 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L499 | 7048 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L500 | 26662 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L501 | 1163 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L502 | 554 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L503 | 41281 | L498 L499 L500 L501 L502 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L504 | 92435 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L505 | 131779 | L504 L503 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L506 | 401 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L507 | 21 | L505 and L506 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L508 | 19 | L506 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L509 | 35 | L507 L508 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L510 | 54 | (US-20120316658-$ or US-20080208475-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L511 | 2 | L510 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L512 | 8 | L510 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L513 | 6 | L510 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L514 | 2 | L510 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L515 | 130 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2017/09/26 08:06 AM |
| L516 | 22 | L515 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L517 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L518 | 152 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L519 | 10 | L518 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L520 | 421 | L484 L517 L519 L516 L511 L512 L513 L514 L509 L508 L507 L497 L496 L495 L493 L488 L490 L491 L486 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L521 | 421 | L520 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2017/09/26 08:06 AM |
| L526 | 6162 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L527 | 7047 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L528 | 26678 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L529 | 1163 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L530 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L531 | 41304 | L526 L527 L528 L529 L530 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L532 | 255944 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L533 | 3560512 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L534 | 80 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2019/02/25 11:11 AM |
| L535 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2019/02/25 11:11 AM |
| L536 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2019/02/25 11:11 AM |
| L537 | 8 | real-time and onsite and internet and | (EPO; JPO; DERWENT) | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | communication | | | | | |
| L538 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L539 | 0 | L538 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L540 | 7 | L538 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L541 | 7529 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L542 | 3807 | L541 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L543 | 1433 | L542 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L544 | 390 | L543 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L545 | 6 | L544 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L546 | 2051 | L531 and L532 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L547 | 3428769 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L548 | 31081 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L549 | 979 | L533 and L546 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L550 | 514 | L549 and L547 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L551 | 709 | L532 and L548 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L552 | 16 | L550 and L551 | (US-PGPUB; USPAT; | OR | ON | ON | 2019/02/25 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 11:11 AM |
| L553 | 23 | L532 and L548 and L531 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L554 | 975821 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L555 | 18051 | L554 and L532 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L556 | 286 | L555 and L548 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L557 | 381 | L534 L535 L536 L537 L539 L540 L545 L552 L553 L556 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L558 | 5106 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L559 | 34 | L558 and L548 and L547 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L560 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L561 | 4 | L560 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L562 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L563 | 29 | L562 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L564 | 12 | L563 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L565 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L566 | 20 | L565 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L567 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | (US-PGPUB; USPAT) | OR | ON | ON | 2019/02/25 11:11 AM |
| L568 | 24 | L567 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L569 | 17 | L567 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L570 | 13 | L568 and L569 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L571 | 6162 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L572 | 7047 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L573 | 26678 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L574 | 1163 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L575 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L576 | 41304 | L571 L572 L573 L574 L575 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L577 | 113460 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L578 | 152783 | L577 L576 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L579 | 428 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L580 | 22 | L578 and L579 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L581 | 19 | L579 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L582 | 36 | L580 L581 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L583 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L584 | 2 | L583 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L585 | 8 | L583 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L586 | 6 | L583 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L587 | 2 | L583 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L588 | 137 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2019/02/25 11:11 AM |
| L589 | 23 | L588 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L590 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L591 | 163 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L592 | 10 | L591 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L593 | 531 | L557 L590 L592 L589 L584 L585 L586 L587 L582 L581 L580 L570 L569 L568 L566 L561 L563 L564 L559 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/02/25 11:11 AM |
| L594 | 531 | L593 | (US-PGPUB; USPAT; FPRS; EPO; DERWENT) | OR | ON | ON | 2019/02/25 11:11 AM |
| L595 | 6159 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L596 | 7059 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L597 | 26673 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L598 | 1163 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L599 | 552 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L600 | 41307 | L595 L596 L597 L598 L599 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L601 | 262037 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L602 | 3673947 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L603 | 87 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2019/07/15 08:47 AM |
| L604 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2019/07/15 08:47 AM |
| L605 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2019/07/15 08:47 AM |
| L606 | 8 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2019/07/15 08:47 AM |
| L607 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L608 | 0 | L607 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L609 | 7 | L607 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L610 | 7745 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L611 | 3922 | L610 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L612 | 1472 | L611 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L613 | 404 | L612 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L614 | 6 | L613 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L615 | 2062 | L600 and L601 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L616 | 3552609 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L617 | 32585 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L618 | 990 | L602 and L615 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L619 | 526 | L618 and L616 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L620 | 799 | L601 and L617 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L621 | 25 | L619 and L620 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L622 | 32 | L601 and L617 and L600 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L623 | 1012917 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L624 | 18822 | L623 and L601 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L625 | 338 | L624 and L617 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L626 | 440 | L603 L604 L605 L606 L608 L609 L614 L621 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | L622 L625 | | | | | |
| L627 | 5397 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L628 | 42 | L627 and L617 and L616 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L629 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L630 | 4 | L629 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L631 | 47 | (US-20120316658-$ or | (US-PGPUB; USPAT; | OR | ON | ON | 2019/07/15 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | EPO) | | | | 08:47 AM |
| L632 | 29 | L631 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L633 | 12 | L632 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L634 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L635 | 20 | L634 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L636 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or | (US-PGPUB; USPAT) | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L637 | 24 | L636 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L638 | 17 | L636 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L639 | 13 | L637 and L638 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L640 | 6159 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L641 | 7059 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L642 | 26673 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L643 | 1163 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L644 | 552 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L645 | 41307 | L640 L641 L642 L643 L644 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L646 | 119993 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L647 | 159311 | L646 L645 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L648 | 440 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L649 | 26 | L647 and L648 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L650 | 19 | L648 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L651 | 40 | L649 L650 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L652 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L653 | 2 | L652 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L654 | 8 | L652 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L655 | 6 | L652 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L656 | 2 | L652 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L657 | 137 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2019/07/15 08:47 AM |
| L658 | 23 | L657 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L659 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L660 | 164 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L661 | 10 | L660 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L662 | 602 | L626 L659 L661 L658 L653 L654 L655 L656 L651 L650 L649 L639 L638 L637 L635 L630 L632 L633 L628 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L663 | 602 | L662 | (US-PGPUB; USPAT; FPRS; EPO; DERWENT) | OR | ON | ON | 2019/07/15 08:47 AM |
| L664 | 6159 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L665 | 7059 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; | OR | ON | ON | 2019/07/15 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 08:47 AM |
| L666 | 26673 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L667 | 1163 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L668 | 552 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L669 | 41307 | L664 L665 L666 L667 L668 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L670 | 262037 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L671 | 3673947 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L672 | 87 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2019/07/15 08:47 AM |
| L673 | 5 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2019/07/15 08:47 AM |
| L674 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2019/07/15 08:47 AM |
| L675 | 8 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2019/07/15 08:47 AM |
| L676 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L677 | 0 | L676 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L678 | 7 | L676 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L679 | 7745 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L680 | 3922 | L679 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L681 | 1472 | L680 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L682 | 404 | L681 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L683 | 6 | L682 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L684 | 2062 | L669 and L670 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2019/07/15 08:47 AM |
| L685 | 11 | ("20020161685"\|"20020169645"\|"20030004624"\|"20030182463"\|"20040088115"\|"20040231851"\|"20050108504"\|"20060240818"\|"20080208475"\|"20100295673"\|"20120316658").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L686 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L687 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L688 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L689 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L690 | 1 | ("20060149476").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L691 | 1 | ("20060271299").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L692 | 1 | ("20030065447").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L693 | 1 | ("4594665").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L694 | 1 | ("20050092523").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L695 | 1 | ("20060047527").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L696 | 4857 | L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L697 | 17 | (US-20090260829-$ or US-20020112860-$ or US-20040262008-$ or US-20070107903-$ or US-20040251030-$).did. or (US-7000693-$ or US-6420976-$ or US-7967066-$ or US-RE41173-$ or US-7148812-$ or US-6768700-$ or US- | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7845404-$ or US-6913083-$ or US-4636934-$ or US-5732776-$ or US-4052703-$ or US-7958938-$ or US-4755943-$).did. | | | | | |
| L698 | 1 | ("7261162").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L699 | 162 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L700 | 1 | ("20040262008").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L701 | 1 | ("7148812").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L702 | 1 | ("7958938").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L703 | 1 | ("7967066").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L704 | 1 | ("7845404").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L705 | 1 | ("6913083").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L706 | 1 | ("20020112860").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L707 | 1 | ("5732776").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L708 | 1 | ("4052703").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L709 | 20 | (US-20040262008-$ or US-20120316658-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L710 | 0 | L25 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L711 | 7 | L25 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L712 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L713 | 4138 | L28 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L714 | 1461 | L29 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L715 | 368 | L30 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L716 | 0 | L31 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L717 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L718 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L719 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L720 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L721 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L722 | 41358 | L33 L34 L35 L36 L37 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L723 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L724 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L725 | 1990 | L38 and L39 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L726 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L727 | 913 | L41 and (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L728 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L729 | 935 | L40 and L41 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L730 | 494 | L45 and L42 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L731 | 937 | L39 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L732 | 26 | L46 and L47 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L733 | 30 | ("2010/0147510").URPN. | (USPAT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L734 | 162 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L735 | 17 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L736 | 34 | L39 and L44 and L38 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L737 | 937 | L39 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L738 | 724 | L53 and (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L739 | 576 | (local autonomous independent) and L45 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L740 | 550 | L55 not L54 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L741 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L742 | 20394 | L57 and L39 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L743 | 435 | L58 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L744 | 44 | ("20030004624"\|"20040088115"\|"20100147510"\|"5732776"\|"7931090"\|"7967066"\|"8312320"\|"20130144531"\|"8301386"\|"20050108504"\|"20100295673"\|"20110231024"\|"6061603"\|"8386059"\|"20100098507"\|"20030182463"\|"4052703"\|"6192980"\|"7958938"\|"8373418"\|"20130024026"\|"20040231851"\|"20060240818"\|"7148812"\|"7289994"\|"20120316658"\|"20040262008"\|"7921916"\|"8131510"\|"8290737"\|"20100326654"\|"20020161685"\|"20090149969"\|"7845404"\|"8179279"\|"20020112860"\|"20050096846"\|"5149443"\|"6801135"\|"6913083"\|"20130008645"\|"20020169645"\|"20080208475"\|"7591308").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L745 | 37 | (US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020161685-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$).did. or (WO-2008124765-$).did. | | | | | |
| L746 | 0 | L61 and oscillate | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L747 | 1 | L61 and (stuck adj3 valve) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L748 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L749 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L750 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L751 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L752 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L753 | 41358 | L64 L65 L66 L67 L68 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L754 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L755 | 394 | L69 and L70 and "240" | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L756 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L757 | 935 | L69 and L70 and L72 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L758 | 18 | L73 and (inoperative in-operative stuck) adj3 (valve part) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L759 | 417 | L70 and (stuck) adj3 (valve) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L760 | 417 | L70 and ((stuck) adj3 (valve)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L761 | 452 | L70 and ((frozen froze stuck) adj3 (valve)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L762 | 18 | ((move jerk oscillate move) near2 ((frozen froze stuck) adj3 (valve))) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L763 | 1 | ("4823749").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L764 | 1 | ("20010032518").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L765 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L766 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L767 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L768 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L769 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L770 | 0 | L85 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L771 | 7 | L85 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L772 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L773 | 4138 | L88 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L774 | 1461 | L89 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L775 | 368 | L90 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L776 | 0 | L91 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L777 | 1990 | L69 and L70 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L778 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L779 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L780 | 935 | L72 and L93 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L781 | 494 | L96 and L94 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L782 | 937 | L70 and L95 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L783 | 26 | L97 and L98 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L784 | 34 | L70 and L95 and L69 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L785 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L786 | 20394 | L101 and L70 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L787 | 435 | L102 and L95 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L788 | 5138 | L81 L82 L83 L84 L86 L87 L92 L99 L100 L103 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L789 | 75 | ("2004/0262008").URPN. | (USPAT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L790 | 16 | ("20040262008" \| "20050035875" \| "4701756" \| "5959547" \| "6229453" \| "6816082").PN. OR ("7148812").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L791 | 1 | ("5959547").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L792 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L793 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 10:21 AM |
| L794 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L795 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L796 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L797 | 41358 | L108 L109 L110 L111 L112 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L798 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L799 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L800 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L801 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L802 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L803 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L804 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L805 | 0 | L120 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L806 | 7 | L120 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L807 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L808 | 4138 | L123 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L809 | 1461 | L124 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L810 | 368 | L125 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L811 | 0 | L126 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L812 | 1990 | L113 and L114 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L813 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L814 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L815 | 935 | L115 and L128 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L816 | 494 | L131 and L129 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L817 | 937 | L114 and L130 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L818 | 26 | L132 and L133 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L819 | 34 | L114 and L130 and L113 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L820 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L821 | 20394 | L136 and L114 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L822 | 435 | L137 and L130 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L823 | 5138 | L116 L117 L118 L119 L121 L122 L127 L134 L135 L138 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L824 | 5138 | L139 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L825 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L826 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L827 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L828 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L829 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L830 | 41358 | L144 L145 L146 L147 L148 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L831 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L832 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L833 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L834 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L835 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L836 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L837 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L838 | 0 | L156 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L839 | 7 | L156 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L840 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L841 | 4138 | L159 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L842 | 1461 | L160 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L843 | 368 | L161 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L844 | 0 | L162 and ("700"/$.ccls. | (US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | "702"/$.ccls.) | EPO) | | | | 10:21 AM |
| L845 | 1990 | L149 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L846 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L847 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L848 | 935 | L151 and L164 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L849 | 494 | L167 and L165 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L850 | 937 | L150 and L166 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L851 | 26 | L168 and L169 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L852 | 34 | L150 and L166 and L149 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L853 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L854 | 20394 | L172 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L855 | 435 | L173 and L166 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L856 | 5138 | L152 L153 L154 L155 L157 L158 L163 L170 L171 L174 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L857 | 5138 | L175 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L858 | 5138 | L176 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L859 | 6439 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L860 | 1829 | L178 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L861 | 1197 | L179 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L862 | 46 | L180 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L863 | 59 | L178 and L166 and L165 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L864 | 5219 | L182 L183 L177 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L865 | 59 | ("4007450" \| "4888726" \| "5560005" \| "5724575" | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | \| "5828851" \| "5838563" \| "5845230" \| "5956483" \| "6000045" \| "6131120" \| "6263487" \| "6701437" \| "6799077").PN. OR ("7289994").URPN. | | | | | |
| L866 | 1 | ("20090055029").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L867 | 46 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L868 | 2 | L187 and pid | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L869 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L870 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L871 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L872 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L873 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L874 | 41358 | L189 L190 L191 L192 L193 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L875 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L876 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L877 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L878 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L879 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L880 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L881 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L882 | 0 | L201 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L883 | 7 | L201 and (oil near2 | (US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | water) | EPO) | | | | 10:21 AM |
| L884 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L885 | 4138 | L204 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L886 | 1461 | L205 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L887 | 368 | L206 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L888 | 0 | L207 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L889 | 1990 | L194 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L890 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L891 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L892 | 935 | L196 and L209 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L893 | 494 | L212 and L210 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L894 | 937 | L195 and L211 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L895 | 26 | L213 and L214 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L896 | 34 | L195 and L211 and L194 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L897 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L898 | 20394 | L217 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L899 | 435 | L218 and L211 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L900 | 5138 | L197 L198 L199 L200 L202 L203 L208 L215 L216 L219 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L901 | 5138 | L220 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L902 | 5138 | L221 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L903 | 6439 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L904 | 1829 | L223 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L905 | 1197 | L224 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L906 | 46 | L225 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L907 | 59 | L223 and L211 and L210 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L908 | 5219 | L226 L227 L222 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L909 | 5219 | L228 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L910 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L911 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L912 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L913 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L914 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L915 | 41358 | L230 L231 L232 L233 L234 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L916 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L917 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L918 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L919 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L920 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L921 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L922 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L923 | 0 | L242 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L924 | 7 | L242 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L925 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L926 | 4138 | L245 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L927 | 1461 | L246 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L928 | 368 | L247 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L929 | 0 | L248 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L930 | 1990 | L235 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L931 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L932 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L933 | 935 | L237 and L250 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L934 | 494 | L253 and L251 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L935 | 937 | L236 and L252 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L936 | 26 | L254 and L255 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L937 | 34 | L236 and L252 and L235 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L938 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L939 | 20394 | L258 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L940 | 435 | L259 and L252 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L941 | 5138 | L238 L239 L240 L241 L243 L244 L249 L256 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | L257 L260 | | | | | |
| L942 | 5138 | L261 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L943 | 5138 | L262 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L944 | 6439 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L945 | 1829 | L264 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L946 | 1197 | L265 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L947 | 46 | L266 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L948 | 59 | L264 and L252 and L251 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L949 | 5219 | L267 L268 L263 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L950 | 5219 | L269 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L951 | 5288 | L270 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L952 | 6171 | 700/1,282,275,281,42.c cls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L953 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L954 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L955 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L956 | 553 | 340/853.3,853.2,856.3. ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L957 | 41358 | L276 L277 L278 L279 L280 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L958 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L959 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L960 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L961 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L962 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L963 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L964 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L965 | 0 | L288 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L966 | 7 | L288 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L967 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L968 | 4138 | L291 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L969 | 1461 | L292 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L970 | 368 | L293 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L971 | 0 | L294 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L972 | 1990 | L281 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L973 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L974 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L975 | 935 | L283 and L296 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L976 | 494 | L299 and L297 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L977 | 937 | L282 and L298 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L978 | 26 | L300 and L301 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L979 | 34 | L282 and L298 and L281 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L980 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L981 | 20394 | L304 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L982 | 435 | L305 and L298 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L983 | 5138 | L284 L285 L286 L287 L289 L290 L295 L302 L303 L306 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L984 | 5138 | L307 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L985 | 5138 | L308 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L986 | 6439 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L987 | 1829 | L310 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L988 | 1197 | L311 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L989 | 46 | L312 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L990 | 59 | L310 and L298 and L297 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L991 | 5219 | L313 L314 L309 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L992 | 5219 | L315 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L993 | 5288 | L316 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L994 | 5288 | L317 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L995 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L996 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L997 | 3 | L320 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L998 | 2 | ("20020018399").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L999 | 17 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1000 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1001 | 29 | L324 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1002 | 12 | L325 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1003 | 2 | ("7096092").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | OFF | OFF | 2021/02/18 10:21 AM |
| L1004 | 1 | ("6967589").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1005 | 163 | ("5438329" \| "5717718" \| "5963650" \| "6062095" \| "6169488" \| "6305471" \| "6356205" \| "6369715" \| "6574652" \| "6693553" \| "6795319").PN. OR ("6967589").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1006 | 110 | L329 and (cell cellular | (US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | wireless) | FPRS; EPO) | | | | 10:21 AM |
| L1007 | 80 | L330 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1008 | 2 | ("20090055029").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1009 | 2 | ("20100033318").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1010 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (WO-2008124765-$).did. | | | | | |
| L1011 | 20 | L334 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1012 | 13 | L335 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1013 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | (US-PGPUB; USPAT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1014 | 24 | L337 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1015 | 17 | L337 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1016 | 13 | L338 and L339 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1017 | 2546 | (web html) near4 (control controlling) near4 (actuator controller valve) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1018 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1019 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1020 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1021 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1022 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1023 | 41358 | L342 L343 L344 L345 L346 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1024 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1025 | 199025 | L348 L347 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1026 | 141 | L341 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1027 | 185 | L349 and L341 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1028 | 413 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1029 | 28 | L349 and L352 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1030 | 18 | L352 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1031 | 41 | L353 L354 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1032 | 2 | ("20020018399").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1033 | 2 | ("5805926").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1034 | 2 | ("20030052180").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1035 | 1 | ("6967589").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1036 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1037 | 2 | L360 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1038 | 2 | L360 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1039 | 8 | L360 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1040 | 6 | L360 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1041 | 2 | L360 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1042 | 1 | ("20020156837").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1043 | 1 | ("6799195").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | OFF | OFF | 2021/02/18 10:21 AM |
| L1044 | 2 | ("20110051645").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1045 | 3 | ("5546301").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1046 | 141 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1047 | 24 | L370 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1048 | 54754 | (thread near4 (actuator sensor gui synchronize data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1049 | 10589 | (thread near4 (actuator sensor gui synchronize data)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1050 | 7966 | (thread near4 (actuator sensor gui synchronize data)).clm. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1051 | 54754 | L372 L373 L374 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1052 | 16487 | L373 L374 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1053 | 609 | L375 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1054 | 154 | L376 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1055 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1056 | 159 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1057 | 10 | L380 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1058 | 12 | ("6249241"\|"5819271"\|"6810386"\|"5805082"\|"5875305"\|"6208938").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1059 | 2 | ("6665568").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1060 | 13 | ("5973696" \| "5982362" \| "6138150" \| "6170007" \| "6201996" \| "6311101").PN. OR ("6665568").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1061 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1062 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1063 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1064 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1065 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1066 | 41358 | L385 L386 L387 L388 L389 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1067 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1068 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1069 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1070 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1071 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1072 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1073 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L1074 | 0 | L397 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1075 | 7 | L397 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1076 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1077 | 4138 | L400 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1078 | 1461 | L401 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1079 | 368 | L402 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1080 | 0 | L403 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1081 | 1990 | L390 and L391 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1082 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1083 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1084 | 935 | L392 and L405 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1085 | 494 | L408 and L406 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1086 | 937 | L391 and L407 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1087 | 26 | L409 and L410 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1088 | 34 | L391 and L407 and L390 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1089 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1090 | 20394 | L413 and L391 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1091 | 435 | L414 and L407 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1092 | 5138 | L393 L394 L395 L396 L398 L399 L404 L411 L412 L415 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1093 | 6439 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 23472.cpc. | | | | | |
| L1094 | 59 | L417 and L407 and L406 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1095 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1096 | 3 | L419 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1097 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1098 | 29 | L421 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1099 | 12 | L422 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1100 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1101 | 20 | L424 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1102 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or | (US-PGPUB; USPAT) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1103 | 24 | L426 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1104 | 17 | L426 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1105 | 13 | L427 and L428 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1106 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1107 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1108 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1109 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1110 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1111 | 41358 | L430 L431 L432 L433 L434 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1112 | 159675 | (G05D7/0676 or | (US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | FPRS; EPO) | | | | 10:21 AM |
| L1113 | 199025 | L436 L435 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1114 | 413 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1115 | 28 | L437 and L438 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1116 | 18 | L438 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1117 | 41 | L439 L440 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1118 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1119 | 2 | L442 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1120 | 8 | L442 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1121 | 6 | L442 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1122 | 2 | L442 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1123 | 141 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1124 | 24 | L447 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1125 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1126 | 159 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1127 | 10 | L450 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1128 | 5371 | L416 L449 L451 L448 L443 L444 L445 L446 L441 L440 L439 L429 L428 L427 L425 L420 L422 L423 L418 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1129 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1130 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1131 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1132 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1133 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1134 | 41358 | L453 L454 L455 L456 L457 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1135 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1136 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1137 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1138 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1139 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1140 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1141 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1142 | 0 | L465 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1143 | 7 | L465 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1144 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1145 | 4138 | L468 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1146 | 1461 | L469 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1147 | 368 | L470 and (oil near2 | (US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | level) | EPO) | | | | 10:21 AM |
| L1148 | 0 | L471 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1149 | 1990 | L458 and L459 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1150 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1151 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1152 | 935 | L460 and L473 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1153 | 494 | L476 and L474 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1154 | 937 | L459 and L475 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1155 | 26 | L477 and L478 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1156 | 34 | L459 and L475 and L458 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1157 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1158 | 20394 | L481 and L459 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1159 | 435 | L482 and L475 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1160 | 5138 | L461 L462 L463 L464 L466 L467 L472 L479 L480 L483 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1161 | 6439 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1162 | 59 | L485 and L475 and L474 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1163 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1164 | 3 | L487 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1165 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | $ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1166 | 29 | L489 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1167 | 12 | L490 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1168 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1169 | 20 | L492 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1170 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US- | (US-PGPUB; USPAT) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1171 | 24 | L494 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1172 | 17 | L494 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1173 | 13 | L495 and L496 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1174 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1175 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1176 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1177 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1178 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1179 | 41358 | L498 L499 L500 L501 L502 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1180 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1181 | 199025 | L504 L503 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1182 | 413 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1183 | 28 | L505 and L506 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1184 | 18 | L506 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1185 | 41 | L507 L508 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1186 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (WO-2008124765-$).did. | | | | | |
| L1187 | 2 | L510 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1188 | 8 | L510 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1189 | 6 | L510 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1190 | 2 | L510 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1191 | 141 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1192 | 24 | L515 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1193 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1194 | 159 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1195 | 10 | L518 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1196 | 5371 | L484 L517 L519 L516 L511 L512 L513 L514 L509 L508 L507 L497 L496 L495 L493 L488 L490 L491 L486 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1197 | 5371 | L520 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1198 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1199 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1200 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1201 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1202 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1203 | 41358 | L526 L527 L528 L529 L530 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1204 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1205 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1206 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1207 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1208 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1209 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1210 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1211 | 0 | L538 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1212 | 7 | L538 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1213 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1214 | 4138 | L541 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1215 | 1461 | L542 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1216 | 368 | L543 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1217 | 0 | L544 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1218 | 1990 | L531 and L532 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1219 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1220 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1221 | 935 | L533 and L546 | (US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 10:21 AM |
| L1222 | 494 | L549 and L547 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1223 | 937 | L532 and L548 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1224 | 26 | L550 and L551 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1225 | 34 | L532 and L548 and L531 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1226 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1227 | 20394 | L554 and L532 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1228 | 435 | L555 and L548 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1229 | 5138 | L534 L535 L536 L537 L539 L540 L545 L552 L553 L556 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1230 | 6439 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1231 | 59 | L558 and L548 and L547 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1232 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1233 | 3 | L560 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1234 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1235 | 29 | L562 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1236 | 12 | L563 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1237 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1238 | 20 | L565 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1239 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US- | (US-PGPUB; USPAT) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1240 | 24 | L567 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1241 | 17 | L567 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1242 | 13 | L568 and L569 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1243 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1244 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1245 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1246 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1247 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1248 | 41358 | L571 L572 L573 L574 L575 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1249 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1250 | 199025 | L577 L576 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1251 | 413 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1252 | 28 | L578 and L579 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1253 | 18 | L579 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1254 | 41 | L580 L581 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1255 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1256 | 2 | L583 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1257 | 8 | L583 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1258 | 6 | L583 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1259 | 2 | L583 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1260 | 141 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1261 | 24 | L588 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1262 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1263 | 159 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1264 | 10 | L591 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1265 | 5371 | L557 L590 L592 L589 L584 L585 L586 L587 L582 L581 L580 L570 L569 L568 L566 L561 L563 L564 L559 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1266 | 5430 | L593 | (US-PGPUB; USPAT; FPRS; EPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1267 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1268 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1269 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1270 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1271 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1272 | 41358 | L595 L596 L597 L598 L599 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1273 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1274 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1275 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1276 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1277 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1278 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1279 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L1280 | 0 | L607 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1281 | 7 | L607 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1282 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1283 | 4138 | L610 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1284 | 1461 | L611 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1285 | 368 | L612 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1286 | 0 | L613 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1287 | 1990 | L600 and L601 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1288 | 4091205 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1289 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1290 | 935 | L602 and L615 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1291 | 494 | L618 and L616 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1292 | 937 | L601 and L617 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1293 | 26 | L619 and L620 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1294 | 34 | L601 and L617 and L600 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1295 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1296 | 20394 | L623 and L601 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1297 | 435 | L624 and L617 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1298 | 5138 | L603 L604 L605 L606 L608 L609 L614 L621 L622 L625 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1299 | 6439 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1300 | 59 | L627 and L617 and L616 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1301 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1302 | 3 | L629 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1303 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1304 | 29 | L631 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1305 | 12 | L632 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1306 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1307 | 20 | L634 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1308 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or | (US-PGPUB; USPAT) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1309 | 24 | L636 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1310 | 17 | L636 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1311 | 13 | L637 and L638 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1312 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1313 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1314 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 10:21 AM |
| L1315 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1316 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1317 | 41358 | L640 L641 L642 L643 L644 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1318 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1319 | 199025 | L646 L645 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1320 | 413 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1321 | 28 | L647 and L648 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1322 | 18 | L648 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1323 | 41 | L649 L650 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1324 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1325 | 2 | L652 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1326 | 8 | L652 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1327 | 6 | L652 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1328 | 2 | L652 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1329 | 141 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1330 | 24 | L657 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1331 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1332 | 159 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1333 | 10 | L660 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1334 | 5371 | L626 L659 L661 L658 L653 L654 L655 L656 L651 L650 L649 L639 L638 L637 L635 L630 L632 L633 L628 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1335 | 5430 | L662 | (US-PGPUB; USPAT; FPRS; EPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1336 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1337 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1338 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1339 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1340 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1341 | 41358 | L664 L665 L666 L667 L668 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1342 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1343 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1344 | 70 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1345 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1346 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1347 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1348 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1349 | 0 | L676 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1350 | 7 | L676 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1351 | 8179 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1352 | 4138 | L679 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1353 | 1461 | L680 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1354 | 368 | L681 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1355 | 0 | L682 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1356 | 1990 | L669 and L670 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/02/18 10:21 AM |
| L1357 | 59 | ((US-7967066-B2 OR US-4052703-A OR US-5149443-A OR US-6967589-B1 OR US-6665568-B1 OR US-5941305-A OR US-6435022-B1 OR US-4823749-A OR US-8208478-B2 OR US-7347271-B2 OR US-5959547-A OR US-6192980-B1 OR US-7096092-B1 OR US-6356205-B1 OR US-5805926-A OR US-5546301-A OR US-7148812-B2 OR US-7958938-B2 OR US-7845404-B2 OR US-6913083-B2 OR US-5732776-A OR US-8179279-B2 OR US-8386059-B2 OR US-8131510-B2 OR US-7289994-B2 OR US-8373418-B2 OR US-8312320-B2 OR US-8290737-B2 OR US-7931090-B2 OR US-7921916-B2 OR US-6061603-A).did. AND USPT.dbnm.) OR ((US-20020161685-A1 OR US-20020018399-A1 OR US-20030052180-A1 OR US-20020156837-A1 OR US-20110051645-A1 OR US-20050084988- | (USPAT; US-PGPUB; FPRS; USOCR; IBM_TDB; EPO; JPO; DERWENT; FIT (AU, AP, AT, CA, CH, CN, DD, DE, EA, EP, ES, FR, GB, JP, KR, OA, RU, SU, WO)) | OR | ON | ON | 2021/07/06 03:39 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | A1 OR US-20050096846-A1 OR US-20110231024-A1 OR US-20120310582-A1 OR US-20010032518-A1 OR US-20090055029-A1 OR US-20100033318-A1 OR US-20080077512-A1 OR US-20090149969-A1 OR US-20120316658-A1 OR US-20040231851-A1 OR US-20040262008-A1 OR US-20020112860-A1 OR US-20100147510-A1 OR US-20080208475-A1 OR US-20060271299-A1 OR US-20060240818-A1 OR US-20050092523-A1 OR US-20040088115-A1 OR US-20030182463-A1 OR US-20020169645-A1 OR US-20140163749-A1).did. AND PGPB.dbnm.) OR ((WO-2008124765-A1).did. AND EPAB.dbnm.) | | | | | |
| L1358 | 59 | ((US-7967066-B2 OR US-4052703-A OR US-5149443-A OR US-6967589-B1 OR US-6665568-B1 OR US-5941305-A OR US-6435022-B1 OR US-4823749-A OR US-8208478-B2 OR US-7347271-B2 OR US-5959547-A OR US-6192980-B1 OR US-7096092-B1 OR US-6356205-B1 OR US-5805926-A OR US-5546301-A OR US-7148812-B2 OR US-7958938-B2 OR US-7845404-B2 OR US-6913083-B2 OR US-5732776-A OR US-8179279-B2 OR US-8386059-B2 OR US-8131510-B2 OR US-7289994-B2 OR US- | (USPAT; US-PGPUB; FPRS; USOCR; IBM_TDB; EPO; JPO; DERWENT; FIT (AU, AP, AT, CA, CH, CN, DD, DE, EA, EP, ES, FR, GB, JP, KR, OA, RU, SU, WO)) | OR | ON | ON | 2021/07/14 11:09 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8373418-B2 OR US-8312320-B2 OR US-8290737-B2 OR US-7931090-B2 OR US-7921916-B2 OR US-6061603-A).did. AND USPT.dbnm.) OR ((US-20020161685-A1 OR US-20020018399-A1 OR US-20030052180-A1 OR US-20020156837-A1 OR US-20110051645-A1 OR US-20050084988-A1 OR US-20050096846-A1 OR US-20110231024-A1 OR US-20120310582-A1 OR US-20010032518-A1 OR US-20090055029-A1 OR US-20100033318-A1 OR US-20080077512-A1 OR US-20090149969-A1 OR US-20120316658-A1 OR US-20040231851-A1 OR US-20040262008-A1 OR US-20020112860-A1 OR US-20100147510-A1 OR US-20080208475-A1 OR US-20060271299-A1 OR US-20060240818-A1 OR US-20050092523-A1 OR US-20040088115-A1 OR US-20030182463-A1 OR US-20020169645-A1 OR US-20140163749-A1).did. AND PGPB.dbnm.) OR ((WO-2008124765-A1).did. AND EPAB.dbnm.) | | | | | |
| L1359 | 5 | 1358 AND (network adj4 address) | (US-PGPUB; USPAT; USOCR; FIT (CN, FR, WO); FPRS; EPO; JPO; IBM_TDB) | OR | ON | ON | 2021/07/14 11:34 AM |
| L1360 | 11 | ("20020161685"\|"20020169645"\|"20030004624"\|"20030182463"\|"20040088115"\|"20040231851"\|"20050108504"\|"20060240818"\|"200802084 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 75"\|"20100295673"\|"20120316658").PN. | | | | | |
| L1361 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1362 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1363 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1364 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1365 | 1 | ("20060149476").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1366 | 1 | ("20060271299").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1367 | 1 | ("20030065447").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1368 | 1 | ("4594665").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1369 | 1 | ("20050092523").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1370 | 1 | ("20060047527").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1371 | 5146 | L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1372 | 17 | (US-20090260829-$ or US-20020112860-$ or US-20040262008-$ or US-20070107903-$ or US-20040251030-$).did. or (US-7000693-$ or US-6420976-$ or US-7967066-$ or US-RE41173-$ or US-7148812-$ or US-6768700-$ or US-7845404-$ or US-6913083-$ or US-4636934-$ or US-5732776-$ or US-4052703-$ or US-7958938-$ or US-4755943-$).did. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1373 | 1 | ("7261162").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1374 | 164 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | | | | | |
| L1375 | 1 | ("20040262008").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1376 | 1 | ("7148812").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1377 | 1 | ("7958938").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1378 | 1 | ("7967066").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1379 | 1 | ("7845404").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1380 | 1 | ("6913083").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1381 | 1 | ("20020112860").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1382 | 1 | ("5732776").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1383 | 1 | ("4052703").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1384 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | $).did. | | | | | |
| L1385 | 0 | L25 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1386 | 7 | L25 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1387 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1388 | 4261 | L28 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1389 | 1502 | L29 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1390 | 370 | L30 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1391 | 0 | L31 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1392 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1393 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1394 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1395 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1396 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1397 | 41358 | L33 L34 L35 L36 L37 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1398 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1399 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1400 | 1990 | L38 and L39 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1401 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1402 | 913 | L41 and (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1403 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1404 | 935 | L40 and L41 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1405 | 494 | L45 and L42 | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 01:52 PM |
| L1406 | 986 | L39 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1407 | 26 | L46 and L47 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1408 | 34 | ("2010/0147510").URPN. | (USPAT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1409 | 164 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1410 | 17 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1411 | 34 | L39 and L44 and L38 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1412 | 986 | L39 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1413 | 766 | L53 and (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1414 | 576 | (local autonomous independent) and L45 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1415 | 550 | L55 not L54 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1416 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1417 | 21028 | L57 and L39 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1418 | 466 | L58 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1419 | 44 | ("20030004624"\|"20040088115"\|"20100147510"\|"5732776"\|"7931090"\|"7967066"\|"8312320"\|"20130144531"\|"8301386"\|"20050108504"\|"20100295673"\|"20110231024"\|"6061603"\|"8386059"\|"20100098507"\|"20030182463"\|"4052703"\|"6192980"\|"7958938"\|"8373418"\|"20130024026"\|"20040231851"\|"20060240818"\|"7148812"\|"7289994"\|"20120316658"\|"20040262008"\|"7921916"\|"8131510"\|"8290737"\|"20100326654"\|"20020161685"\|"20090149969"\|"7845404"\|"8179279"\|"20020112860"\|"20050096846"\|"5149443"\|"6801135"\|"6913083"\|"20130008645"\|"20020169645"\|"20080208475"\|"7591308").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1420 | 37 | (US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020161685-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$).did. or (WO-2008124765-$).did. | | | | | |
| L1421 | 0 | L61 and oscillate | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1422 | 1 | L61 and (stuck adj3 valve) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1423 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1424 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1425 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1426 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1427 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1428 | 41358 | L64 L65 L66 L67 L68 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1429 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1430 | 402 | L69 and L70 and "240" | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1431 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1432 | 935 | L69 and L70 and L72 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1433 | 18 | L73 and (inoperative in-operative stuck) adj3 (valve part) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1434 | 428 | L70 and (stuck) adj3 (valve) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1435 | 428 | L70 and ((stuck) adj3 (valve)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1436 | 465 | L70 and ((frozen froze stuck) adj3 (valve)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1437 | 19 | ((move jerk oscillate move) near2 ((frozen froze stuck) adj3 (valve))) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1438 | 1 | ("4823749").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1439 | 1 | ("20010032518").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1440 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1441 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1442 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1443 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1444 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1445 | 0 | L85 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1446 | 7 | L85 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1447 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1448 | 4261 | L88 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1449 | 1502 | L89 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1450 | 370 | L90 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1451 | 0 | L91 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1452 | 1990 | L69 and L70 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1453 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1454 | 36145 | (local autonomous independent) near2 (controller control | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | device) near2 (operate operat$4 adjust drive move close) | | | | | |
| L1455 | 935 | L72 and L93 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1456 | 494 | L96 and L94 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1457 | 986 | L70 and L95 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1458 | 26 | L97 and L98 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1459 | 34 | L70 and L95 and L69 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1460 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1461 | 21028 | L101 and L70 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1462 | 466 | L102 and L95 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1463 | 5450 | L81 L82 L83 L84 L86 L87 L92 L99 L100 L103 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1464 | 75 | ("2004/0262008").URPN. | (USPAT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1465 | 16 | ("20040262008" \| "20050035875" \| "4701756" \| "5959547" \| "6229453" \| "6816082").PN. OR ("7148812").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1466 | 1 | ("5959547").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1467 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1468 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1469 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1470 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1471 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1472 | 41358 | L108 L109 L110 L111 L112 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1473 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1474 | 4085594 | (controller control device) near2 (operate | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | operat$4 adjust drive move close) | | | | | |
| L1475 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1476 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1477 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1478 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1479 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1480 | 0 | L120 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1481 | 7 | L120 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1482 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1483 | 4261 | L123 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1484 | 1502 | L124 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1485 | 370 | L125 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1486 | 0 | L126 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1487 | 1990 | L113 and L114 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1488 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1489 | 36145 | (local autonomous independent) near2 (controller control | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | device) near2 (operate operat$4 adjust drive move close) | | | | | |
| L1490 | 935 | L115 and L128 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1491 | 494 | L131 and L129 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1492 | 986 | L114 and L130 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1493 | 26 | L132 and L133 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1494 | 34 | L114 and L130 and L113 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1495 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1496 | 21028 | L136 and L114 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1497 | 466 | L137 and L130 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1498 | 5450 | L116 L117 L118 L119 L121 L122 L127 L134 L135 L138 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1499 | 5450 | L139 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1500 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1501 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1502 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1503 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1504 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1505 | 41358 | L144 L145 L146 L147 L148 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1506 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1507 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1508 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1509 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1510 | 13 | (AMPLISINE adj2 | (EPO; JPO; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | LABS).as. | DERWENT) | | | | 01:52 PM |
| L1511 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1512 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1513 | 0 | L156 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1514 | 7 | L156 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1515 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1516 | 4261 | L159 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1517 | 1502 | L160 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1518 | 370 | L161 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1519 | 0 | L162 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1520 | 1990 | L149 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1521 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1522 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1523 | 935 | L151 and L164 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1524 | 494 | L167 and L165 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1525 | 986 | L150 and L166 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1526 | 26 | L168 and L169 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1527 | 34 | L150 and L166 and L149 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1528 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1529 | 21028 | L172 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1530 | 466 | L173 and L166 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1531 | 5450 | L152 L153 L154 L155 L157 L158 L163 L170 L171 L174 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1532 | 5450 | L175 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1533 | 5450 | L176 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1534 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1535 | 1892 | L178 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1536 | 1240 | L179 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1537 | 47 | L180 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1538 | 63 | L178 and L166 and L165 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1539 | 5535 | L182 L183 L177 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1540 | 62 | ("4007450" \| "4888726" \| "5560005" \| "5724575" \| "5828851" \| "5838563" \| "5845230" \| "5956483" \| "6000045" \| "6131120" \| "6263487" \| "6701437" \| "6799077").PN. OR ("7289994").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1541 | 1 | ("20090055029").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1542 | 46 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1543 | 2 | L187 and pid | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1544 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1545 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1546 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1547 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1548 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1549 | 41358 | L189 L190 L191 L192 L193 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1550 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (well site disposal station) | | | | | |
| L1551 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1552 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1553 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1554 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1555 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1556 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1557 | 0 | L201 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1558 | 7 | L201 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1559 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1560 | 4261 | L204 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1561 | 1502 | L205 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1562 | 370 | L206 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1563 | 0 | L207 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1564 | 1990 | L194 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1565 | 4228799 | (internet network (web | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | adj2 server)) | EPO) | | | | 01:52 PM |
| L1566 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1567 | 935 | L196 and L209 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1568 | 494 | L212 and L210 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1569 | 986 | L195 and L211 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1570 | 26 | L213 and L214 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1571 | 34 | L195 and L211 and L194 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1572 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1573 | 21028 | L217 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1574 | 466 | L218 and L211 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1575 | 5450 | L197 L198 L199 L200 L202 L203 L208 L215 L216 L219 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1576 | 5450 | L220 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1577 | 5450 | L221 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1578 | 6684 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1579 | 1892 | L223 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1580 | 1240 | L224 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1581 | 47 | L225 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1582 | 63 | L223 and L211 and L210 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1583 | 5535 | L226 L227 L222 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1584 | 5535 | L228 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1585 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1586 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1587 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1588 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1589 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1590 | 41358 | L230 L231 L232 L233 L234 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1591 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1592 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1593 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1594 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1595 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1596 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1597 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1598 | 0 | L242 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1599 | 7 | L242 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1600 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1601 | 4261 | L245 and pump | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 01:52 PM |
| L1602 | 1502 | L246 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1603 | 370 | L247 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1604 | 0 | L248 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1605 | 1990 | L235 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1606 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1607 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1608 | 935 | L237 and L250 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1609 | 494 | L253 and L251 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1610 | 986 | L236 and L252 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1611 | 26 | L254 and L255 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1612 | 34 | L236 and L252 and L235 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1613 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1614 | 21028 | L258 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1615 | 466 | L259 and L252 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1616 | 5450 | L238 L239 L240 L241 L243 L244 L249 L256 L257 L260 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1617 | 5450 | L261 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1618 | 5450 | L262 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1619 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1620 | 1892 | L264 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1621 | 1240 | L265 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1622 | 47 | L266 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1623 | 63 | L264 and L252 and L251 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1624 | 5535 | L267 L268 L263 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1625 | 5535 | L269 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1626 | 5606 | L270 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1627 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1628 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1629 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1630 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1631 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1632 | 41358 | L276 L277 L278 L279 L280 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1633 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1634 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1635 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1636 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1637 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1638 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1639 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L1640 | 0 | L288 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1641 | 7 | L288 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1642 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1643 | 4261 | L291 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1644 | 1502 | L292 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1645 | 370 | L293 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1646 | 0 | L294 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1647 | 1990 | L281 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1648 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1649 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1650 | 935 | L283 and L296 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1651 | 494 | L299 and L297 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1652 | 986 | L282 and L298 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1653 | 26 | L300 and L301 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1654 | 34 | L282 and L298 and L281 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1655 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1656 | 21028 | L304 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1657 | 466 | L305 and L298 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1658 | 5450 | L284 L285 L286 L287 L289 L290 L295 L302 L303 L306 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1659 | 5450 | L307 | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 01:52 PM |
| L1660 | 5450 | L308 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1661 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1662 | 1892 | L310 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1663 | 1240 | L311 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1664 | 47 | L312 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1665 | 63 | L310 and L298 and L297 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1666 | 5535 | L313 L314 L309 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1667 | 5535 | L315 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1668 | 5606 | L316 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1669 | 5606 | L317 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1670 | 160297 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1671 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1672 | 3 | L320 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1673 | 2 | ("20020018399").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1674 | 17 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1675 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1676 | 29 | L324 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1677 | 12 | L325 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1678 | 2 | ("7096092").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | OFF | OFF | 2021/07/14 01:52 PM |
| L1679 | 1 | ("6967589").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1680 | 172 | ("5438329" \| "5717718" \| "5963650" \| "6062095" \| "6169488" \| "6305471" \| "6356205" \| "6369715" \| "6574652" \| "6693553" \| "6795319").PN. OR ("6967589").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1681 | 118 | L329 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1682 | 88 | L330 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1683 | 2 | ("20090055029").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1684 | 2 | ("20100033318").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1685 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1686 | 20 | L334 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1687 | 13 | L335 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1688 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or | (US-PGPUB; USPAT) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1689 | 24 | L337 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1690 | 17 | L337 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1691 | 13 | L338 and L339 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1692 | 2620 | (web html) near4 (control controlling) near4 (actuator controller valve) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1693 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1694 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1695 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1696 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1697 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1698 | 41358 | L342 L343 L344 L345 L346 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1699 | 160297 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1700 | 199646 | L348 L347 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1701 | 141 | L341 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1702 | 186 | L349 and L341 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1703 | 447 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1704 | 27 | L349 and L352 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1705 | 18 | L352 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1706 | 40 | L353 L354 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1707 | 2 | ("20020018399").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1708 | 2 | ("5805926").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1709 | 2 | ("20030052180").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1710 | 1 | ("6967589").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1711 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1712 | 2 | L360 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1713 | 2 | L360 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1714 | 8 | L360 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1715 | 6 | L360 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1716 | 2 | L360 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1717 | 1 | ("20020156837").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1718 | 2 | ("6799195").PN. | (US-PGPUB; USPAT; | OR | OFF | OFF | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | FPRS; EPO) | | | | 01:52 PM |
| L1719 | 2 | ("20110051645").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1720 | 3 | ("5546301").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1721 | 142 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1722 | 25 | L370 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1723 | 57216 | (thread near4 (actuator sensor gui synchronize data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1724 | 11540 | (thread near4 (actuator sensor gui synchronize data)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1725 | 8178 | (thread near4 (actuator sensor gui synchronize data)).clm. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1726 | 57216 | L372 L373 L374 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1727 | 17602 | L373 L374 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1728 | 609 | L375 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1729 | 154 | L376 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1730 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1731 | 161 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1732 | 10 | L380 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1733 | 13 | ("6249241"\|"5819271"\|"6810386"\|"5805082"\|"5875305"\|"6208938").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1734 | 2 | ("6665568").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1735 | 13 | ("5973696" \| "5982362" \| "6138150" \| "6170007" \| "6201996" \| "6311101").PN. OR ("6665568").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1736 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1737 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1738 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1739 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1740 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1741 | 41358 | L385 L386 L387 L388 L389 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1742 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1743 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1744 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1745 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1746 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1747 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1748 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1749 | 0 | L397 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1750 | 7 | L397 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1751 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1752 | 4261 | L400 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1753 | 1502 | L401 and (oil near2 | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | well) | EPO) | | | | 01:52 PM |
| L1754 | 370 | L402 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1755 | 0 | L403 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1756 | 1990 | L390 and L391 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1757 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1758 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1759 | 935 | L392 and L405 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1760 | 494 | L408 and L406 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1761 | 986 | L391 and L407 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1762 | 26 | L409 and L410 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1763 | 34 | L391 and L407 and L390 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1764 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1765 | 21028 | L413 and L391 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1766 | 466 | L414 and L407 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1767 | 5450 | L393 L394 L395 L396 L398 L399 L404 L411 L412 L415 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1768 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1769 | 63 | L417 and L407 and L406 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1770 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1771 | 3 | L419 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1772 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1773 | 29 | L421 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1774 | 12 | L422 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1775 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1776 | 20 | L424 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1777 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US- | (US-PGPUB; USPAT) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1778 | 24 | L426 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1779 | 17 | L426 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1780 | 13 | L427 and L428 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1781 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1782 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1783 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1784 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1785 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1786 | 41358 | L430 L431 L432 L433 L434 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1787 | 160297 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1788 | 199646 | L436 L435 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1789 | 447 | ((web html) near4 (control controlling) near4 (actuator | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | controller valve)).ab. | | | | | |
| L1790 | 27 | L437 and L438 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1791 | 18 | L438 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1792 | 40 | L439 L440 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1793 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1794 | 2 | L442 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1795 | 8 | L442 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1796 | 6 | L442 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1797 | 2 | L442 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1798 | 142 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1799 | 25 | L447 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1800 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1801 | 161 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1802 | 10 | L450 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1803 | 5690 | L416 L449 L451 L448 L443 L444 L445 L446 L441 L440 L439 L429 L428 L427 L425 L420 L422 L423 L418 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1804 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1805 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1806 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1807 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1808 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1809 | 41358 | L453 L454 L455 L456 L457 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1810 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1811 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1812 | 76 | ((AARON) near2 | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (PHILLIPS)).INV. | USOCR) | | | | 01:52 PM |
| L1813 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1814 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1815 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1816 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1817 | 0 | L465 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1818 | 7 | L465 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1819 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1820 | 4261 | L468 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1821 | 1502 | L469 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1822 | 370 | L470 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1823 | 0 | L471 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1824 | 1990 | L458 and L459 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1825 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1826 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1827 | 935 | L460 and L473 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1828 | 494 | L476 and L474 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1829 | 986 | L459 and L475 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1830 | 26 | L477 and L478 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1831 | 34 | L459 and L475 and L458 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1832 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1833 | 21028 | L481 and L459 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1834 | 466 | L482 and L475 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1835 | 5450 | L461 L462 L463 L464 L466 L467 L472 L479 L480 L483 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1836 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1837 | 63 | L485 and L475 and L474 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1838 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1839 | 3 | L487 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1840 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1841 | 29 | L489 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1842 | 12 | L490 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1843 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1844 | 20 | L492 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1845 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US- | (US-PGPUB; USPAT) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1846 | 24 | L494 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1847 | 17 | L494 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1848 | 13 | L495 and L496 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1849 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1850 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1851 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1852 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1853 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1854 | 41358 | L498 L499 L500 L501 L502 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1855 | 160297 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1856 | 199646 | L504 L503 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1857 | 447 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1858 | 27 | L505 and L506 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1859 | 18 | L506 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1860 | 40 | L507 L508 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1861 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1862 | 2 | L510 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1863 | 8 | L510 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1864 | 6 | L510 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1865 | 2 | L510 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1866 | 142 | ("5247447" \| "5272642" \| "5353229").PN. OR | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | ("5546301").URPN. | | | | | |
| L1867 | 25 | L515 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1868 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1869 | 161 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1870 | 10 | L518 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1871 | 5690 | L484 L517 L519 L516 L511 L512 L513 L514 L509 L508 L507 L497 L496 L495 L493 L488 L490 L491 L486 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1872 | 5690 | L520 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1873 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1874 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1875 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1876 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1877 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1878 | 41358 | L526 L527 L528 L529 L530 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1879 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1880 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1881 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1882 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1883 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1884 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1885 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L1886 | 0 | L538 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1887 | 7 | L538 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1888 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1889 | 4261 | L541 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1890 | 1502 | L542 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1891 | 370 | L543 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1892 | 0 | L544 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1893 | 1990 | L531 and L532 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1894 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1895 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1896 | 935 | L533 and L546 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1897 | 494 | L549 and L547 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1898 | 986 | L532 and L548 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1899 | 26 | L550 and L551 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1900 | 34 | L532 and L548 and L531 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1901 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1902 | 21028 | L554 and L532 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1903 | 466 | L555 and L548 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1904 | 5450 | L534 L535 L536 L537 L539 L540 L545 L552 L553 L556 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1905 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1906 | 63 | L558 and L548 and L547 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1907 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1908 | 3 | L560 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1909 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1910 | 29 | L562 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1911 | 12 | L563 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1912 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1913 | 20 | L565 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1914 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or | (US-PGPUB; USPAT) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1915 | 24 | L567 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1916 | 17 | L567 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1917 | 13 | L568 and L569 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1918 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1919 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1920 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 01:52 PM |
| L1921 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1922 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1923 | 41358 | L571 L572 L573 L574 L575 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1924 | 160297 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1925 | 199646 | L577 L576 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1926 | 447 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1927 | 27 | L578 and L579 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1928 | 18 | L579 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1929 | 40 | L580 L581 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1930 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1931 | 2 | L583 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1932 | 8 | L583 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1933 | 6 | L583 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1934 | 2 | L583 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1935 | 142 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1936 | 25 | L588 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1937 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1938 | 161 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1939 | 10 | L591 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1940 | 5690 | L557 L590 L592 L589 L584 L585 L586 L587 L582 L581 L580 L570 L569 L568 L566 L561 L563 L564 L559 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1941 | 5750 | L593 | (US-PGPUB; USPAT; FPRS; EPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1942 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1943 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1944 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1945 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1946 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1947 | 41358 | L595 L596 L597 L598 L599 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1948 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1949 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1950 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1951 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1952 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1953 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1954 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1955 | 0 | L607 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1956 | 7 | L607 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1957 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1958 | 4261 | L610 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1959 | 1502 | L611 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1960 | 370 | L612 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1961 | 0 | L613 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1962 | 1990 | L600 and L601 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1963 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1964 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1965 | 935 | L602 and L615 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1966 | 494 | L618 and L616 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1967 | 986 | L601 and L617 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1968 | 26 | L619 and L620 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1969 | 34 | L601 and L617 and L600 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1970 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1971 | 21028 | L623 and L601 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1972 | 466 | L624 and L617 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1973 | 5450 | L603 L604 L605 L606 L608 L609 L614 L621 L622 L625 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1974 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1975 | 63 | L627 and L617 and L616 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1976 | 46 | (US-20040262008-$ or | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | EPO) | | | | 01:52 PM |
| L1977 | 3 | L629 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1978 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1979 | 29 | L631 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1980 | 12 | L632 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1981 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1982 | 20 | L634 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1983 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or | (US-PGPUB; USPAT) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1984 | 24 | L636 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1985 | 17 | L636 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1986 | 13 | L637 and L638 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1987 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1988 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1989 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1990 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1991 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1992 | 41358 | L640 L641 L642 L643 L644 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1993 | 160297 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | | | | | |
| L1994 | 199646 | L646 L645 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1995 | 447 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1996 | 27 | L647 and L648 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1997 | 18 | L648 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1998 | 40 | L649 L650 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L1999 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L2000 | 2 | L652 and (leak adj4 sensor) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2001 | 8 | L652 and (private) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2002 | 6 | L652 and (carrier) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2003 | 2 | L652 and (validity) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2004 | 142 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2005 | 25 | L657 and thread | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2006 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2007 | 161 | (thread near4 (actuator and sensor)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2008 | 10 | L660 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2009 | 5690 | L626 L659 L661 L658 L653 L654 L655 L656 L651 L650 L649 L639 L638 L637 L635 L630 L632 L633 L628 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2010 | 5750 | L662 | (US-PGPUB; USPAT; FPRS; EPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2011 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2012 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2013 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2014 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2015 | 553 | 340/853.3,853.2,856.3. | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | ccls. | EPO) | | | | 01:52 PM |
| L2016 | 41358 | L664 L665 L666 L667 L668 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2017 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2018 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2019 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2020 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2021 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2022 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2023 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2024 | 0 | L676 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2025 | 7 | L676 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2026 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2027 | 4261 | L679 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2028 | 1502 | L680 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2029 | 370 | L681 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L2030 | 0 | L682 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2031 | 1990 | L669 and L670 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2032 | 11 | ("20020161685"\|"20020169645"\|"20030004624"\|"20030182463"\|"20040088115"\|"20040231851"\|"20050108504"\|"20060240818"\|"20080208475"\|"20100295673"\|"20120316658").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2033 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2034 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2035 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2036 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2037 | 1 | ("20060149476").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2038 | 1 | ("20060271299").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2039 | 1 | ("20030065447").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2040 | 1 | ("4594665").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2041 | 1 | ("20050092523").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2042 | 1 | ("20060047527").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2043 | 5146 | L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2044 | 17 | (US-20090260829-$ or US-20020112860-$ or US-20040262008-$ or US-20070107903-$ or US-20040251030-$).did. or (US-7000693-$ or US-6420976-$ or US-7967066-$ or US-RE41173-$ or US-7148812-$ or US-6768700-$ or US-7845404-$ or US-6913083-$ or US-4636934-$ or US-5732776-$ or US-4052703-$ or US-7958938-$ or US-4755943-$).did. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L2045 | 1 | ("7261162").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2046 | 164 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2047 | 1 | ("20040262008").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2048 | 1 | ("7148812").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2049 | 1 | ("7958938").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2050 | 1 | ("7967066").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2051 | 1 | ("7845404").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2052 | 1 | ("6913083").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2053 | 1 | ("20020112860").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2054 | 1 | ("5732776").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2055 | 1 | ("4052703").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2056 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L2057 | 0 | L25 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2058 | 7 | L25 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2059 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2060 | 4261 | L28 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2061 | 1502 | L29 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2062 | 370 | L30 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2063 | 0 | L31 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2064 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2065 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2066 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2067 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2068 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2069 | 41358 | L33 L34 L35 L36 L37 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2070 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2071 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2072 | 1990 | L38 and L39 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2073 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2074 | 913 | L41 and (internet network (web adj2 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | server)) | | | | | |
| L2075 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2076 | 935 | L40 and L41 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2077 | 494 | L45 and L42 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2078 | 986 | L39 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2079 | 26 | L46 and L47 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2080 | 34 | ("2010/0147510").URPN. | (USPAT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2081 | 164 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2082 | 17 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2083 | 34 | L39 and L44 and L38 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2084 | 986 | L39 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2085 | 766 | L53 and (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2086 | 576 | (local autonomous | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | independent) and L45 | EPO) | | | | 01:52 PM |
| L2087 | 550 | L55 not L54 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2088 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2089 | 21028 | L57 and L39 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2090 | 466 | L58 and L44 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2091 | 44 | ("20030004624"\|"20040088115"\|"20100147510"\|"5732776"\|"7931090"\|"7967066"\|"8312320"\|"20130144531"\|"8301386"\|"20050108504"\|"20100295673"\|"20110231024"\|"6061603"\|"8386059"\|"20100098507"\|"20030182463"\|"4052703"\|"6192980"\|"7958938"\|"8373418"\|"20130024026"\|"20040231851"\|"20060240818"\|"7148812"\|"7289994"\|"20120316658"\|"20040262008"\|"7921916"\|"8131510"\|"8290737"\|"20100326654"\|"20020161685"\|"20090149969"\|"7845404"\|"8179279"\|"20020112860"\|"20050096846"\|"5149443"\|"6801135"\|"6913083"\|"20130008645"\|"20020169645"\|"20080208475"\|"7591308").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2092 | 37 | (US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020161685-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US- | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$).did. or (WO-2008124765-$).did. | | | | | |
| L2093 | 0 | L61 and oscillate | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2094 | 1 | L61 and (stuck adj3 valve) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2095 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2096 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2097 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2098 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2099 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2100 | 41358 | L64 L65 L66 L67 L68 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2101 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2102 | 402 | L69 and L70 and "240" | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2103 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2104 | 935 | L69 and L70 and L72 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2105 | 18 | L73 and (inoperative in-operative stuck) adj3 (valve part) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2106 | 428 | L70 and (stuck) adj3 (valve) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2107 | 428 | L70 and ((stuck) adj3 | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (valve)) | EPO) | | | | 01:52 PM |
| L2108 | 465 | L70 and ((frozen froze stuck) adj3 (valve)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2109 | 19 | ((move jerk oscillate move) near2 ((frozen froze stuck) adj3 (valve))) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2110 | 1 | ("4823749").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2111 | 1 | ("20010032518").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2112 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2113 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2114 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2115 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2116 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2117 | 0 | L85 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2118 | 7 | L85 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2119 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2120 | 4261 | L88 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2121 | 1502 | L89 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2122 | 370 | L90 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L2123 | 0 | L91 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2124 | 1990 | L69 and L70 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2125 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2126 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2127 | 935 | L72 and L93 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2128 | 494 | L96 and L94 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2129 | 986 | L70 and L95 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2130 | 26 | L97 and L98 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2131 | 34 | L70 and L95 and L69 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2132 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2133 | 21028 | L101 and L70 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2134 | 466 | L102 and L95 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2135 | 5450 | L81 L82 L83 L84 L86 L87 L92 L99 L100 L103 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2136 | 75 | ("2004/0262008").URPN. | (USPAT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2137 | 16 | ("20040262008" \| "20050035875" \| "4701756" \| "5959547" \| "6229453" \| "6816082").PN. OR ("7148812").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2138 | 1 | ("5959547").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2139 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2140 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2141 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2142 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2143 | 553 | 340/853.3,853.2,856.3. | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | ccls. | EPO) | | | | 01:52 PM |
| L2144 | 41358 | L108 L109 L110 L111 L112 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2145 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2146 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2147 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2148 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2149 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2150 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2151 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2152 | 0 | L120 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2153 | 7 | L120 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2154 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2155 | 4261 | L123 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2156 | 1502 | L124 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2157 | 370 | L125 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L2158 | 0 | L126 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2159 | 1990 | L113 and L114 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2160 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2161 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2162 | 935 | L115 and L128 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2163 | 494 | L131 and L129 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2164 | 986 | L114 and L130 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2165 | 26 | L132 and L133 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2166 | 34 | L114 and L130 and L113 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2167 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2168 | 21028 | L136 and L114 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2169 | 466 | L137 and L130 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2170 | 5450 | L116 L117 L118 L119 L121 L122 L127 L134 L135 L138 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2171 | 5450 | L139 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2172 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2173 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2174 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2175 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2176 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2177 | 41358 | L144 L145 L146 L147 L148 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2178 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L2179 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2180 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2181 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2182 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2183 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2184 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2185 | 0 | L156 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2186 | 7 | L156 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2187 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2188 | 4261 | L159 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2189 | 1502 | L160 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2190 | 370 | L161 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2191 | 0 | L162 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2192 | 1990 | L149 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2193 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2194 | 36145 | (local autonomous | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | EPO) | | | | 01:52 PM |
| L2195 | 935 | L151 and L164 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2196 | 494 | L167 and L165 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2197 | 986 | L150 and L166 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2198 | 26 | L168 and L169 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2199 | 34 | L150 and L166 and L149 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2200 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2201 | 21028 | L172 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2202 | 466 | L173 and L166 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2203 | 5450 | L152 L153 L154 L155 L157 L158 L163 L170 L171 L174 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2204 | 5450 | L175 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2205 | 5450 | L176 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2206 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2207 | 1892 | L178 and L150 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2208 | 1240 | L179 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2209 | 47 | L180 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2210 | 63 | L178 and L166 and L165 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2211 | 5535 | L182 L183 L177 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2212 | 62 | ("4007450" \| "4888726" \| "5560005" \| "5724575" \| "5828851" \| "5838563" \| "5845230" \| "5956483" \| "6000045" \| "6131120" \| "6263487" \| "6701437" \| "6799077").PN. OR ("7289994").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L2213 | 1 | ("20090055029").PN. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2214 | 46 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2215 | 2 | L187 and pid | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2216 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2217 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2218 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | EPO) | | | | 01:52 PM |
| L2219 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2220 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2221 | 41358 | L189 L190 L191 L192 L193 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2222 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2223 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2224 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2225 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2226 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2227 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2228 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2229 | 0 | L201 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2230 | 7 | L201 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2231 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2232 | 4261 | L204 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L2233 | 1502 | L205 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2234 | 370 | L206 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2235 | 0 | L207 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2236 | 1990 | L194 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2237 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2238 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2239 | 935 | L196 and L209 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2240 | 494 | L212 and L210 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2241 | 986 | L195 and L211 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2242 | 26 | L213 and L214 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2243 | 34 | L195 and L211 and L194 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2244 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2245 | 21028 | L217 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2246 | 466 | L218 and L211 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2247 | 5450 | L197 L198 L199 L200 L202 L203 L208 L215 L216 L219 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2248 | 5450 | L220 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2249 | 5450 | L221 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2250 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2251 | 1892 | L223 and L195 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2252 | 1240 | L224 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2253 | 47 | L225 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2254 | 63 | L223 and L211 and | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | L210 | EPO) | | | | 01:52 PM |
| L2255 | 5535 | L226 L227 L222 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2256 | 5535 | L228 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2257 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2258 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2259 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2260 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2261 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2262 | 41358 | L230 L231 L232 L233 L234 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2263 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2264 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2265 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2266 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2267 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2268 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2269 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (WO-2008124765-$).did. | | | | | |
| L2270 | 0 | L242 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2271 | 7 | L242 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2272 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2273 | 4261 | L245 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2274 | 1502 | L246 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2275 | 370 | L247 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2276 | 0 | L248 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2277 | 1990 | L235 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2278 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2279 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2280 | 935 | L237 and L250 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2281 | 494 | L253 and L251 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2282 | 986 | L236 and L252 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2283 | 26 | L254 and L255 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2284 | 34 | L236 and L252 and L235 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2285 | 1178714 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2286 | 21028 | L258 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2287 | 466 | L259 and L252 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2288 | 5450 | L238 L239 L240 L241 L243 L244 L249 L256 L257 L260 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2289 | 5450 | L261 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2290 | 5450 | L262 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L2291 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2292 | 1892 | L264 and L236 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2293 | 1240 | L265 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2294 | 47 | L266 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2295 | 63 | L264 and L252 and L251 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2296 | 5535 | L267 L268 L263 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2297 | 5535 | L269 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2298 | 5606 | L270 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2299 | 6171 | 700/1,282,275,281,42.c cls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2300 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2301 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2302 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2303 | 553 | 340/853.3,853.2,856.3. ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2304 | 41358 | L276 L277 L278 L279 L280 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2305 | 277677 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2306 | 4085594 | (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2307 | 76 | ((AARON) near2 (PHILLIPS)).INV. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2308 | 3 | ((AARON) near2 (PHILLIPS)).INV. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2309 | 13 | (AMPLISINE adj2 LABS).as. | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2310 | 11 | real-time and onsite and internet and communication | (EPO; JPO; DERWENT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2311 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L2312 | 0 | L288 and (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2313 | 7 | L288 and (oil near2 water) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2314 | 8412 | (oil near2 water near2 separation) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2315 | 4261 | L291 and pump | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2316 | 1502 | L292 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2317 | 370 | L293 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2318 | 0 | L294 and ("700"/$.ccls. "702"/$.ccls.) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2319 | 1990 | L281 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2320 | 4228799 | (internet network (web adj2 server)) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2321 | 36145 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2322 | 935 | L283 and L296 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2323 | 494 | L299 and L297 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2324 | 986 | L282 and L298 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2325 | 26 | L300 and L301 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2326 | 34 | L282 and L298 and L281 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2327 | 1178714 | (remote internet network) near2 (control | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | monitor control$4 monitor$4 command) | | | | | |
| L2328 | 21028 | L304 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2329 | 466 | L305 and L298 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2330 | 5450 | L284 L285 L286 L287 L289 L290 L295 L302 L303 L306 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2331 | 5450 | L307 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2332 | 5450 | L308 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2333 | 6684 | G05D7/0676;G05B9/02; E21B47/00;G05B2219/ 23472.cpc. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2334 | 1892 | L310 and L282 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2335 | 1240 | L311 and (oil near2 well) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2336 | 47 | L312 and (oil near2 level) | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2337 | 63 | L310 and L298 and L297 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2338 | 5535 | L313 L314 L309 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2339 | 5535 | L315 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2340 | 5606 | L316 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2341 | 5606 | L317 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2342 | 160297 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2343 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L2344 | 3 | L320 and (network adj2 (address addresses)) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2345 | 2 | ("20020018399").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2346 | 17 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2347 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L2348 | 29 | L324 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2349 | 12 | L325 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2350 | 2 | ("7096092").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | OFF | OFF | 2021/07/14 01:52 PM |
| L2351 | 1 | ("6967589").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2352 | 172 | ("5438329" \| "5717718" \| "5963650" \| "6062095" \| "6169488" \| "6305471" \| "6356205" \| "6369715" \| "6574652" \| "6693553" \| "6795319").PN. OR ("6967589").URPN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2353 | 118 | L329 and (cell cellular wireless) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2354 | 88 | L330 and (web html) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2355 | 2 | ("20090055029").PN. | (US-PGPUB; USPAT; | OR | ON | ON | 2021/07/14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | FPRS; EPO) | | | | 01:52 PM |
| L2356 | 2 | ("20100033318").PN. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2357 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2358 | 20 | L334 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L2359 | 13 | L335 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2360 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | (US-PGPUB; USPAT) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2361 | 24 | L337 and (address addresses) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2362 | 17 | L337 and (cell cellular) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2363 | 13 | L338 and L339 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L2364 | 2620 | (web html) near4 (control controlling) near4 (actuator controller valve) | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2365 | 6171 | 700/1,282,275,281,42.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2366 | 7062 | 702/6,13,183,188.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2367 | 26701 | 709/224.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2368 | 1170 | 166/336,363,250.1.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2369 | 553 | 340/853.3,853.2,856.3.ccls. | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2370 | 41358 | L342 L343 L344 L345 L346 | (US-PGPUB; USPAT; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2371 | 160297 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2372 | 199646 | L348 L347 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2373 | 141 | L341 and 700/$.ccls. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2374 | 186 | L349 and L341 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2375 | 447 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |
| L2376 | 27 | L349 and L352 | (US-PGPUB; USPAT; FPRS; EPO) | OR | ON | ON | 2021/07/14 01:52 PM |

## PE2E SEARCH - Search History (Interference)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | British Equivalents | Time Stamp |
|---|---|---|---|---|---|---|---|
| N141 | 0 | (translating plurality commands translated commands encoded plurality protocols different from the first protocol each translated command being translated into a protocol among the plurality of protocols | (US-PGPUB; USPAT) | AND | ON | ON | 2013/10/25 01:15 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | suitable for a fluid handling device to which the respective command is directed the at least some of the translated command being operative to cause a local controller of the given fluid-handling device to drive the given fluid-handling device to the plurality of different target states the local controller being responsive to the translated commands and feedback from the given fluid handling device indicative of whether the given fluid handling device is in a targeted state).clm. | | | | | |
| N142 | 0 | (translating plurality commands translated commands encoded plurality protocols different from the first protocol each translated command being translated into a protocol among the plurality of protocols suitable for a fluid handling device to which the respective command is directed the at least some of the translated command being operative to cause a local controller of the given fluid-handling device).clm. | (US-PGPUB; USPAT) | AND | ON | ON | 2013/10/25 01:16 PM |
| N143 | 0 | (sending the translated commands to respective local controllers of the respective fluid handling devices to which the respective commands are directed).clm. | (US-PGPUB; USPAT) | AND | ON | ON | 2013/10/25 01:16 PM |
| N272 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state | (US-PGPUB; USPAT) | AND | ON | ON | 2015/09/21 08:51 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | of at least one of the fluid handling devices based on at least some of the plurality of instructions comprises after receiving the instructions determining a plurality of different target states of the at least one of the fluid handling devices, the plurality of different states each corresponding to different times after determining the plurality of different target states translating each received instructions into one or more translated instructions encoded in the selected respective protocol or protocols the one or more translated instructions including the determined plurality of different target states).clm. | | | | | |
| N273 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions comprises after receiving the instructions determining a plurality of different target states of the at least one of the fluid handling devices).clm. | (US-PGPUB; USPAT) | AND | ON | ON | 2015/09/21 08:51 AM |
| N274 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state).clm. | (US-PGPUB; USPAT) | AND | ON | ON | 2015/09/21 08:51 AM |
| N275 | 0 | (the plurality of different states each | (US-PGPUB; USPAT) | AND | ON | ON | 2015/09/21 08:51 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | corresponding to different times after determining the plurality of different target states translating each received instructions into one or more translated instructions encoded in the selected respective protocol or protocols the one or more translated instructions including the determined plurality of different target states).clm. | | | | | |
| N522 | 0 | (a computer-implemented web interface module modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send | (US-PGPUB; USPAT) | AND | ON | ON | 2017/09/26 08:20 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil or gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N523 | 0 | (a computer-implemented web interface module modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in | (US-PGPUB; USPAT) | AND | ON | ON | 2017/09/26 08:20 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N524 | 0 | (actuate an actuator entered via a presented control interface identify a network address in | (US-PGPUB; USPAT) | AND | ON | ON | 2017/09/26 08:20 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N525 | 0 | (a computer-implemented web interface module modules configured to | (US-PGPUB; USPAT) | AND | ON | ON | 2017/09/26 08:20 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first).clm. | | | | | |
| N685 | 129 | (a computer- | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | implemented user-interface module or modules configured to send respective instructions to present respective control interfaces on respective user computing devices logged in to respective ones of the accounts and to receive respective commands to control respective actuators from the respective user computing devices wherein the system is configured to receive with the user-interface module modules a user command to actuate an actuator entered via a presented control interface identify an address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of fluid-handling facilities, one or more users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of fluid-handling facilities the second account corresponds to a second group of fluid-handling facilities, the first group being different from the second group one more users of the second account being authorized to send | | | | | 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | commands to remotely control fluid handling devices at the second group of fluid-handling facilities the third account corresponds to the first group of fluid-handling facilities one more users of the third account being authorized to view reports of data from fluid handling devices at the first group of fluid-handling facilities the fourth account corresponds to the second group of fluid-handling facilities, one more users of the of the fourth account being authorized to view reports of data from fluid handling devices at the second group of fluid-handling facilities).clm. | | | | | |
| N686 | 0 | (user command to actuate an actuator entered via a presented control interface identify an address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of fluid-handling facilities, one or more users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of fluid-handling facilities the second account corresponds to | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | a second group of fluid-handling facilities, the first group being different from the second group one more users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of fluid-handling facilities the third account corresponds to the first group of fluid-handling facilities one more users of the third account being authorized to view reports of data from fluid handling devices at the first group of fluid-handling facilities the fourth account corresponds to the second group of fluid-handling facilities, one more users of the of the fourth account being authorized to view reports of data from fluid handling devices at the second group of fluid-handling facilities).clm. | | | | | |
| N687 | 0 | (translating plurality commands translated commands encoded plurality protocols different from the first protocol each translated command being translated into a protocol among the plurality of protocols suitable for a fluid handling device to which the respective command is directed the at least some of the translated command being operative to cause a local controller of the given fluid-handling device to drive the given fluid-handling device to the plurality of different target states | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | the local controller being responsive to the translated commands and feedback from the given fluid handling device indicative of whether the given fluid handling device is in a targeted state).clm. | | | | | |
| N688 | 0 | (translating plurality commands translated commands encoded plurality protocols different from the first protocol each translated command being translated into a protocol among the plurality of protocols suitable for a fluid handling device to which the respective command is directed the at least some of the translated command being operative to cause a local controller of the given fluid-handling device).clm. | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |
| N689 | 0 | (sending the translated commands to respective local controllers of the respective fluid handling devices to which the respective commands are directed).clm. | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |
| N690 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions comprises after receiving the instructions determining a plurality of different target states of the at least one of the fluid handling devices, the plurality of different states each | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | corresponding to different times after determining the plurality of different target states translating each received instructions into one or more translated instructions encoded in the selected respective protocol or protocols the one or more translated instructions including the determined plurality of different target states).clm. | | | | | |
| N691 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions comprises after receiving the instructions determining a plurality of different target states of the at least one of the fluid handling devices).clm. | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |
| N692 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state).clm. | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |
| N693 | 0 | (the plurality of different states each corresponding to different times after determining the plurality of different target states translating each received instructions into one or more translated instructions encoded in the selected respective protocol or protocols the one or more translated instructions including | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | the determined plurality of different target states).clm. | | | | | |
| N694 | 0 | (a computer-implemented web interface module modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil or gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N695 | 0 | (a computer-implemented web interface module modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N696 | 0 | (actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N697 | 0 | (a computer-implemented web interface module modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first).clm. | | | | | |
| N698 | 0 | N687 N688 N689 N690 N691 N692 N693 N694 N695 N696 N697 | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:45 AM |
| N699 | 0 | (a computer-implemented user-interface module modules configured to send respective instructions to present respective control interfaces on respective user computing devices logged in to respective | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:46 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | ones of the accounts and to receive respective commands to control respective actuators from the respective user computing devices wherein the system is configured to receive with the user-interface module modules a user command to actuate an actuator entered via a presented control interface identify an address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of fluid-handling facilities, one or more users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of fluid-handling facilities the second account corresponds to a second group of fluid-handling facilities, the first group being different from the second group one more users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of fluid-handling facilities the third account corresponds to the first group of fluid-handling facilities one more users of the third | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | account being authorized to view reports of data from fluid handling devices at the first group of fluid-handling facilities the fourth account corresponds to the second group of fluid-handling facilities, one more users of the of the fourth account being authorized to view reports of data from fluid handling devices at the second group of fluid-handling facilities).clm. | | | | | |
| N700 | 0 | N698 N699 | (US-PGPUB; USPAT) | AND | ON | ON | 2019/07/15 08:46 AM |
| N701 | 0 | (record database command target fluid handling actuator set point).clm. | (US-PGPUB; USPAT) | AND | ON | ON | 2021/07/14 02:00 PM |

## Bibliographic Data

Application No: 16/656,319

Foreign Priority claimed: ○ Yes ◉ No

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

Verified and Acknowledged: /Christopher E. Everett/ (Examiner's Signature) | (Initials)

Title: REMOTE CONTROL OF FLUID-HANDLING DEVICES

| FILING or 371(c) DATE | CLASS | GROUP ART UNIT | ATTORNEY DOCKET NO. |
|---|---|---|---|
| 10/17/2019 | 700 | 2116 | 034392-0508266 |
| RULE | | | |

**APPLICANTS**

SitePro, Inc., Lubbock, TX, UNITED STATES

**INVENTORS**

Aaron Phillips, Lubbock, TX, UNITED STATES

**CONTINUING DATA**

This application is a CON of 15867077 01/10/2018 PAT 10488871

15867077 is a CON of 14984422 12/30/2015 PAT 9898014

14984422 is a CON of 14147190 01/03/2014 PAT 9342078

14147190 is a CON of 13708557 12/07/2012 PAT 8649909

**FOREIGN APPLICATIONS**

**IF REQUIRED, FOREIGN LICENSE GRANTED****

11/04/2019

**** SMALL ENTITY ****

**STATE OR COUNTRY**

UNITED STATES

**ADDRESS**

Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102
UNITED STATES

**FILING FEE RECEIVED**

$865

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | | |
|---|---|---|---|
| First Named Inventor: Aaron Phillips | § | Group Art Unit: | 2116 |
| | § | Confirmation No.: | 2059 |
| Serial No.: 16/656,319 | § | Examiner: | Everett, Christopher E. |
| Filed: 17 October 2019 | § | | |
| | § | | |
| For: REMOTE CONTROL OF FLUID-HANDLING DEVICES | § | Atty. Docket: | 034392-0508266 |
| | § | | |

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF TRANSMISSION OR MAILING
37 C.F.R. 1.8

I hereby certify that this correspondence is being transmitted by facsimile to the United States Patent and Trademark Office in accordance with 37 C.F.R. § 1.6(d), or is being transmitted via the Office electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4), or is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

| 23 June 2021 | /Antu Xie, Reg. No. 70329/ |
|---|---|
| Date | Antu Xie, Reg. No. 70329 |

Commissioner:

**AMENDMENT AND RESPONSE**
**TO NON-FINAL OFFICE ACTION ISSUED ON 23 FEBRUARY 2021**

In response to the above-noted office action, Applicant amends and remarks as follows.

***Authorization for Extensions of Time and Payment of Fees***

In accordance with 37 C.F.R. § 1.136, Applicant hereby provides a general authorization to treat this and any future reply requiring an extension of time as incorporating a request thereof. The Commissioner is authorized to charge any additional fees that may be required to Deposit Account No. 033975, referencing the above attorney docket number.

## AMENDMENTS TO THE CLAIMS

The following is a complete listing of the claims, which replaces all previous versions and listings of the claims.

1-20. (cancelled)

21. (new) A non-transitory, machine-readable medium comprising instructions to effectuate operations, the operations comprising:

receiving, with a server, a command comprising a target value of a fluid-handling device from a computing device via a control interface, wherein the command is received in association with a record stored on a datastore;

determining, with the server, a network address of a network based on the record, wherein the network address identifies a controller of the fluid-handling device, and wherein the controller accesses a sensor to measure a fluid being handled by the fluid-handling device and an actuator of the fluid-handling device;

sending, with the server, the target value to the network address via the network;

receiving, with the controller, a measurement of the fluid by the sensor;

determining, with the controller, whether the measurement satisfies the target value;

in response to a determination that the measurement does not satisfy the target value, obtaining, with the controller, a set point based on the command; and

controlling, with the controller, the actuator based on the set point.

22. (new) The medium of claim 21, wherein:

the controller is a site master-controller;

the site master-controller controls a plurality of local controllers, the plurality of local controllers comprising a first local controller in communication with the actuator;

controlling the actuator with the controller based on the set point comprises:

sending the set point from the site master-controller to the first local

controller; and

actuating, with the first local controller, the actuator based on the set point.

23. (new) The medium of claim 21, wherein:

obtaining the set point comprises determining a sequence of set points based on the command; and

controlling the actuator comprises controlling the actuator to a plurality of different states based on the sequence of set points.

24. (new) The medium of claim 21, wherein the command is a first command, and wherein sending the command to the network address comprises:

identifying a protocol of the fluid-handling device based on the network address;

translating the first command into a translated command based on the protocol; and

sending the translated command to the controller.

25. (new) The medium of claim 24, wherein identifying the protocol comprises parsing an identifier from the first command and retrieving a corresponding record from a set of records based on the identifier, the corresponding record including a protocol identifier of the protocol.

26. (new) The medium of claim 21, wherein:

the set point is a first set point;

the command comprises the first set point and a second set point;

obtaining the first set point comprises obtaining the first set point and the second set point from the command;

the measurement is a first measurement;

the operations further comprises:

receiving, with the controller, a second sensor measurement after controlling the actuator based on the first set point;

determining, with the controller, whether the second sensor measurement satisfies a criterion based on the first set point; and

in response to a determination that the first set point is satisfied, controlling the actuator based on the second set point.

27. (new) The medium of claim 21, wherein the record is a first record, the operations further comprising sending sensor data from the sensor to a plurality of records that comprises the first record, wherein the plurality of records is associated with a user.

28. (new) The medium of claim 21, wherein:

the actuator controls a valve;

the command comprises instructions to oscillate the valve using the actuator; and

controlling the actuator comprises translating, at the controller, the command to oscillate the valve into a sequence of high voltage and low voltage signals.

29. (new) The medium of claim 21, wherein the measurement comprises at least one of a fluid flow rate, a fluid temperature, or a fluid pressure.

30. (new) The medium of claim 21, wherein the fluid-handling device is a first fluid-handling device of a plurality of fluid-handling devices, the operations further comprising:

polling, with the controller, the plurality of fluid-handling devices to collect a set of data comprising the measurement; and

sending the set of data from the controller to the server.

31. (new) The medium of claim 21, wherein the network comprises a wireless network, and sending the command comprises sending the command via a wireless signal.

32. (new) The medium of claim 21, wherein:

the measurement is a first measurement of a plurality of measurements of the sensor;

wherein the target value is a value of a pattern of values; and

determining whether the measurement satisfies the target value comprises determining whether the plurality of measurements satisfies the pattern of values.

33. (new) The medium of claim 32, wherein the pattern of values comprises a pattern of valve configurations.

34. (new) The medium of claim 21, wherein the sensor comprises a level sensor of a separation tank to indicate a level at which a first fluid phase meets a second fluid phase.

35. (new) The medium of claim 21, wherein:

the server comprises a web server; and

the controller comprises a site server distinct from the web server.

36. (new) The medium of claim 35, wherein:

the server communicates with a plurality of user devices via a first network port of the web server, wherein the plurality of user devices comprises the computing device; and

the site server communicates with facilities via a second network port of the computing device, wherein the second network port being different from the first network port, and wherein a facility of the facilities comprises the fluid-handling device.

37. (new) The medium of claim 21, wherein controlling the actuator based on the set point comprise steps for controlling the actuator.

38. (new) The medium of claim 21, wherein receiving the command comprises receiving the command via a web interface on the computing device.

39. (new) The medium of claim 21, wherein the controller is communicatively coupled to the fluid-handling device via a frame-based carrier-sense multiple access protocol.

40. (new) A method comprising:

receiving, with a server, a command comprising a target value of a fluid-handling device from a computing device via a control interface, wherein the command is received in association with a record stored on a datastore;

determining, with the server, a network address of a network based on the record, wherein the network address identifies a controller of the fluid-handling device, and wherein the controller accesses a sensor to measure a fluid being handled by the fluid-handling device and an actuator of the fluid-handling device;

sending, with the server, the target value to the network address via the network;

receiving, with the controller, a measurement of the fluid by the sensor;

determining, with the controller, whether the measurement satisfies the target value;

in response to a determination that the measurement does not satisfy the target value, obtaining, with the controller, a set point based on the command; and

controlling the actuator based on the set point.

## REMARKS

In the office action, the Examiner rejected claims 1-20. By this response, Applicant cancels claims 1-20 and adds new claims 21-40. Upon entry of these amendments, claims 21-40 are pending in the present application and are believed to be in condition for allowance. Support for the amendments may be found in the originally-filed application in at least paragraphs 17, 20, 22, 24-34. No new matter is added. In view of the foregoing amendments and the following remarks, Applicant respectfully requests consideration and allowance of all pending claims.

### Double patenting

In the office action, the Examiner provisionally rejects claims 1-20 on the ground of nonstatutory double patenting. Applicant has cancelled claims 1-20 and requests withdrawal of the rejection.

### Claim Rejections under 35 U.S.C. § 103(a)

The Examiner rejected claims 1-20 under 35 U.S.C. 103(a). Applicant has cancelled claims 1-20 and requests withdrawal of the rejection.

### New Claims

The new claims are believed to be in condition for allowance. The new claims are supported by the application as filed. Accordingly, Applicant respectfully asks that the new claims be allowed.

### Reservation of Arguments

Above, Applicant identifies reasons why the present rejections should not be applied to the pending claims. This explanation, however, should not be construed as an admission that other features of the claims beyond those discussed, including the combination of claim features, are taught or suggested by the cited art, or that the rejections

are otherwise proper. In the interest of brevity, Applicant has refrained from providing an exhaustive explanation of every basis for allowing the claims. Accordingly, Applicant reserves the right to identify other grounds for overcoming the present rejections and the cited art, and Applicant reiterates that the amendments and arguments above are made without prejudice, including to rights available under the doctrine of equivalents.

Moreover, Applicant stresses that many terms in the claims are defined within the claim itself. Particularly where bespoke noun phrases are used, Applicant has sought to embed the characteristics of their referent relevant to the claim in the claim itself. As such, use of such noun phrases (e.g., those having a meaning particular to the document at hand) should not be taken as an invitation to import limitations from the specification when the relevant limitations are already recited in the claim itself.

**Conclusion**

Applicant respectfully submits that all pending claims should be in condition for allowance. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

Date: 23 June 2021

/Antu Xie, Reg. No. 70329/

Antu Xie
Registration No. 70329
Pillsbury Winthrop Shaw Pittman LLP
P.O. Box 10500
McLean, VA 22102
Phone 512-580-9676

| Electronic Patent Application Fee Transmittal | |
|---|---|
| **Application Number:** | 16656319 |
| **Filing Date:** | 17-Oct-2019 |
| **Title of Invention:** | REMOTE CONTROL OF FLUID-HANDLING DEVICES |
| **First Named Inventor/Applicant Name:** | Aaron Phillips |
| **Filer:** | AnTu Xie/Nicole Banks |
| **Attorney Docket Number:** | 034392-0508266 |
| Filed as Small Entity | |
| **Filing Fees for Utility under 35 USC 111(a)** | |

| Description | Fee Code | Quantity | Amount | Sub-Total in USD($) |
|---|---|---|---|---|
| **Basic Filing:** | | | | |
| **Pages:** | | | | |
| **Claims:** | | | | |
| **Miscellaneous-Filing:** | | | | |
| **Petition:** | | | | |
| **Patent-Appeals-and-Interference:** | | | | |
| **Post-Allowance-and-Post-Issuance:** | | | | |
| **Extension-of-Time:** | | | | |

| Description | Fee Code | Quantity | Amount | Sub-Total in USD($) |
|---|---|---|---|---|
| Extension - 1 month with $0 paid | 2251 | 1 | 110 | 110 |
| **Miscellaneous:** | | | | |
| | | **Total in USD ($)** | | **110** |

| Electronic Acknowledgement Receipt | |
|---|---|
| **EFS ID:** | 43071894 |
| **Application Number:** | 16656319 |
| **International Application Number:** | |
| **Confirmation Number:** | 2059 |
| **Title of Invention:** | REMOTE CONTROL OF FLUID-HANDLING DEVICES |
| **First Named Inventor/Applicant Name:** | Aaron Phillips |
| **Customer Number:** | 909 |
| **Filer:** | AnTu Xie/Nicole Banks |
| **Filer Authorized By:** | AnTu Xie |
| **Attorney Docket Number:** | 034392-0508266 |
| **Receipt Date:** | 23-JUN-2021 |
| **Filing Date:** | 17-OCT-2019 |
| **Time Stamp:** | 18:23:52 |
| **Application Type:** | Utility under 35 USC 111(a) |

## Payment information:

| | |
|---|---|
| Submitted with Payment | yes |
| Payment Type | DA |
| Payment was successfully received in RAM | $110 |
| RAM confirmation Number | E20216MI24173369 |
| Deposit Account | 033975 |
| Authorized User | Nicole Banks |
| The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:<br>37 CFR 1.16 (National application filing, search, and examination fees)<br>37 CFR 1.17 (Patent application and reexamination processing fees) | |

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

## File Listing:

| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part /.zip | Pages (if appl.) |
|---|---|---|---|---|---|
| 1 | | 034392-0508266_Response_to_Non-Final_Office_Action_filed_23JUN2021.pdf | 211160<br>77d01d4916b3fb5b6d0c1cb99acec9a3430 40f3b | yes | 9 |

| | Multipart Description/PDF files in .zip description | | |
|---|---|---|---|
| | **Document Description** | **Start** | **End** |
| | Amendment/Req. Reconsideration-After Non-Final Reject | 1 | 1 |
| | Claims | 2 | 6 |
| | Applicant Arguments/Remarks Made in an Amendment | 7 | 9 |

**Warnings:**

**Information:**

| | | | | | |
|---|---|---|---|---|---|
| 2 | Fee Worksheet (SB06) | fee-info.pdf | 30810<br>623ba971f68024930ea4adbd1175c903ef3c da2e | no | 2 |

**Warnings:**

**Information:**

| | |
|---|---|
| **Total Files Size (in bytes):** | 241970 |

**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.**

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

| **PATENT APPLICATION FEE DETERMINATION RECORD**<br>Substitute for Form PTO-875 | Application or Docket Number<br>16/656,319 | Filing Date<br>10/17/2019 | ☐ To be Mailed |
|---|---|---|---|

**ENTITY:** ☐ LARGE ☑ SMALL ☐ MICRO

## APPLICATION AS FILED - PART I

| | (Column 1) | (Column 2) | | | |
|---|---|---|---|---|---|
| FOR | NUMBER FILED | NUMBER EXTRA | | RATE ($) | FEE ($) |
| ☐ BASIC FEE (37 CFR 1.16(a), (b), or (c)) | N/A | N/A | | N/A | |
| ☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m)) | N/A | N/A | | N/A | |
| ☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q)) | N/A | N/A | | N/A | |
| TOTAL CLAIMS (37 CFR 1.16(i)) | minus 20 = | * | | x $50 = | |
| INDEPENDENT CLAIMS (37 CFR 1.16(h)) | minus 3 = | * | | x $230 = | |
| ☐ APPLICATION SIZE FEE (37 CFR 1.16(s)) | If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). | | | | |
| ☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j)) | | | | | |
| * If the difference in column 1 is less than zero, enter "0" in column 2. | | | | TOTAL | |

## APPLICATION AS AMENDED - PART II

| | | (Column 1) | | (Column 2) | (Column 3) | | | |
|---|---|---|---|---|---|---|---|---|
| AMENDMENT | 06/23/2021 | CLAIMS REMAINING AFTER AMENDMENT | | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | | RATE ($) | ADDITIONAL FEE ($) |
| | Total (37 CFR 1.16(i)) | * 20 | Minus | ** 20 | = 0 | | x $50 = | 0 |
| | Independent (37 CFR 1.16(h)) | * 2 | Minus | *** 3 | = 0 | | x $240 = | 0 |
| | ☐ Application Size Fee (37 CFR 1.16(s)) | | | | | | | |
| | ☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) | | | | | | | |
| | | | | | | | TOTAL ADD'L FEE | 0 |

| | | (Column 1) | | (Column 2) | (Column 3) | | | |
|---|---|---|---|---|---|---|---|---|
| AMENDMENT | | CLAIMS REMAINING AFTER AMENDMENT | | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | | RATE ($) | ADDITIONAL FEE ($) |
| | Total (37 CFR 1.16(i)) | * | Minus | ** | = | | x $0 = | |
| | Independent (37 CFR 1.16(h)) | * | Minus | *** | = | | x $0 = | |
| | ☐ Application Size Fee (37 CFR 1.16(s)) | | | | | | | |
| | ☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) | | | | | | | |
| | | | | | | | TOTAL ADD'L FEE | |

| | |
|---|---|
| * If the entry in column 1 is less than the entry in column 2, write "0" in column 3. | LIE |
| ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". | /ROSS W BROWN/ |
| *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". | |
| The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1. | |

This collection of information is required by 37 CFR 1.16. 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 12 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, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

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. |
|---|---|---|---|---|
| 16/656,319 | 10/17/2019 | Aaron Phillips | 034392-0508266 | 2059 |

909 7590 02/23/2021

Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102

| EXAMINER |
|---|
| EVERETT, CHRISTOPHER E |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2116 | |

| NOTIFICATION DATE | DELIVERY MODE |
|---|---|
| 02/23/2021 | 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):

docket_ip@pillsburylaw.com

| *Office Action Summary* | **Application No.** 16/656,319 | **Applicant(s)** Phillips, Aaron | |
|---|---|---|---|
| | **Examiner** CHRISTOPHER E EVERETT | **Art Unit** 2116 | **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 10/17/2019.

☐ 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) 1-20 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) 1-20 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 10/17/2019 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

1. Claims 1-20 are pending.

### *Notice of Pre-AIA or AIA Status*

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

3. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

### *Double Patenting*

4. 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 § 2146 *et seq.* 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.

Claims 1-20 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 9,898,014 and claims 1-34 of U.S. Patent No. 10,488,871. Although the claims at issue are not identical, they are not patentably distinct from each other as outlined below.

| **U.S. Patent Application No. 16/656,319** | **U.S. Patent No. 9,898,014** | **U.S. Patent No. 10,488,871** |
|---|---|---|
| 1. A hosted, networked, remote industrial monitoring and control system for geographically distributed fluid-handling facilities, the system comprising: | 1. A hosted, web-based, remote industrial monitoring and control system for geographically distributed facilities in oil and gas fields, the system comprising: | 1. A hosted, networked, remote industrial monitoring and control system for geographically distributed fluid-handling facilities, the system comprising: |
| a computer-implemented datastore storing: | a computer-implemented datastore storing: | a computer-implemented datastore storing: |
| a plurality of accounts, each account corresponding to an entity operating one or more geographically distributed fluid-handling facilities, the accounts associating different fluid-handling facilities with different entities; | a plurality of accounts, each account corresponding to an entity operating one or more geographically distributed oil or gas facilities, the accounts associating different oil or gas facilities with different entities; and | a plurality of accounts, each account corresponding to an entity operating one or more geographically distributed fluid-handling facilities, the accounts associating different fluid-handling facilities with different entities; and |
| and network addresses by which industrial monitoring or | network addresses by which industrial monitoring or | addresses by which industrial monitoring or |

| | | |
|---|---|---|
| control equipment at the facilities is accessible via cellular network connections, the monitoring or control equipment including sensors or actuators; | control equipment at the facilities is accessible via cellular network connections, the monitoring or control equipment including sensors or actuators; | control equipment at the facilities is accessible via network connections, the monitoring or control equipment including sensors configured to measure fluid handled at respective fluid-handling facilities and actuators configured to manipulate fluid flow at respective fluid-handling facilities, at least some of the fluid-handling facilities including both a plurality of the sensors and a plurality of the actuators; |
| a computer-implemented facility-interface module or modules configured to obtain data from the sensors at the facilities and send commands to the actuators at the facilities via | a computer-implemented facility-interface module or modules configured to obtain data from the sensors at the facilities and send commands to the actuators at the facilities | a computer-implemented facility-interface module or modules configured to obtain data from the sensors at the facilities and send commands to the |

| | | |
|---|---|---|
| the cellular network connections; | via the cellular network connections; and | actuators at the facilities via the network connections; and |
| and a computer-implemented web-interface module or modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices, | a computer-implemented web-interface module or modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices, | a computer-implemented user-interface module or modules configured to send respective instructions to present respective control interfaces on respective user-computing devices logged in to respective ones of the accounts and to receive respective commands to control respective actuators from the respective user computing devices, |
| wherein the system is configured to receive, with the web-interface module or modules, a user command to actuate an actuator entered via a presented control interface, | wherein the system is configured to receive, with the web-interface module or modules, a user command to actuate an actuator entered via a presented control interface, | wherein the system is configured to receive, with the user-interface module or modules, a user command to actuate an actuator entered via a |

| | | |
|---|---|---|
| identify a network address in the datastore corresponding to a facility at which the actuator is located, and send instructions with the facility-interface module or modules to the facility to actuate the actuator. | identify a network address in the datastore corresponding to a facility at which the actuator is located, and send instructions with the facility-interface module or modules to the facility to actuate the actuator, and wherein: | presented control interface, identify an address in the datastore corresponding to a facility at which the actuator is located, and send instructions with the facility-interface module or modules to the facility to actuate the actuator, and wherein: |
| | the plurality of accounts include a first account, a second account, a third account, and a fourth account; | the plurality of accounts include a first account, a second account, a third account, and a fourth account; |
| | the first account corresponds to a first group of oil or gas facilities, users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil or gas facilities; | the first account corresponds to a first group of fluid-handling facilities, one or more users of the first account being authorized to send commands to remotely control fluid handling |

| | | |
|---|---|---|
| | | devices at the first group of fluid-handling facilities; |
| | the second account corresponds to a second group of oil or gas facilities, the first group being different from the second group, users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil or gas facilities; | the second account corresponds to a second group of fluid-handling facilities, the first group being different from the second group, one or more users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of fluid-handling facilities; |
| | the third account corresponds to the first group of oil or gas facilities, users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil or gas facilities; and | the third account corresponds to the first group of fluid-handling facilities, one or more users of the third account being authorized to view reports of data from fluid handling devices at the first |

| | | |
|---|---|---|
| | | group of fluid-handling facilities; and |
| | the fourth account corresponds to the second group of oil or gas facilities, users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil or gas facilities. | the fourth account corresponds to the second group of fluid-handling facilities, one or more users of the of the fourth account being authorized to view reports of data from fluid handling devices at the second group of fluid-handling facilities. |
| 2. The system of claim 1, wherein the sensors include a tank level sensor of a tank at one of the facilities, and wherein the datastore includes a record associating the tank with the facility, data from the tank being unavailable to users without an account associated with the tank. | 2. The system of claim 1, wherein the sensors include a tank level sensor of a tank at one of the facilities, and wherein the datastore includes a record associating the tank with the facility, data from the tank being unavailable to users without an account associated with the tank, and wherein the accounts: | 3. The system of claim 1, wherein:<br>the sensors include a tank level sensor of a tank at one of the facilities;<br>the datastore includes a record associating the tank with the facility, data from the tank being unavailable to users without an account |

| | | |
|---|---|---|
| | designate oil or gas facilities to which a given user is authorized to send the user command to actuate the actuator. | associated with the tank; and<br>the accounts designate a plurality of fluid-handling facilities to which a given user is authorized to send user commands to actuate actuators, wherein at least some users of the third account are not authorized by the third account to issue commands to fluid handling devices at the first group of fluid-handling facilities. |
| 3. The system of claim 1, wherein the sensors include a level sensor of an oil/water separation tank at one of the facilities configured to indicate a level at which oil meets water, and wherein the datastore includes a record | 3. The system of claim 1, wherein the sensors include a level sensor of an oil/water separation tank at one of the facilities configured to indicate a level at which oil meets water, and wherein the datastore includes a record | 2. The system of claim 1, wherein:<br>at least some of the fluid-handling facilities are oil-or-gas related fluid-handling facilities and include petro-water |

| | | |
|---|---|---|
| associating the tank with the facility. | associating the tank with the facility. | disposal facilities or re-injection facilities; and<br>the sensors include a level sensor of an oil/water separation tank at one of the facilities configured to indicate a level at which oil meets water, and wherein the datastore includes a record associating the tank with the facility. |
| 4. The system of claim 1, wherein the sensors include a leak detector at one of the facilities, and wherein the datastore includes a record associating the leak detector with the facility. | 4. The system of claim 1, wherein the sensors include a leak detector at one of the facilities, and wherein the datastore includes a record associating the leak detector with the facility. | 4. The system of claim 1, wherein the sensors include:<br>a level sensor of a tank at a given one of the facilities and wherein the datastore includes a record associating the tank with the given facility; and<br>a leak detector at the given facility, and wherein the datastore includes a record |

| | | |
|---|---|---|
| | | associating the leak detector with the given facility. |
| 5. The system of claim 1, wherein: the web-interface module or modules comprises a web server; and the facility-interface module or modules comprises a site server distinct from the web server. | 5. The system of claim 1, wherein: the web-interface module or modules comprises a web server; and the facility-interface module or modules comprises a site server distinct from the web server. | 5. The system of claim 1, wherein: the user-interface module or modules comprises a web server; and the facility-interface module or modules comprises a site server distinct from the web server; the web server is configured to communicate with user devices via a first network port of a computing device executing the web server; the site server is configured to communicate with facilities via a second network port of the |

| | | |
|---|---|---|
| | | computing device, the second network port being different from the first network port; and the data store is configured to store subscription information associated with at least some of the accounts. |
| 6. The system of claim 5, wherein: the web server communicates with user devices via a first network port of a computing device executing the web server; and the site server communicates with facilities via a second network port of the computing device, the second network port being different from the first network port. | 6. The system of claim 5, wherein: the web server communicates with user devices via a first network port of a computing device executing the web server; and the site server communicates with facilities via a second network port of the computing device, the second network port being different from the first network port. | 5. The system of claim 1, wherein: the user-interface module or modules comprises a web server; and the facility-interface module or modules comprises a site server distinct from the web server; the web server is configured to communicate with user devices via a first network port of a |

| | | |
|---|---|---|
| | | computing device executing the web server; the site server is configured to communicate with facilities via a second network port of the computing device, the second network port being different from the first network port; and the data store is configured to store subscription information associated with at least some of the accounts. |
| 7. The system of claim 1, wherein: the data store stores subscription information associated with at least some of the accounts. | 7. The system of claim 1, wherein: the data store stores subscription information associated with at least some of the accounts. | 5. The system of claim 1, wherein: the user-interface module or modules comprises a web server; and the facility-interface module or modules comprises a site server |

| | | |
|---|---|---|
| | | distinct from the web server;<br>the web server is configured to communicate with user devices via a first network port of a computing device executing the web server;<br>the site server is configured to communicate with facilities via a second network port of the computing device, the second network port being different from the first network port; and<br>the data store is configured to store subscription information associated with at least some of the accounts. |
| 8. The system of claim 1, wherein the facility-interface | 8. The system of claim 1, wherein the facility-interface | 6. The system of claim 1, wherein: |

| | | |
|---|---|---|
| module or modules comprise:<br>means for interfacing with a plurality of site controllers associated with the facilities. | module or modules comprise:<br>means for interfacing with a plurality of site controllers associated with the facilities. | the facility-interface module or modules comprise means for interfacing with a plurality of site controllers associated with the facilities; and<br>the user-interface module or modules comprise means for sending instructions to present a control interface on the user devices. |
| 9. The system of claim 1, wherein the web-interface module or modules comprise:<br>means for sending instructions to present a control interface on the user devices. | 9. The system of claim 1, wherein the web-interface module or modules comprise:<br>means for sending instructions to present a control interface on the user devices. | 6. The system of claim 1, wherein:<br>the facility-interface module or modules comprise means for interfacing with a plurality of site controllers associated with the facilities; and |

| | | |
|---|---|---|
| | | the user-interface module or modules comprise means for sending instructions to present a control interface on the user devices. |
| 10. The system of claim 1, wherein the datastore stores accounts for more than one hundred facilities, and the web-interface module or modules are configured interface with more than one hundred user devices. | 10. The system of claim 1, wherein the datastore stores accounts for more than one hundred facilities, and the web-interface module or modules are configured interface with more than one hundred user devices. | 7. The system of claim 1, wherein the datastore stores accounts for more than one thousand facilities, and the user-interface module or modules are configured interface with more than one thousand user devices. |
| 11. The system of claim 1, wherein the facility-interface module or modules are configured to send pull requests to facilities to retrieve data buffered at the facilities. | 11. The system of claim 1, wherein the facility-interface module or modules are configured to send pull requests to facilities to retrieve data buffered at the facilities. | 8. The system of claim 1, wherein the facility-interface module or modules are configured to send pull requests to facilities to retrieve data buffered at the facilities. |

| | | |
|---|---|---|
| 12. The system of claim 1, comprising: a controller at one of the facilities communicatively coupled to an actuator or a sensor. | 12. The system of claim 1, comprising: a controller at one of the facilities communicatively coupled to an actuator or a sensor. | 11. The system of claim 1, comprising: a controller at one of the facilities communicatively coupled to an actuator or a sensor. |
| 13. The system of claim 12, comprising at least four of the following as distinct threads from one another: a thread configured to sends and receive data requests; a thread configured to synchronize other threads with updated information; a thread configured to set a target state of actuators; a thread configured to obtain updated sensor readings; a thread configured to process user interactions; and a thread that eliminates other threads upon | 13. The system of claim 12, wherein the system is configured to instantiate at least four of the following as distinct threads from one another: a thread configured to sends and receive data requests; a thread configured to synchronize other threads with updated information; a thread configured to set a target state of actuators; a thread configured to obtain updated sensor readings; a thread configured to process user interactions; and a thread that eliminates other threads | 9. The system of claim 1, wherein the system is configured to instantiate at least three of the following as distinct threads from one another: a thread configured to sends and receive data requests; a thread configured to synchronize other threads with updated information; a thread configured to set a target state of actuators; a thread configured to obtain updated sensor readings; |

| | | |
|---|---|---|
| detecting a problem with the eliminated threads. | upon detecting a problem with the eliminated threads. | a thread configured to process user interactions; and<br>a thread that eliminates other threads upon detecting a problem with the eliminated threads. |
| 14. The system of claim 12, comprising at least two of the following as distinct threads from one another: a thread configured to sends or receive data request; a thread configured to synchronize other threads with updated information; a thread configured to set a target state of actuators; a thread configured to obtain updated sensor readings; a thread configured to process user interactions; and a thread that eliminates other threads upon | 14. The system of claim 12, wherein the system is configured to instantiate at least two of the following as distinct threads from one another: a thread configured to sends or receive data request; a thread configured to synchronize other threads with updated information; a thread configured to set a target state of actuators; a thread configured to obtain updated sensor readings; a thread configured to process user interactions; and a thread | 10. The system of claim 1, wherein the system is configured to instantiate each and every of the following as distinct threads from one another:<br>a thread configured to sends or receive data request;<br>a thread configured to synchronize other threads with updated information;<br>a thread configured to set a target state of actuators; |

| | | |
|---|---|---|
| detecting a problem with the eliminated threads. | that eliminates other threads upon detecting a problem with the eliminated threads. | a thread configured to obtain updated sensor readings;<br>a thread configured to process user interactions; and<br>a thread that eliminates other threads upon detecting a problem with the eliminated threads. |
| 15. The system of claim 12, wherein the controller is communicatively coupled to the actuator or sensor via a private local area network. | 15. The system of claim 12, wherein the controller is communicatively coupled to the actuator or sensor via a private local area network. | 12. The system of claim 11, wherein the controller is communicatively coupled to the actuator and the sensor via a private local area network, the system comprising a respective fluid-handling facility having the controller, the system further comprising the actuator, the sensor, and the private local area |

| | | |
|---|---|---|
| | | network, and wherein controller is communicatively coupled to the actuator or sensor via a frame-based carrier-sense multiple access protocol with collision detection. |
| 16. The system of claim 12, wherein controller is communicatively coupled to the actuator or sensor via a frame-based carrier-sense multiple access protocol with collision detection. | 16. The system of claim 12, wherein controller is communicatively coupled to the actuator or sensor via a frame-based carrier-sense multiple access protocol with collision detection. | 12. The system of claim 11, wherein the controller is communicatively coupled to the actuator and the sensor via a private local area network, the system comprising a respective fluid-handling facility having the controller, the system further comprising the actuator, the sensor, and the private local area network, and wherein controller is |

| | | |
|---|---|---|
| | | communicatively coupled to the actuator or sensor via a frame-based carrier-sense multiple access protocol with collision detection. |
| 17. The system of claim 12, wherein controller is configured to periodically push buffered data to the facility-interface module or modules. | 17. The system of claim 12, wherein controller is configured to periodically push buffered data to the facility-interface module or modules. | 13. The system of claim 11, wherein controller is configured to push buffered data to the facility-interface module or modules. |
| 18. The system of claim 12, comprising: means for ensuring at least some data is not lost if network access ceases intermittently. | 18. The system of claim 12, comprising: means for ensuring at least some data is not lost if network access ceases intermittently. | 14. The system of claim 11, comprising: means for ensuring at least some data is not lost if network access ceases intermittently. |
| 19. The system of claim 12, comprising: means for translating a command for an actuator from an input format to a format configured to | 19. The system of claim 12, comprising: means for translating a command for an actuator from an input format to a format configured to | 15. The system of claim 11, comprising: means for translating a command for an actuator from an input format to a |

| | | |
|---|---|---|
| effectuate changes in the actuator. | effectuate changes in the actuator. | format configured to effectuate changes in the actuator. |
| 20. The system of claim 19, comprising: means for executing control routines implicated by translated commands on an individual actuator or sensor. | 20. The system of claim 19, comprising: means for executing control routines implicated by translated commands on an individual actuator or sensor. | 16. The system of claim 11, comprising: means for executing control routines implicated by translated commands on an individual actuator or sensor. |

***Claim Interpretation***

5. The following is a quotation of 35 U.S.C. 112(f):

> (f) Element in Claim for a Combination. – An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

The following is a quotation of pre-AIA 35 U.S.C. 112, sixth paragraph:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

The claims in this application are given their broadest reasonable interpretation using the plain meaning of the claim language in light of the specification as it would be understood by

one of ordinary skill in the art. The broadest reasonable interpretation of a claim element (also commonly referred to as a claim limitation) is limited by the description in the specification when 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph, is invoked.

As explained in MPEP § 2181, subsection I, claim limitations that meet the following three-prong test will be interpreted under 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph:

(A) the claim limitation uses the term "means" or "step" or a term used as a substitute for "means" that is a generic placeholder (also called a nonce term or a non-structural term having no specific structural meaning) for performing the claimed function;

(B) the term "means" or "step" or the generic placeholder is modified by functional language, typically, but not always linked by the transition word "for" (e.g., "means for") or another linking word or phrase, such as "configured to" or "so that"; and

(C) the term "means" or "step" or the generic placeholder is not modified by sufficient structure, material, or acts for performing the claimed function.

Use of the word "means" (or "step") in a claim with functional language creates a rebuttable presumption that the claim limitation is to be treated in accordance with 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph. The presumption that the claim limitation is interpreted under 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph, is rebutted when the claim limitation recites sufficient structure, material, or acts to entirely perform the recited function.

Absence of the word "means" (or "step") in a claim creates a rebuttable presumption that the claim limitation is not to be treated in accordance with 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph. The presumption that the claim limitation is not interpreted under

35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph, is rebutted when the claim limitation recites function without reciting sufficient structure, material or acts to entirely perform the recited function.

Claim limitations in this application that use the word "means" (or "step") are being interpreted under 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph, except as otherwise indicated in an Office action. Conversely, claim limitations in this application that do not use the word "means" (or "step") are not being interpreted under 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph, except as otherwise indicated in an Office action.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries for establishing a background for determining obviousness under pre-AIA 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 5, 7-10, 12, and 18-20 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0161685 (Dwinnell) in view of U.S. Patent Publication No. 2002/0018399 (Schultz) and further in view of U.S. Patent Publication No. 2003/0052180 (Huhn).

**Claim 1:**

The cited prior art describes a hosted, web-based, remote industrial monitoring and control system for geographically distributed facilities in oil and gas fields, the system comprising: **(Dwinnell: "Embodiments of the present invention as disclosed collect live productivity data and streaming media information broadcast from remote sites of interest (such as oil and gas drilling locations, construction sites, etc.) in real-time into a collection and distribution network that delivers this data and information to investors and managers via the Internet via a dynamic web page interface." abstract)**

- a computer-implemented datastore storing: **(Dwinnell: see the database system 303 of the central system 102 as illustrated in figure 3 and as described in paragraph 0057)**
    - a plurality of accounts, each account corresponding to an entity operating one or more geographically distributed oil or gas facilities, the accounts associating different oil or gas facilities with different entities; and **(Dwinnell: see the accounts and the various ventures and wells as described in paragraphs**

**0057, 0067, 0068 and as illustrated in figures 6A, 6B; "Retrieval by web site users (investors and managers) of information and data stored in the archive system 302 or the database system 303 is controlled by standard authentication and authorization protocols. Users sign up for access to certain restricted features of the dynamic web site and receive a username and password to access desired information. Once a user has received an account, he is able to login into various otherwise-restricted web pages and thus be presented with a dynamically generated web page representative of the level of access that the user's particular account possesses." Paragraph 0057)**

- a computer-implemented facility-interface module or modules configured to **(Dwinnell: see the central collection and distribution system 102 as illustrated in figures 1, 3 and as described in paragraph 0031)**
    - obtain data from the sensors at the facilities and **(Dwinnell: "Each remote site system 101 gathers information and data from a particular remote site (i.e., an oil and gas drilling site or rig) and transmits the information and data to a central collection and distribution system 102 at least partially in the form of streaming media, and preferably digital streaming video." Paragraph 0031)**
- a computer-implemented web-interface module or modules configured to **(Dwinnell: see the web platform system 305 of the central system 102 as illustrated in figure 3 and as described in paragraphs 0051, 0054)**
    - send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to **(Dwinnell: see the**

**interfaces in web browsers along with delivered data from the web-server to the web browser as illustrated in figures 4, 5, 6A, 6B and as described in paragraphs 0063, 0064, 0065, 0066)**

Dwinnell does not explicitly describe sending commands as described below. However, Schultz teaches the sending commands as described below.

- send commands to the actuators at the facilities via the cellular network connections; and **(see the sending of commands to actuators in Schultz and the use of a cellular network in Dwinnell; Schultz: "In addition, a corresponding one of the actuators 88, 90, 92 may be controlled via the respective web page to operate the associated device 80 or 82. Thus, in the system 68, a person with a connection to the Internet 102 at a remote location may, for example, monitor a pressure drop across or a flow rate through the device 80 and, based on this information, operate the actuator 88 to adjust the pressure drop or flow rate, or to close the device, as desired." Paragraph 0048; Dwinnell: "The remote site system 101 further includes a remote site transmission device 203 for connecting to and sending streaming media information and other data to the central system 102. Preferably, the transmission device 203 should be capable of 64 Kb/s or greater telecommunication bandwidth and can comprise a cellular or land-line high speed modem, microwave, ADSL, ISDN line, LAN/WAN, etc., and most preferably comprises a portable VSAT satellite receiver/transmitter and antenna." Paragraph 0044))**

- receive commands to control actuators from the user computing devices, **(Schultz: "In addition, a corresponding one of the actuators 88, 90, 92 may be controlled via the respective web page to operate the associated device 80 or 82. Thus, in the system 68, a person with a connection to the Internet 102 at a remote location may, for example, monitor a pressure drop across or a flow rate through the device 80 and, based on this information, operate the actuator 88 to adjust the pressure drop or flow rate, or to close the device, as desired." Paragraph 0048)**

- wherein the system is configured to
  - receive, with the web-interface module or modules, a user command to actuate an actuator entered via a presented control interface, **(Schultz: "In addition, a corresponding one of the actuators 88, 90, 92 may be controlled via the respective web page to operate the associated device 80 or 82. Thus, in the system 68, a person with a connection to the Internet 102 at a remote location may, for example, monitor a pressure drop across or a flow rate through the device 80 and, based on this information, operate the actuator 88 to adjust the pressure drop or flow rate, or to close the device, as desired." Paragraph 0048)**
  - send instructions with the facility-interface module or modules to the facility to actuate the actuator. **(Schultz: "In addition, a corresponding one of the actuators 88, 90, 92 may be controlled via the respective web page to operate the associated device 80 or 82. Thus, in the system 68, a person with a connection to the Internet 102 at a remote location may, for example,**

**monitor a pressure drop across or a flow rate through the device 80 and, based on this information, operate the actuator 88 to adjust the pressure drop or flow rate, or to close the device, as desired." Paragraph 0048)**

One of ordinary skill in the art would have recognized that applying the known technique of Dwinnell, namely, a web based interface for oil and gas drilling location information, with the known techniques of Schultz, namely, a web server based interface for oil well information and control, would have yielded predictable results and resulted in an improved system. Accordingly, applying the teachings of Dwinnell to provide a web interface for remote viewing of information about oil wells with the teachings of Schultz to use a web interface to view information and control devices in oil wells would have been recognized by those of ordinary skill in the art as resulting in an improved monitoring and control system (i.e., remote monitoring and control of oil wells of Dwinnell based on the teachings of remote control of oil wells in Schultz).

Dwinnell and Schultz do not explicitly describe network addresses as described below. However, Huhn teaches the network addresses as described below.

- network addresses by which industrial monitoring or control equipment at the facilities is accessible via cellular network connections, the monitoring or control equipment including sensors or actuators; **(see the stored network addresses for actuators in Huhn and the cell network communication in Dwinnell; Huhn: see the store address to eeprom 330 as illustrated in figure 9; "In accordance with a preferred embodiment of the present invention, the address for an actuator is stored in the EEPROM 130. As mentioned, each of the actuators**

**of the system are identical." Paragraph 0042; Dwinnell: "The remote site system 101 further includes a remote site transmission device 203 for connecting to and sending streaming media information and other data to the central system 102. Preferably, the transmission device 203 should be capable of 64 Kb/s or greater telecommunication bandwidth and can comprise a cellular or land-line high speed modem, microwave, ADSL, ISDN line, LAN/WAN, etc., and most preferably comprises a portable VSAT satellite receiver/transmitter and antenna." Paragraph 0044)**

- identify a network address in the datastore corresponding to a facility at which the actuator is located, and **(Huhn: see the find address in look-up table 328 as illustrated in figure 9; "An address from the stored desired addresses is selected (328) from the look-up table of all addresses of the mounted actuator in response to the at least one operating parameter (316, 324, 326)." Abstract; "Each of the actuators 50-54 have an associated address. When the HVAC controller 30 wants to command one of the actuators to move that actuator's associated conduit door, it transmits a two part serial communication signal on the command line 64 connected to all actuators. The first part of the serial communication is an actuator address for that actuator to be commanded. The second part of the serial communication is the command to further open or further close the conduit door. All other actuators ignore the command when the address portion of the serial communication does not match its stored address." Paragraph 0041)**

One of ordinary skill in the art would have recognized that applying the known technique of Dwinnell, namely, a web based interface for oil and gas drilling location information, and the known techniques of Schultz, namely, a web server based interface for oil well information and control, with the teachings of Huhn, namely, using addresses to control actuators in a process control system, would have yielded predictable results and resulted in an improved system. Accordingly, applying the teachings of Dwinnell to provide a web interface for remote viewing of information about oil wells and the teachings of Schultz to use a web interface to view information and control devices in oil wells with the teachings of Huhn to control actuators using addresses would have been recognized by those of ordinary skill in the art as resulting in an improved monitoring and control system (i.e., remote monitoring and control of oil wells using actuator addressing of Dwinnell based on the teachings of remote control of oil wells in Schultz and the teachings of controlling actuators using addressing in Huhn).

**Claim 5:**

Dwinnell describes the system of claim 1, wherein:

- the web-interface module or modules comprises a web server; and **(Dwinnell: "The web platform system 305, comprising one or more web servers, communicates directly with each user's computer (running a web browser application) via the Internet and retrieves and serves, in a suitable hardware independent page description language (such as HTML, XML, and java), requested data from the database system 303, live streaming broadcasts and associated data from the broadcast system 304, and archived streams and associated data from the archive system 302." Paragraph**

**0054; see the web platform system 305 of the central system 102 as illustrated in figure 3 and as described in paragraphs 0051, 0054)**

- the facility-interface module or modules comprises a site server distinct from the web server. **(Dwinnell: "Incoming streamed media is received by the central system transmission device 103 and sent directly to the collection system 301 where it is identified." Paragraph 0052; "Each of the systems 301-305 that comprise the central system 102 are composed of suitable servers, storage devices (including databases), memory devices and support hardware as is known in the art of computer networks to achieve the functions of each system 301-305." Paragraph 0051)**

**Claim 7:**

Dwinnell describes the system of claim 1, wherein: the data store stores subscription information associated with at least some of the accounts. **(Dwinnell: see the accounts and the various ventures and wells as described in paragraphs 0057, 0067, 0068 and as illustrated in figures 6A, 6B; "Retrieval by web site users (investors and managers) of information and data stored in the archive system 302 or the database system 303 is controlled by standard authentication and authorization protocols. Users sign up for access to certain restricted features of the dynamic web site and receive a username and password to access desired information. Once a user has received an account, he is able to login into various otherwise-restricted web pages and thus be presented with a dynamically generated web page representative of the level of access that the user's particular account possesses." Paragraph 0057)**

**Claim 8:**

Dwinnell describes the system of claim 1, wherein the facility-interface module or modules comprise: means for interfacing with a plurality of site controllers associated with the facilities. **(Dwinnell: see the central system transmission device 103 interfacing with the remote site systems 101 as illustrated in figure 1 and as described in paragraph 0034; "First, a continuous stream is sent from each remote site system 101 to the central collection and distribution system 102 via the central system transmission device 103 (such as a high speed modem, LAN, WAN or VSAT satellite transmitter/receiver)." Paragraph 0034)**

**Claim 9:**

Dwinnell describes the system of claim 1, wherein the web-interface module or modules comprise: means for sending instructions to present a control interface on the user devices. **(Dwinnell: see the interfaces in web browsers along with delivered data from the web-server to the web browser as illustrated in figures 4, 5, 6A, 6B and as described in paragraphs 0063, 0064, 0065, 0066)**

**Claim 10:**

Dwinnell describes the system of claim 1,

- wherein the datastore stores accounts for more than one hundred facilities, and **(Dwinnell: "As is apparent from FIG. 1, the network 100 can be expanded or contracted to include any number of remote site systems 101 or investors/managers 105 as is necessitated." Paragraph 0031)**

- the web-interface module or modules are configured interface with more than one hundred user devices. **(Dwinnell: "As is apparent from FIG. 1, the network 100 can be expanded or contracted to include any number of remote site systems 101 or investors/managers 105 as is necessitated." Paragraph 0031)**

**Claim 12:**

Dwinnell describes the system of claim 1, comprising: a controller at one of the facilities communicatively coupled to an actuator or a sensor. **(Dwinnell: "The remote site system 101 comprises a remote site video and data capture server 202 (hereinafter referred to as a remote site capture server 202 or "RSCS 202") in electronic communication with a plurality of cameras 205 positioned strategically about the remote site." Paragraph 0039)**

**Claim 18:**

Dwinnell describes the system of claim 12, comprising: means for ensuring at least some data is not lost if network access ceases intermittently. **(Dwinnell: "Preferably, the remote site system 101 also includes a storage medium (not explicitly shown in FIG. 2) for archiving a local copy of said collected data and streams such that such information and data will not be permanently lost in the case oc communication problems with the central system 100." Paragraph 0044)**

**Claim 19:**

Dwinnell does not explicitly describe translating a command as described below. However, Schultz teaches the translating a command as described below.

Dwinnell and Schultz describe the system of claim 12, comprising: means for translating a command for an actuator from an input format to a format configured to effectuate changes in the actuator. **(Schultz: see the converter 26 converting optical signals into electrical signals for control of an actuator as illustrated in figures 1, 2 and as described in paragraphs 0032, 0042; "Accordingly, the well tool 10 includes a converter 26 for converting electrical signals generated by the webserver 22 into optical signals for transmission via the fiber optic line(s) of the cable 24." Paragraph 0032; "In a described embodiment, a well tool includes a webserver connected to a sensor and an actuator of the tool." Abstract; "The actuators 88, 90, 92 maybe electrically, hydraulically or otherwise operated." Paragraph 0042)**

Dwinnell and Schultz are combinable for the same rationale as set forth above with respect to claim 1.

**Claim 20:**

Dwinnell does not explicitly describe executing control routines as described below. However, Schultz teaches the executing control routines as described below.

Dwinnell and Schultz describe the system of claim 19, comprising: means for executing control routines implicated by translated commands on an individual actuator or sensor. **(Schultz: see the converter 26 converting optical signals into electrical signals for control of an actuator as illustrated in figures 1, 2 and as described in paragraphs 0032, 0042; "Accordingly, the well tool 10 includes a converter 26 for converting electrical signals generated by the webserver 22 into optical signals for transmission via the fiber optic line(s) of the cable 24." Paragraph 0032; "In a described embodiment, a well tool includes a webserver connected to a sensor and an actuator of the tool." Abstract; "The actuators 88,**

**90, 92 maybe electrically, hydraulically or otherwise operated." Paragraph 0042; "In addition, a corresponding one of the actuators 88, 90, 92 may be controlled via the respective web page to operate the associated device 80 or 82. Thus, in the system 68, a person with a connection to the Internet 102 at a remote location may, for example, monitor a pressure drop across or a flow rate through the device 80 and, based on this information, operate the actuator 88 to adjust the pressure drop or flow rate, or to close the device, as desired." Paragraph 0048)**

Dwinnell and Schultz are combinable for the same rationale as set forth above with respect to claim 1.

8. Claims 2, 11, and 17 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0161685 (Dwinnell) in view of U.S. Patent Publication No. 2002/0018399 (Schultz) and further in view of U.S. Patent Publication No. 2003/0052180 (Huhn) and U.S. Patent No. 6,967,589 (Peters).

**Claim 2:**

Dwinnell, Schultz, and Huhn do not explicitly describe tank sensors as described below. However, Peters teaches the tank sensors as described below.

Dwinnell, Schultz, Huhn, and Peters describe the system of claim 1,

- wherein the sensors include a tank level sensor of a tank at one of the facilities, and **(Peters: "Monitoring unit 120, connected to oil tank 95, measures the pressure at the bottom of the tank. With that information, as well as the diameter of the oil tank 95 and the specific gravity of the oil in the oil tank 95, the amount of oil in oil tank 95 can be determined by a formula as is known to those of skill in the art. Likewise, monitoring unit 130, connected to water tank 98, measures the pressure at the bottom of water tank 98. With that information, as well as the diameter of the water tank 98 and the specific gravity of water, the amount of water in water tank 98 can be determined by a formula as is known to those of skill in the art. In each case, additional sensors can be used, e.g., trip level sensors in the tanks. Other methods of measuring can be used, such as, infrared, microwave and float sensors." Col. 5, line 61 through col. 6, line 7)**
- wherein the datastore includes a record associating the tank with the facility, **(see the tanks in Peters and the association of ventures to wells in Dwinnell; Peters: see the tanks 95, 98 as illustrated in figure 1; Dwinnell: see the ventures (i.e., facility) and the associated wells (i.e., equipment) as illustrated in figure 6A and as described in paragraph 0067)**
- data from the tank being unavailable to users without an account associated with the tank. **(see the tanks in Peters and the availability and unavailability of data for accounts in Dwinnell; Peters: see the tanks 95, 98 as illustrated in figure 1; Dwinnell: see the accounts and the various ventures and wells as described in paragraphs 0057, 0067, 0068 and as illustrated in figures 6A, 6B; "Retrieval by web site users (investors and managers) of information and data stored in the archive system 302 or the database**

**system 303 is controlled by standard authentication and authorization protocols. Users sign up for access to certain restricted features of the dynamic web site and receive a username and password to access desired information. Once a user has received an account, he is able to login into various otherwise-restricted web pages and thus be presented with a dynamically generated web page representative of the level of access that the user's particular account possesses." Paragraph 0057)**

One of ordinary skill in the art would have recognized that applying the known technique of Dwinnell, namely, a web based interface for oil and gas drilling location information, the known techniques of Schultz, namely, a web server based interface for oil well information and control, and the teachings of Huhn, namely, using addresses to control actuators in a process control system, with the teachings of Peters, namely, monitoring a gas/oil well, would have yielded predictable results and resulted in an improved system. Accordingly, applying the teachings of Dwinnell to provide a web interface for remote viewing of information about oil wells, the teachings of Schultz to use a web interface to view information and control devices in oil wells, and the teachings of Huhn to control actuators using addresses with the teachings of Peters to use tank sensors to monitor a gas/oil well would have been recognized by those of ordinary skill in the art as resulting in an improved monitoring and control system (i.e., remote monitoring using sensors and control of oil wells using actuator addressing of Dwinnell based on the teachings of remote control of oil wells in Schultz, the teachings of controlling actuators using addressing in Huhn, and the teachings of monitoring an oil/gas well with tank sensors in Peters).

**Claim 11:**

Dwinnell, Schultz, and Huhn do not explicitly describe pull requests as described below. However, Peters teaches the pull requests as described below.

Dwinnell, Schultz, Huhn, and Peters describe the system of claim 1, wherein the facility-interface module or modules are configured to send pull requests to facilities to retrieve data buffered at the facilities. **(Peters: "Relay unit 140 can query each, some or all of the monitoring units 100, 110, 120 and 130 or receive data and requests from each, some or all of them." Col. 6, lines 32-35)**

Dwinnell, Schultz, Huhn, and Peters are combinable for the same rationale as set forth above with respect to claim 2.

**Claim 17:**

Dwinnell, Schultz, and Huhn do not explicitly describe pushes as described below. However, Peters teaches the pushes as described below.

Dwinnell, Schultz, Huhn, and Peters describe the system of claim 12, wherein controller is configured to periodically push buffered data to the facility-interface module or modules. **(Peters: "Relay units may be configured to do any of these "wake ups" and to alter their alarm time intervals. This allows given periods for daily data dumps from monitoring units to the host interface 200 via the relay unit 240 and/or host interface 200 queries to monitoring units via the relay unit 240, both at any time interval. Preferably, the default setting for the relay unit 240 is to commence data dumps to the host interface at twelve (12) AM (midnight) each day and to wake up and await for host interface queries every 30 minutes for 2 minutes." Col. 10, lines 30-39)**

Dwinnell, Schultz, Huhn, and Peters are combinable for the same rationale as set forth above with respect to claim 2.

9. Claim 3 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0161685 (Dwinnell) in view of U.S. Patent Publication No. 2002/0018399 (Schultz) and further in view of U.S. Patent Publication No. 2003/0052180 (Huhn) and U.S. Patent No. 5,149,443 (Varnam).

**Claim 3:**

Dwinnell, Schultz, and Huhn do not explicitly describe oil/water sensors as described below. However, Varnam teaches the oil/water sensors as described below.

Dwinnell, Schultz, Huhn, and Peters describe the system of claim 1,

- wherein the sensors include a level sensor of an oil/water separation tank at one of the facilities configured to indicate a level at which oil meets water, and **(Varnam: "Also mounted on the floating arms 50 and 52 is at least one acoustical type oil layer thickness sensor 158. Sensor 158 acts to sense and determine the thickness of the oil layer lying within the defined oil collection area 54." Col. 6, lines 4-8)**
- wherein the datastore includes a record associating the tank with the facility. **(see the tanks in Varnam and the association of ventures to wells in Dwinnell; Varnam: see the tanks 200 as illustrated in figure 1; Dwinnell: see the ventures (i.e., facility) and**

**the associated wells (i.e., equipment) as illustrated in figure 6A and as described in paragraph 0067)**

One of ordinary skill in the art would have recognized that applying the known technique of Dwinnell, namely, a web based interface for oil and gas drilling location information, the known techniques of Schultz, namely, a web server based interface for oil well information and control, and the teachings of Huhn, namely, using addresses to control actuators in a process control system, with the teachings of Varnam, namely, an oil recovery system with an oil/water sensor, would have yielded predictable results and resulted in an improved system. Accordingly, applying the teachings of Dwinnell to provide a web interface for remote viewing of information about oil wells, the teachings of Schultz to use a web interface to view information and control devices in oil wells, and the teachings of Huhn to control actuators using addresses with the teachings of Varnam to use an oil/water sensor would have been recognized by those of ordinary skill in the art as resulting in an improved monitoring and control system (i.e., remote monitoring using various sensors and control of oil wells using actuator addressing of Dwinnell based on the teachings of remote control of oil wells in Schultz, the teachings of controlling actuators using addressing in Huhn, and the teachings of using an oil/water sensor in Varnam).

10. Claim 4 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0161685 (Dwinnell) in view of U.S. Patent Publication No. 2002/0018399 (Schultz) and further in view of U.S. Patent Publication No. 2003/0052180 (Huhn) and U.S. Patent No. 7,967,066 (McStay).

**Claim 4:**

Dwinnell, Schultz, and Huhn do not explicitly describe a leak detector as described below. However, McStay teaches the leak detector as described below.

Dwinnell, Schultz, Huhn, and McStay describe the system of claim 1,

- wherein the sensors include a leak detector at one of the facilities, and **(McStay: see the leak detection sensors 320 as illustrated in figure 3)**
- wherein the datastore includes a record associating the leak detector with the facility. **(see the leak detector in McStay and the association of ventures to wells in Dwinnell; McStay: see the leak detection sensors 320 as illustrated in figure 3; Dwinnell: see the ventures (i.e., facility) and the associated wells (i.e., equipment) as illustrated in figure 6A and as described in paragraph 0067)**

One of ordinary skill in the art would have recognized that applying the known technique of Dwinnell, namely, a web based interface for oil and gas drilling location information, the known techniques of Schultz, namely, a web server based interface for oil well information and control, and the teachings of Huhn, namely, using addresses to control actuators in a process control system, with the teachings of McStay, namely, leak detection in an oil well, would have yielded predictable results and resulted in an improved system. Accordingly, applying the teachings of Dwinnell to provide a web interface for remote viewing of information about oil wells, the teachings of Schultz to use a web interface to view information and control devices in oil wells, and the teachings of Huhn to control actuators using addresses with the teachings of McStay to use a leak detection sensor in an oil well would have been recognized by those of ordinary skill

in the art as resulting in an improved monitoring and control system (i.e., remote monitoring using various sensors and control of oil wells using actuator addressing of Dwinnell based on the teachings of remote control of oil wells in Schultz, the teachings of controlling actuators using addressing in Huhn, and the teachings of using a leak detector in an oil well in McStay).

11. Claims 6 and 15 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0161685 (Dwinnell) in view of U.S. Patent Publication No. 2002/0018399 (Schultz) and further in view of U.S. Patent Publication No. 2003/0052180 (Huhn) and U.S. Patent Publication No. 2002/0156837 (Batke).

**Claim 6:**

Dwinnell, Schultz, and Huhn do not explicitly describe two ports as described below. However, Batke teaches the two ports as described below.

Dwinnell, Schultz, Huhn, and Batke describe the system of claim 5, wherein:

- the web server communicates with user devices via a first network port of a computing device executing the web server; and **(Batke: see the web server communication by the web access interface 30 via the internet interface 32 (i.e., first network port) as illustrated in figure 1 and as described in paragraph 0020; "Referring to FIG. 1, a**

**new industrial control system 100 used to control an industrial process includes a web access interface 30 that is coupled to one or more control devices, which are shown as control devices 110, 120, 130 and 140. The web access interface 30 is capable of communications with one or more remote computer terminals or other remote devices 10 by way of the Internet or World Wide Web (or simply the "web") by way of an Internet interface 32. The web access interface 30 is also coupled to the control devices 110-140 by way of a control network interface 62 having one or more ports, which in this exemplary embodiment are shown to include a first port 60 and a second port 70. Communication links 80 in turn couple the network interface 62 with the control devices 110-140." Paragraph 0020)**

- the site server communicates with facilities via a second network port of the computing device, the second network port being different from the first network port. **(Batke: see the control device 110-140 communication by the web access interface 30 via the control network interface 62 (i.e., second network port) as illustrated in figure 1 and as described in paragraph 0020; "Referring to FIG. 1, a new industrial control system 100 used to control an industrial process includes a web access interface 30 that is coupled to one or more control devices, which are shown as control devices 110, 120, 130 and 140. The web access interface 30 is capable of communications with one or more remote computer terminals or other remote devices 10 by way of the Internet or World Wide Web (or simply the "web") by way of an Internet interface 32. The web access interface 30 is also coupled to the control devices 110-140 by way of a control network interface 62 having one or more ports, which in this exemplary embodiment are shown to include a first port 60 and a second port 70.**

**Communication links 80 in turn couple the network interface 62 with the control devices 110-140." Paragraph 0020)**

One of ordinary skill in the art would have recognized that applying the known technique of Dwinnell, namely, a web based interface for oil and gas drilling location information, the known techniques of Schultz, namely, a web server based interface for oil well information and control, and the teachings of Huhn, namely, using addresses to control actuators in a process control system, with the teachings of Batke, namely, a process control system with a web server, would have yielded predictable results and resulted in an improved system. Accordingly, applying the teachings of Dwinnell to provide a web interface for remote viewing of information about oil wells, the teachings of Schultz to use a web interface to view information and control devices in oil wells, and the teachings of Huhn to control actuators using addresses with the teachings of Batke to have various network configurations for the control device in the control system would have been recognized by those of ordinary skill in the art as resulting in an improved monitoring and control system (i.e., remote monitoring and control of oil wells using actuator addressing and various ports for communication of Dwinnell based on the teachings of remote control of oil wells in Schultz, the teachings of controlling actuators using addressing in Huhn, and the teachings of multiple ports for communication within the process control system in Batke).

**Claim 15:**

Dwinnell, Schultz, and Huhn do not explicitly describe a private network as described below. However, Batke teaches the private network as described below.

Dwinnell, Schultz, Huhn, and Batke describe the system of claim 12, wherein the controller is communicatively coupled to the actuator or sensor via a private local area network.

**(Batke: see the communication links 80 between the web access interface 30 and the control devices 110-140 as illustrated in figure 1 and as described in paragraphs 0020, 0029, 0031; "The communication links 80 can be wire cable, fiber optic or wireless, and are typically a proprietary or specialized network suitable for industrial control." Paragraph 0020)**

Dwinnell, Schultz, Huhn, and Batke are combinable for the same rationale as set forth above with respect to claim 6.

12. Claims 13-14 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0161685 (Dwinnell) in view of U.S. Patent Publication No. 2002/0018399 (Schultz) and further in view of U.S. Patent Publication No. 2003/0052180 (Huhn) and U.S. Patent Publication No. 2005/0084988 (Huang).

**Claim 13:**

Dwinnell, Schultz, and Huhn do not explicitly describe threads as described below. However, Huang teaches the threads as described below.

Dwinnell, Schultz, Huhn, and Huang describe the system of claim 12, comprising at least four of the following as distinct threads from one another:

- a thread configured to sends and receive data requests; **(Huang: see the trace data collection tread receiving start/stop triggered by events from the machine control**

**thread and sending trace data to the trace data store as illustrated in figure 5; "For the status data path 506, an independently executing thread obtains all sensor and/or actuator data from the various I/O module controllers to be passed along to user interface module 508 for display." Paragraph 0075)**

- a thread configured to synchronize other threads with updated information; **(Huang: see the trace data report thread updating the status data collection thread with data from the trace data store and the event driven data as illustrated in figure 5 and as described in paragraph 0076)**
- a thread configured to set a target state of actuators; **(Huang: see the machine control thread as illustrated in figure 5; "In one embodiment, the execution thread for collecting the trace data may have a higher priority even than the control thread that controls the actuators (which is also shown in FIG. 5)." Paragraph 0076)**
- a thread configured to obtain updated sensor readings; **(Huang: see the status data collection thread as illustrated in figure 5; "For the status data path 506, an independently executing thread obtains all sensor and/or actuator data from the various I/O module controllers to be passed along to user interface module 508 for display." Paragraph 0075)**
- a thread configured to process user interactions; and
- a thread that eliminates other threads upon detecting a problem with the eliminated threads.

One of ordinary skill in the art would have recognized that applying the known technique of Dwinnell, namely, a web based interface for oil and gas drilling location information, the known techniques of Schultz, namely, a web server based interface for oil well information and control,

and the teachings of Huhn, namely, using addresses to control actuators in a process control system, with the teachings of Huang, namely, using various threads in a process control system, would have yielded predictable results and resulted in an improved system. Accordingly, applying the teachings of Dwinnell to provide a web interface for remote viewing of information about oil wells, the teachings of Schultz to use a web interface to view information and control devices in oil wells, and the teachings of Huhn to control actuators using addresses with the teachings of Huang to use various threads in a process control system would have been recognized by those of ordinary skill in the art as resulting in an improved monitoring and control system (i.e., remote monitoring and control of oil wells using actuator addressing and various threads for control of Dwinnell based on the teachings of remote control of oil wells in Schultz, the teachings of controlling actuators using addressing in Huhn, and the teachings of using various threads for control in a process control system in Huang).

**Claim 14:**

Dwinnell, Schultz, and Huhn do not explicitly describe threads as described below. However, Huang teaches the threads as described below.

Dwinnell, Schultz, Huhn, and Huang describe the system of claim 12, comprising at least two of the following as distinct threads from one another:

- a thread configured to sends or receive data request; **(Huang: see the trace data collection tread receiving start/stop triggered by events from the machine control thread and sending trace data to the trace data store as illustrated in figure 5; "For the status data path 506, an independently executing thread obtains all sensor**

**and/or actuator data from the various I/O module controllers to be passed along to user interface module 508 for display." Paragraph 0075)**

- a thread configured to synchronize other threads with updated information; **(Huang: see the trace data report thread updating the status data collection thread with data from the trace data store and the event driven data as illustrated in figure 5 and as described in paragraph 0076)**
- a thread configured to set a target state of actuators; **(Huang: see the machine control thread as illustrated in figure 5; "In one embodiment, the execution thread for collecting the trace data may have a higher priority even than the control thread that controls the actuators (which is also shown in FIG. 5)." Paragraph 0076)**
- a thread configured to obtain updated sensor readings; **(Huang: see the status data collection thread as illustrated in figure 5; "For the status data path 506, an independently executing thread obtains all sensor and/or actuator data from the various I/O module controllers to be passed along to user interface module 508 for display." Paragraph 0075)**
- a thread configured to process user interactions; and
- a thread that eliminates other threads upon detecting a problem with the eliminated threads.

Dwinnell, Schultz, Huhn, and Haung are combinable for the same rationale as set forth above with respect to claim 13.

13. Claim 16 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0161685 (Dwinnell) in view of U.S. Patent Publication No. 2002/0018399 (Schultz) and further in view of U.S. Patent Publication No. 2003/0052180 (Huhn) and U.S. Patent Publication No. 2011/0051645 (Hong).

**Claim 16:**

Dwinnell, Schultz, and Huhn do not explicitly describe checking validity as described below. However, Hong teaches the checking validity as described below.

Dwinnell, Schultz, Huhn, and Hong describe the system of claim 12, wherein controller is communicatively coupled to the actuator or sensor via a frame-based carrier-sense multiple access protocol with collision detection. **(see the controller in Dwinnell and the CSMA communication in Hong; Hong: "The node sensed collision and the nodes transmitted signals to the node sensed collision transmit data packets using a Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA) technique, which uses RTS/CTS for avoiding collision. Therefore, the nodes transmitted the signals check if the signals they transmitted collide in the upper node through a signal overhearing period. When a collision signal is detected, the nodes perform a channel allocation operation using the RTS/CTS packet in the data transmission period." Paragraph 0083; Dwinnell: "The remote site system 101 comprises a remote site video and data capture server 202 (hereinafter referred to as a remote site capture server 202 or "RSCS 202") in electronic communication with a plurality of cameras 205 positioned strategically about the remote site." Paragraph 0039)**

One of ordinary skill in the art would have recognized that applying the known technique of Dwinnell, namely, a web based interface for oil and gas drilling location information, the known techniques of Schultz, namely, a web server based interface for oil well information and control, and the teachings of Huhn, namely, using addresses to control actuators in a process control system, with the teachings of Hong ,namely, using various communication techniques in a sensor network, would have yielded predictable results and resulted in an improved system. Accordingly, applying the teachings of Dwinnell to provide a web interface for remote viewing of information about oil wells, the teachings of Schultz to use a web interface to view information and control devices in oil wells, and the teachings of Huhn to control actuators using addresses with the teachings of using various communication techniques in a sensor network to Hong would have been recognized by those of ordinary skill in the art as resulting in an improved monitoring and control system (i.e., remote monitoring and control of oil wells using actuator addressing and various communication techniques of Dwinnell based on the teachings of remote control of oil wells in Schultz, the teachings of controlling actuators using addressing in Huhn, and the teachings of using CSMA by sensors in Hong).

## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER E EVERETT whose telephone number is (571)272-2851. The examiner can normally be reached on Monday-Friday 8:00 am to 5:00 pm (Eastern).

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, Kenneth Lo can be reached on 571-272-9774. 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.

/Christopher E. Everett/
Primary Examiner, Art Unit 2116

| Notice of References Cited | Application/Control No. 16/656,319 | Applicant(s)/Patent Under Reexamination Phillips, Aaron | |
|---|---|---|---|
| | Examiner CHRISTOPHER E EVERETT | Art Unit 2116 | Page 1 of 1 |

**U.S. PATENT DOCUMENTS**

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | CPC Classification | US Classification |
|---|---|---|---|---|---|---|
| * | A | US-20020161685-A1 | 10-2002 | Dwinnell, Michael | G06Q40/06 | 705/36R |
| * | B | US-20020018399-A1 | 02-2002 | Schultz, Roger L. | G01V11/002 | 367/81 |
| * | C | US-20030052180-A1 | 03-2003 | Huhn, Scott G. | H04L29/12254 | 236/49.3 |
| * | D | US-6967589-B1 | 11-2005 | Peters; George W. | E21B47/00 | 166/250.15 |
| * | E | US-5149443-A | 09-1992 | Varnam; O'Neal | B01D17/0214 | 210/739 |
| * | F | US-7967066-B2 | 06-2011 | McStay; Daniel | E21B33/0355 | 166/250.01 |
| * | G | US-20020156837-A1 | 10-2002 | Batke, Brian A. | H04L69/08 | 709/203 |
| * | H | US-20050084988-A1 | 04-2005 | Huang, Chung-Ho | H01J37/32935 | 438/9 |
| * | I | US-20110051645-A1 | 03-2011 | HONG; Seung Ki | H04W40/005 | 370/311 |
| | J | | | | | |
| | K | | | | | |
| | L | | | | | |
| | M | | | | | |

**FOREIGN PATENT DOCUMENTS**

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Country | Name | CPC Classification |
|---|---|---|---|---|---|---|
| | N | | | | | |
| | O | | | | | |
| | P | | | | | |
| | Q | | | | | |
| | R | | | | | |
| | S | | | | | |
| | T | | | | | |

**NON-PATENT DOCUMENTS**

| * | | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
|---|---|---|
| | U | |
| | V | |
| | W | |
| | X | |

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

| Search Notes | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|---|---|---|
| | 16/656,319 | Phillips, Aaron |
| | Examiner | Art Unit |
| | CHRISTOPHER E EVERETT | 2116 |

| CPC - Searched* | | |
|---|---|---|
| Symbol | Date | Examiner |
| G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472 | 02/18/2021 | CEE |

| 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.

| Search Notes | | |
|---|---|---|
| Search Notes | Date | Examiner |
| Search of G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472 using text searches | 02/18/2021 | CEE |
| Search of 700/1,282,275,281,42 using text searches | 02/18/2021 | CEE |
| Review of file histories and search histories for parent application nos . 13/708557; 14/147190; 14/984422; 15/867077 | 02/18/2021 | CEE |
| Search of DAV using inventor search | 02/18/2021 | CEE |
| Search of PE2E Search using inventor, applicant, and text searches | 02/18/2021 | CEE |
| Search of Google patent using text searches | 02/18/2021 | CEE |
| Search of Google scholar using text searches | 02/18/2021 | CEE |

| /Christopher E. Everett/<br>Primary Examiner, Art Unit 2116 | |
|---|---|

| Search Notes | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|---|---|---|
| | 16/656,319 | Phillips, Aaron |
| | Examiner | Art Unit |
| | CHRISTOPHER E EVERETT | 2116 |

| Interference Search | | | |
|---|---|---|---|
| US Class/CPC Symbol | US Subclass/CPC Group | Date | Examiner |
| | | | |

| | |
|---|---|
| /Christopher E. Everett/<br>Primary Examiner, Art Unit 2116 | |

## PE2E SEARCH - Search History (Prior Art)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | British Equivalents | Time Stamp |
|---|---|---|---|---|---|---|---|
| L1 | 11 | ("20020161685"\|"20020169645"\|"20030004624"\|"20030182463"\|"20040088115"\|"20040231851"\|"20050108504"\|"20060240818"\|"20080208475"\|"20100295673"\|"20120316658").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 08:35 AM |
| L2 | 34 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2013/02/22 08:35 AM |
| L3 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2013/02/22 08:35 AM |
| L4 | 0 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2013/02/22 08:36 AM |
| L5 | 5 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2013/02/22 08:39 AM |
| L6 | 1 | ("20060149476").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 08:39 AM |
| L7 | 1 | ("20060271299").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 08:40 AM |
| L8 | 1 | ("20030065447").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 08:40 AM |
| L9 | 1 | ("4594665").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 08:40 AM |
| L10 | 1 | ("20050092523").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 08:42 AM |
| L11 | 1 | ("20060047527").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 08:42 AM |
| L12 | 53 | L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 08:54 AM |
| L13 | 17 | (US-20090260829-$ or US-20020112860-$ or US-20040262008-$ or US-20070107903-$ or US-20040251030-$).did. or (US-7000693-$ or US-6420976-$ or US- | EPO; JPO; DERWENT | OR | ON | ON | 2013/02/22 09:01 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7967066-$ or US-RE41173-$ or US-7148812-$ or US-6768700-$ or US-7845404-$ or US-6913083-$ or US-4636934-$ or US-5732776-$ or US-4052703-$ or US-7958938-$ or US-4755943-$).did. | | | | | |
| L14 | 1 | ("7261162").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 09:05 AM |
| L15 | 62 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2013/02/22 09:05 AM |
| L16 | 1 | ("20040262008").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 09:05 AM |
| L17 | 1 | ("7148812").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 09:08 AM |
| L18 | 1 | ("7958938").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 09:08 AM |
| L19 | 1 | ("7967066").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 09:08 AM |
| L20 | 1 | ("7845404").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 09:08 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L21 | 1 | ("6913083").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 09:09 AM |
| L22 | 1 | ("20020112860").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 09:09 AM |
| L23 | 1 | ("5732776").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 09:10 AM |
| L24 | 1 | ("4052703").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/22 09:11 AM |
| L25 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/25 03:50 PM |
| L26 | 0 | L25 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/25 03:50 PM |
| L27 | 7 | L25 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/25 03:51 PM |
| L28 | 4518 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/25 03:52 PM |
| L29 | 2295 | L28 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/25 03:53 PM |
| L30 | 839 | L29 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/25 03:53 PM |
| L31 | 239 | L30 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/25 03:54 PM |
| L32 | 2 | L31 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/25 03:54 PM |
| L33 | 4284 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:07 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L34 | 5841 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:07 AM |
| L35 | 18470 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:07 AM |
| L36 | 767 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:07 AM |
| L37 | 463 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:08 AM |
| L38 | 29579 | L33 L34 L35 L36 L37 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:08 AM |
| L39 | 168445 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:08 AM |
| L40 | 2119066 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:10 AM |
| L41 | 1404 | L38 and L39 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:10 AM |
| L42 | 1837654 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:11 AM |
| L43 | 579 | L41 and (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:11 AM |
| L44 | 15604 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:12 AM |
| L45 | 642 | L40 and L41 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:12 AM |
| L46 | 315 | L45 and L42 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:12 AM |
| L47 | 337 | L39 and L44 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:12 AM |
| L48 | 6 | L46 and L47 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:12 AM |
| L49 | 2 | ("2010/0147510").URPN. | USPAT | OR | ON | ON | 2013/02/26 10:13 AM |
| L50 | 62 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2013/02/26 10:14 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | | | | | |
| L51 | 11 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2013/02/26 10:18 AM |
| L52 | 10 | L39 and L44 and L38 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:21 AM |
| L53 | 337 | L39 and L44 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:22 AM |
| L54 | 203 | L53 and (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:22 AM |
| L55 | 387 | (local autonomous independent) and L45 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:25 AM |
| L56 | 381 | L55 not L54 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:25 AM |
| L57 | 501662 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:28 AM |
| L58 | 8886 | L57 and L39 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:29 AM |
| L59 | 106 | L58 and L44 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/02/26 10:29 AM |
| L60 | 44 | ("20030004624"\|"2004008 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/11 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8115"\|"20100147510"\|"57<br>32776"\|"7931090"\|"79670<br>66"\|"8312320"\|"20130144<br>531"\|"8301386"\|"2005010<br>8504"\|"20100295673"\|"20<br>110231024"\|"6061603"\|"8<br>386059"\|"20100098507"\|"<br>20030182463"\|"4052703"\|<br>"6192980"\|"7958938"\|"83<br>73418"\|"20130024026"\|"2<br>0040231851"\|"200602408<br>18"\|"7148812"\|"7289994"\|<br>"20120316658"\|"2004026<br>2008"\|"7921916"\|"813151<br>0"\|"8290737"\|"201003266<br>54"\|"20020161685"\|"2009<br>0149969"\|"7845404"\|"817<br>9279"\|"20020112860"\|"20<br>050096846"\|"5149443"\|"6<br>801135"\|"6913083"\|"2013<br>0008645"\|"20020169645"\|<br>"20080208475"\|"7591308<br>").PN. | | | | | 01:22 PM |
| L61 | 37 | (US-20040262008-$ or<br>US-20020112860-$ or<br>US-20090149969-$ or<br>US-20100147510-$ or<br>US-20050096846-$ or<br>US-20110231024-$ or<br>US-20120316658-$ or<br>US-20080208475-$ or<br>US-20060271299-$ or<br>US-20060240818-$ or<br>US-20050092523-$ or<br>US-20040231851-$ or<br>US-20040088115-$ or<br>US-20030182463-$ or<br>US-20020169645-$ or<br>US-20020161685-$).did.<br>or (US-7148812-$ or US-<br>7958938-$ or US-<br>7967066-$ or US-<br>7845404-$ or US-<br>6913083-$ or US-<br>5732776-$ or US-<br>4052703-$ or US-<br>8179279-$ or US-<br>5149443-$ or US-<br>8386059-$ or US-<br>8131510-$ or US-<br>7289994-$ or US-<br>8373418-$ or US-<br>8312320-$ or US-<br>8290737-$ or US-<br>7931090-$ or US-<br>7921916-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12<br>07:58 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 6801135-$ or US-6061603-$ or US-6192980-$).did. or (WO-2008124765-$).did. | | | | | |
| L62 | 0 | L61 and oscillate | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 07:58 AM |
| L63 | 1 | L61 and (stuck adj3 valve) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 07:59 AM |
| L64 | 4400 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:10 AM |
| L65 | 5969 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:10 AM |
| L66 | 19220 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:10 AM |
| L67 | 804 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:10 AM |
| L68 | 475 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:10 AM |
| L69 | 30612 | L64 L65 L66 L67 L68 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:10 AM |
| L70 | 172242 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:10 AM |
| L71 | 241 | L69 and L70 and "240" | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:10 AM |
| L72 | 2175607 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:11 AM |
| L73 | 664 | L69 and L70 and L72 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:11 AM |
| L74 | 6 | L73 and (inoperative in-operative stuck) adj3 (valve part) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:11 AM |
| L75 | 94 | L70 and (stuck) adj3 (valve) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:14 AM |
| L76 | 94 | L70 and ((stuck) adj3 (valve)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:14 AM |
| L77 | 109 | L70 and ((frozen froze stuck) adj3 (valve)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:19 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L78 | 12 | ((move jerk oscillate move) near2 ((frozen froze stuck) adj3 (valve))) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:21 AM |
| L79 | 1 | ("4823749").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 08:22 AM |
| L80 | 1 | ("20010032518").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 10:53 AM |
| L81 | 35 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2013/06/12 11:14 AM |
| L82 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2013/06/12 11:14 AM |
| L83 | 0 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2013/06/12 11:14 AM |
| L84 | 5 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2013/06/12 11:14 AM |
| L85 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L86 | 0 | L85 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L87 | 7 | L85 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L88 | 4795 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L89 | 2432 | L88 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L90 | 889 | L89 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L91 | 246 | L90 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L92 | 2 | L91 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L93 | 1458 | L69 and L70 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L94 | 1900176 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L95 | 16083 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L96 | 664 | L72 and L93 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L97 | 327 | L96 and L94 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L98 | 343 | L70 and L95 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L99 | 6 | L97 and L98 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L100 | 10 | L70 and L95 and L69 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L101 | 528886 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L102 | 9459 | L101 and L70 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L103 | 110 | L102 and L95 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L104 | 158 | L81 L82 L83 L84 L86 L87 L92 L99 L100 L103 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/06/12 11:14 AM |
| L105 | 16 | ("2004/0262008").URPN. | USPAT | OR | ON | ON | 2013/10/25 12:32 PM |
| L106 | 9 | ("20040262008" \| "20050035875" \| | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2013/10/25 12:39 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | "4701756" \| "5959547" \| "6229453" \| "6816082").PN. OR ("7148812").URPN. | | | | | |
| L107 | 1 | ("5959547").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:45 PM |
| L108 | 4578 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L109 | 6150 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L110 | 20349 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L111 | 850 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L112 | 486 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L113 | 32148 | L108 L109 L110 L111 L112 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L114 | 177528 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L115 | 2253717 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L116 | 36 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2013/10/25 12:46 PM |
| L117 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2013/10/25 12:46 PM |
| L118 | 0 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2013/10/25 12:46 PM |
| L119 | 5 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2013/10/25 12:46 PM |
| L120 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L121 | 0 | L120 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L122 | 7 | L120 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L123 | 4935 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L124 | 2501 | L123 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L125 | 917 | L124 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L126 | 257 | L125 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L127 | 2 | L126 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L128 | 1540 | L113 and L114 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L129 | 1987225 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L130 | 16785 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L131 | 707 | L115 and L128 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L132 | 351 | L131 and L129 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L133 | 357 | L114 and L130 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L134 | 6 | L132 and L133 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L135 | 10 | L114 and L130 and L113 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L136 | 553323 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L137 | 9948 | L136 and L114 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L138 | 117 | L137 and L130 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L139 | 166 | L116 L117 L118 L119 L121 L122 L127 L134 L135 L138 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L140 | 166 | L139 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2013/10/25 12:46 PM |
| L144 | 4914 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L145 | 6494 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L146 | 22712 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L147 | 948 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L148 | 511 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L149 | 35297 | L144 L145 L146 L147 L148 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L150 | 188122 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L151 | 2416039 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L152 | 38 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2014/07/22 04:19 PM |
| L153 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2014/07/22 04:19 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L154 | 2 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2014/07/22 04:19 PM |
| L155 | 5 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2014/07/22 04:19 PM |
| L156 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L157 | 0 | L156 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L158 | 7 | L156 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L159 | 5262 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L160 | 2663 | L159 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L161 | 969 | L160 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L162 | 268 | L161 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L163 | 4 | L162 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L164 | 1686 | L149 and L150 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L165 | 2171012 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L166 | 18312 | (local autonomous | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | | | | | 04:19 PM |
| L167 | 776 | L151 and L164 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L168 | 390 | L167 and L165 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L169 | 383 | L150 and L166 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L170 | 8 | L168 and L169 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L171 | 12 | L150 and L166 and L149 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L172 | 605853 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L173 | 10936 | L172 and L150 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L174 | 129 | L173 and L166 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L175 | 178 | L152 L153 L154 L155 L157 L158 L163 L170 L171 L174 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L176 | 178 | L175 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L177 | 178 | L176 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:19 PM |
| L178 | 2489 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:20 PM |
| L179 | 645 | L178 and L150 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:28 PM |
| L180 | 452 | L179 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:28 PM |
| L182 | 15 | L180 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:28 PM |
| L183 | 16 | L178 and L166 and L165 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | 04:29 PM |
| L184 | 204 | L182 L183 L177 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2014/07/22 04:29 PM |
| L185 | 23 | ("4007450" \| "4888726" \| "5560005" \| "5724575" \| "5828851" \| "5838563" \| "5845230" \| "5956483" \| "6000045" \| "6131120" \| "6263487" \| "6701437" \| "6799077").PN. OR ("7289994").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2015/02/23 04:41 PM |
| L186 | 1 | ("20090055029").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 02:23 PM |
| L187 | 46 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 02:45 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L188 | 2 | L187 and pid | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 02:45 PM |
| L189 | 5307 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L190 | 6733 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L191 | 24915 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L192 | 1044 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L193 | 530 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L194 | 38241 | L189 L190 L191 L192 L193 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L195 | 197343 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L196 | 2561451 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L197 | 39 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2015/03/06 04:10 PM |
| L198 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2015/03/06 04:10 PM |
| L199 | 2 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2015/03/06 04:10 PM |
| L200 | 6 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2015/03/06 04:10 PM |
| L201 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L202 | 0 | L201 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L203 | 7 | L201 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L204 | 5538 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L205 | 2804 | L204 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L206 | 1031 | L205 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L207 | 287 | L206 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L208 | 4 | L207 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L209 | 1822 | L194 and L195 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L210 | 2334181 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L211 | 19758 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L212 | 846 | L196 and L209 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L213 | 432 | L212 and L210 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L214 | 411 | L195 and L211 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L215 | 10 | L213 and L214 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L216 | 17 | L195 and L211 and L194 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L217 | 652812 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L218 | 11860 | L217 and L195 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L219 | 139 | L218 and L211 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L220 | 192 | L197 L198 L199 L200 L202 L203 L208 L215 L216 L219 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L221 | 192 | L220 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L222 | 192 | L221 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L223 | 2737 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L224 | 706 | L223 and L195 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L225 | 492 | L224 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L226 | 16 | L225 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L227 | 16 | L223 and L211 and L210 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L228 | 219 | L226 L227 L222 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L229 | 219 | L228 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/03/06 04:10 PM |
| L230 | 5577 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L231 | 6864 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L232 | 25873 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L233 | 1107 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L234 | 547 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L235 | 39674 | L230 L231 L232 L233 L234 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L236 | 205047 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L237 | 2685982 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L238 | 43 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2015/09/21 08:46 AM |
| L239 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2015/09/21 08:46 AM |
| L240 | 3 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2015/09/21 08:46 AM |
| L241 | 6 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2015/09/21 08:46 AM |
| L242 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L243 | 0 | L242 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L244 | 7 | L242 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L245 | 5794 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L246 | 2926 | L245 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L247 | 1087 | L246 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L248 | 297 | L247 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L249 | 4 | L248 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L250 | 1898 | L235 and L236 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L251 | 2471267 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L252 | 21038 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L253 | 891 | L237 and L250 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L254 | 452 | L253 and L251 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L255 | 430 | L236 and L252 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L256 | 10 | L254 and L255 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L257 | 17 | L236 and L252 and L235 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L258 | 692562 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L259 | 12566 | L258 and L236 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L260 | 153 | L259 and L252 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L261 | 210 | L238 L239 L240 L241 L243 L244 L249 L256 L257 L260 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L262 | 210 | L261 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L263 | 210 | L262 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L264 | 2965 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L265 | 752 | L264 and L236 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L266 | 523 | L265 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L267 | 16 | L266 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L268 | 18 | L264 and L252 and L251 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L269 | 239 | L267 L268 L263 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L270 | 239 | L269 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L271 | 239 | L270 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2015/09/21 08:46 AM |
| L276 | 6137 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L277 | 7043 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L278 | 26619 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L279 | 1160 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L280 | 554 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L281 | 41214 | L276 L277 L278 L279 L280 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L282 | 223345 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (well site disposal station) | | | | | |
| L283 | 2986529 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L284 | 60 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2016/12/07 04:13 PM |
| L285 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2016/12/07 04:13 PM |
| L286 | 7 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2016/12/07 04:13 PM |
| L287 | 7 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2016/12/07 04:13 PM |
| L288 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L289 | 0 | L288 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L290 | 7 | L288 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L291 | 6407 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L292 | 3258 | L291 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L293 | 1220 | L292 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L294 | 338 | L293 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | 04:13 PM |
| L295 | 6 | L294 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L296 | 2046 | L281 and L282 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L297 | 2802086 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L298 | 24197 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L299 | 976 | L283 and L296 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L300 | 511 | L299 and L297 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L301 | 499 | L282 and L298 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L302 | 15 | L300 and L301 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L303 | 22 | L282 and L298 and L281 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L304 | 788452 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L305 | 14396 | L304 and L282 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L306 | 185 | L305 and L298 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L307 | 262 | L284 L285 L286 L287 L289 L290 L295 L302 L303 L306 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L308 | 262 | L307 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L309 | 262 | L308 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L310 | 3692 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/234 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 72.cpc. | | | | | |
| L311 | 1005 | L310 and L282 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L312 | 680 | L311 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L313 | 20 | L312 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L314 | 22 | L310 and L298 and L297 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L315 | 293 | L313 L314 L309 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L316 | 293 | L315 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L317 | 293 | L316 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L318 | 293 | L317 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L319 | 81003 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:13 PM |
| L320 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:13 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L321 | 4 | L320 and (network adj2 (address addresses)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:19 PM |
| L322 | 2 | ("20020018399").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:26 PM |
| L323 | 13 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2016/12/07 04:27 PM |
| L324 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/07 04:28 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L325 | 29 | L324 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:28 PM |
| L326 | 12 | L325 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:29 PM |
| L327 | 2 | ("7096092").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | OFF | OFF | 2016/12/07 04:29 PM |
| L328 | 1 | ("6967589").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:31 PM |
| L329 | 91 | ("5438329" \| "5717718" \| "5963650" \| "6062095" \| "6169488" \| "6305471" \| "6356205" \| "6369715" \| "6574652" \| "6693553" \| "6795319").PN. OR ("6967589").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2016/12/07 04:32 PM |
| L330 | 47 | L329 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:33 PM |
| L331 | 23 | L330 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:33 PM |
| L332 | 2 | ("20090055029").PN. | US-PGPUB; USPAT; | OR | ON | ON | 2016/12/07 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | FPRS; EPO | | | | 04:34 PM |
| L333 | 2 | ("20100033318").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/07 04:35 PM |
| L334 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/08 12:05 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L335 | 20 | L334 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 12:05 PM |
| L336 | 13 | L335 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 12:22 PM |
| L337 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | US-PGPUB; USPAT | OR | ON | ON | 2016/12/08 12:28 PM |
| L338 | 24 | L337 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:31 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L339 | 17 | L337 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:31 PM |
| L340 | 13 | L338 and L339 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:32 PM |
| L341 | 2230 | (web html) near4 (control controlling) near4 (actuator controller valve) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:48 PM |
| L342 | 6137 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/08 01:48 PM |
| L343 | 7043 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/08 01:48 PM |
| L344 | 26619 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/08 01:48 PM |
| L345 | 1160 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/08 01:48 PM |
| L346 | 554 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/08 01:48 PM |
| L347 | 41214 | L342 L343 L344 L345 L346 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/08 01:48 PM |
| L348 | 81068 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:48 PM |
| L349 | 120388 | L348 L347 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:48 PM |
| L350 | 155 | L341 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:49 PM |
| L351 | 145 | L349 and L341 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:53 PM |
| L352 | 387 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:53 PM |
| L353 | 20 | L349 and L352 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:54 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L354 | 19 | L352 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:54 PM |
| L355 | 34 | L353 L354 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 01:54 PM |
| L356 | 2 | ("20020018399").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/08 02:01 PM |
| L357 | 1 | ("5805926").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 08:48 AM |
| L358 | 2 | ("20030052180").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 08:55 AM |
| L359 | 1 | ("6967589").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 10:24 AM |
| L360 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2016/12/09 11:51 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L361 | 2 | L360 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 11:51 AM |
| L362 | 2 | L360 and (leak adj4 sensor) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 11:51 AM |
| L363 | 8 | L360 and (private) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 11:52 AM |
| L364 | 6 | L360 and (carrier) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 11:52 AM |
| L365 | 2 | L360 and (validity) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 11:52 AM |
| L366 | 1 | ("20020156837").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 12:11 PM |
| L367 | 1 | ("6799195").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | OFF | OFF | 2016/12/09 12:15 PM |
| L368 | 2 | ("20110051645").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 12:34 PM |
| L369 | 3 | ("5546301").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 12:55 PM |
| L370 | 127 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2016/12/09 12:55 PM |
| L371 | 21 | L370 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 12:55 PM |
| L372 | 38793 | (thread near4 (actuator sensor gui synchronize data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 01:00 PM |
| L373 | 6873 | (thread near4 (actuator | US-PGPUB; USPAT; | OR | ON | ON | 2016/12/09 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | sensor gui synchronize data)).ab. | FPRS; EPO | | | | 01:00 PM |
| L374 | 6416 | (thread near4 (actuator sensor gui synchronize data)).clm. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 01:00 PM |
| L375 | 38793 | L372 L373 L374 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 01:00 PM |
| L376 | 11652 | L373 L374 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 01:01 PM |
| L377 | 625 | L375 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 01:01 PM |
| L378 | 157 | L376 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 01:01 PM |
| L379 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 01:02 PM |
| L380 | 144 | (thread near4 (actuator and sensor)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 01:02 PM |
| L381 | 10 | L380 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2016/12/09 01:02 PM |
| L382 | 10 | ("6249241"\|"5819271"\|"6810386"\|"5805082"\|"5875305"\|"6208938").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 12:39 PM |
| L383 | 1 | ("6665568").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:01 PM |
| L384 | 10 | ("5973696" \| "5982362" \| "6138150" \| "6170007" \| "6201996" \| "6311101").PN. OR ("6665568").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2017/03/23 02:15 PM |
| L385 | 6148 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L386 | 7044 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L387 | 26644 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L388 | 1160 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L389 | 554 | 340/853.3,853.2,856.3.ccl | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | s. | | | | | 02:18 PM |
| L390 | 41251 | L385 L386 L387 L388 L389 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L391 | 227637 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L392 | 3060500 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L393 | 62 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2017/03/23 02:18 PM |
| L394 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2017/03/23 02:18 PM |
| L395 | 9 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2017/03/23 02:18 PM |
| L396 | 8 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2017/03/23 02:18 PM |
| L397 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L398 | 0 | L397 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L399 | 7 | L397 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L400 | 6555 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L401 | 3329 | L400 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L402 | 1245 | L401 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L403 | 342 | L402 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L404 | 6 | L403 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L405 | 2046 | L390 and L391 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L406 | 2883167 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L407 | 24993 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L408 | 976 | L392 and L405 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L409 | 511 | L408 and L406 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L410 | 514 | L391 and L407 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L411 | 15 | L409 and L410 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L412 | 22 | L391 and L407 and L390 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L413 | 812457 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L414 | 14890 | L413 and L391 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L415 | 190 | L414 and L407 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L416 | 269 | L393 L394 L395 L396 L398 L399 L404 L411 L412 L415 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L417 | 3859 | G05D7/0676;G05B9/02;E | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 21B47/00;G05B2219/23472.cpc. | | | | | 02:18 PM |
| L418 | 22 | L417 and L407 and L406 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L419 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L420 | 4 | L419 and (network adj2 (address addresses)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L421 | 47 | (US-20120316658-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | 02:18 PM |
| L422 | 29 | L421 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L423 | 12 | L422 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L424 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L425 | 20 | L424 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L426 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or | US-PGPUB; USPAT | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L427 | 24 | L426 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L428 | 17 | L426 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L429 | 13 | L427 and L428 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L430 | 6148 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L431 | 7044 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | 02:18 PM |
| L432 | 26644 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L433 | 1160 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L434 | 554 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L435 | 41251 | L430 L431 L432 L433 L434 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L436 | 86021 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L437 | 125354 | L436 L435 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L438 | 394 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L439 | 20 | L437 and L438 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L440 | 19 | L438 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L441 | 34 | L439 L440 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L442 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L443 | 2 | L442 and (leak adj4 sensor) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L444 | 8 | L442 and (private) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L445 | 6 | L442 and (carrier) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L446 | 2 | L442 and (validity) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L447 | 129 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2017/03/23 02:18 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L448 | 21 | L447 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L449 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L450 | 146 | (thread near4 (actuator and sensor)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L451 | 10 | L450 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L452 | 405 | L416 L449 L451 L448 L443 L444 L445 L446 L441 L440 L439 L429 L428 L427 L425 L420 L422 L423 L418 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/03/23 02:18 PM |
| L453 | 6153 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L454 | 7048 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L455 | 26662 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L456 | 1163 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L457 | 554 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L458 | 41281 | L453 L454 L455 L456 L457 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L459 | 235216 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L460 | 3192542 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L461 | 65 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2017/09/26 08:06 AM |
| L462 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2017/09/26 08:06 AM |
| L463 | 11 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2017/09/26 08:06 AM |
| L464 | 8 | real-time and onsite and | EPO; JPO; DERWENT | OR | ON | ON | 2017/09/26 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | internet and communication | | | | | 08:06 AM |
| L465 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L466 | 0 | L465 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L467 | 7 | L465 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L468 | 6830 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L469 | 3457 | L468 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L470 | 1296 | L469 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L471 | 352 | L470 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L472 | 6 | L471 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L473 | 2051 | L458 and L459 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L474 | 3028538 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L475 | 26427 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L476 | 977 | L460 and L473 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L477 | 513 | L476 and L474 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L478 | 540 | L459 and L475 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L479 | 15 | L477 and L478 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L480 | 22 | L459 and L475 and L458 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L481 | 855191 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L482 | 15715 | L481 and L459 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L483 | 201 | L482 and L475 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L484 | 283 | L461 L462 L463 L464 L466 L467 L472 L479 L480 L483 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L485 | 4113 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L486 | 22 | L485 and L475 and L474 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L487 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L488 | 4 | L487 and (network adj2 (address addresses)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L489 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L490 | 29 | L489 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L491 | 12 | L490 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L492 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L493 | 20 | L492 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L494 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US- | US-PGPUB; USPAT | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L495 | 24 | L494 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L496 | 17 | L494 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L497 | 13 | L495 and L496 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L498 | 6153 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L499 | 7048 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L500 | 26662 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L501 | 1163 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L502 | 554 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L503 | 41281 | L498 L499 L500 L501 L502 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L504 | 92435 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L505 | 131779 | L504 L503 | US-PGPUB; USPAT; | OR | ON | ON | 2017/09/26 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | FPRS; EPO | | | | 08:06 AM |
| L506 | 401 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L507 | 21 | L505 and L506 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L508 | 19 | L506 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L509 | 35 | L507 L508 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L510 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2017/09/26 08:06 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L511 | 2 | L510 and (leak adj4 sensor) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L512 | 8 | L510 and (private) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L513 | 6 | L510 and (carrier) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L514 | 2 | L510 and (validity) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L515 | 130 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2017/09/26 08:06 AM |
| L516 | 22 | L515 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L517 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L518 | 152 | (thread near4 (actuator and sensor)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L519 | 10 | L518 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L520 | 421 | L484 L517 L519 L516 L511 L512 L513 L514 L509 L508 L507 L497 L496 L495 L493 L488 L490 L491 L486 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L521 | 421 | L520 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2017/09/26 08:06 AM |
| L526 | 6162 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L527 | 7047 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L528 | 26678 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L529 | 1163 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L530 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L531 | 41304 | L526 L527 L528 L529 L530 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L532 | 255944 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L533 | 3560512 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L534 | 80 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2019/02/25 11:11 AM |
| L535 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2019/02/25 11:11 AM |
| L536 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2019/02/25 11:11 AM |
| L537 | 8 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2019/02/25 11:11 AM |
| L538 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L539 | 0 | L538 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L540 | 7 | L538 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L541 | 7529 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L542 | 3807 | L541 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L543 | 1433 | L542 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L544 | 390 | L543 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L545 | 6 | L544 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L546 | 2051 | L531 and L532 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L547 | 3428769 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L548 | 31081 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L549 | 979 | L533 and L546 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L550 | 514 | L549 and L547 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L551 | 709 | L532 and L548 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L552 | 16 | L550 and L551 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L553 | 23 | L532 and L548 and L531 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L554 | 975821 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L555 | 18051 | L554 and L532 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L556 | 286 | L555 and L548 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L557 | 381 | L534 L535 L536 L537 L539 L540 L545 L552 L553 L556 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L558 | 5106 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L559 | 34 | L558 and L548 and L547 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L560 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L561 | 4 | L560 and (network adj2 (address addresses)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L562 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L563 | 29 | L562 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L564 | 12 | L563 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L565 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L566 | 20 | L565 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L567 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | US-PGPUB; USPAT | OR | ON | ON | 2019/02/25 11:11 AM |
| L568 | 24 | L567 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L569 | 17 | L567 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L570 | 13 | L568 and L569 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L571 | 6162 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L572 | 7047 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L573 | 26678 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L574 | 1163 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L575 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L576 | 41304 | L571 L572 L573 L574 L575 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L577 | 113460 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L578 | 152783 | L577 L576 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L579 | 428 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L580 | 22 | L578 and L579 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L581 | 19 | L579 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L582 | 36 | L580 L581 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L583 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L584 | 2 | L583 and (leak adj4 sensor) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L585 | 8 | L583 and (private) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L586 | 6 | L583 and (carrier) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L587 | 2 | L583 and (validity) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L588 | 137 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2019/02/25 11:11 AM |
| L589 | 23 | L588 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L590 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L591 | 163 | (thread near4 (actuator and sensor)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L592 | 10 | L591 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L593 | 531 | L557 L590 L592 L589 L584 L585 L586 L587 L582 L581 L580 L570 L569 L568 L566 L561 L563 L564 L559 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/02/25 11:11 AM |
| L594 | 531 | L593 | US-PGPUB; USPAT; FPRS; EPO; DERWENT | OR | ON | ON | 2019/02/25 11:11 AM |
| L595 | 6159 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L596 | 7059 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L597 | 26673 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L598 | 1163 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L599 | 552 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L600 | 41307 | L595 L596 L597 L598 L599 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L601 | 262037 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L602 | 3673947 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L603 | 87 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L604 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2019/07/15 08:47 AM |
| L605 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2019/07/15 08:47 AM |
| L606 | 8 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2019/07/15 08:47 AM |
| L607 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L608 | 0 | L607 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L609 | 7 | L607 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L610 | 7745 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L611 | 3922 | L610 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L612 | 1472 | L611 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L613 | 404 | L612 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L614 | 6 | L613 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L615 | 2062 | L600 and L601 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L616 | 3552609 | (internet network (web | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | adj2 server)) | | | | | 08:47 AM |
| L617 | 32585 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L618 | 990 | L602 and L615 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L619 | 526 | L618 and L616 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L620 | 799 | L601 and L617 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L621 | 25 | L619 and L620 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L622 | 32 | L601 and L617 and L600 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L623 | 1012917 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L624 | 18822 | L623 and L601 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L625 | 338 | L624 and L617 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L626 | 440 | L603 L604 L605 L606 L608 L609 L614 L621 L622 L625 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L627 | 5397 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L628 | 42 | L627 and L617 and L616 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L629 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L630 | 4 | L629 and (network adj2 (address addresses)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L631 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L632 | 29 | L631 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L633 | 12 | L632 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L634 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L635 | 20 | L634 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L636 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or | US-PGPUB; USPAT | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L637 | 24 | L636 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L638 | 17 | L636 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L639 | 13 | L637 and L638 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L640 | 6159 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L641 | 7059 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L642 | 26673 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L643 | 1163 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L644 | 552 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L645 | 41307 | L640 L641 L642 L643 L644 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L646 | 119993 | (G05D7/0676 or H04L67/02 or G05B19/0428 or | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | | | | | |
| L647 | 159311 | L646 L645 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L648 | 440 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L649 | 26 | L647 and L648 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L650 | 19 | L648 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L651 | 40 | L649 L650 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L652 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L653 | 2 | L652 and (leak adj4 sensor) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L654 | 8 | L652 and (private) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L655 | 6 | L652 and (carrier) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L656 | 2 | L652 and (validity) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L657 | 137 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2019/07/15 08:47 AM |
| L658 | 23 | L657 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L659 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L660 | 164 | (thread near4 (actuator and sensor)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L661 | 10 | L660 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L662 | 602 | L626 L659 L661 L658 L653 L654 L655 L656 L651 L650 L649 L639 L638 L637 L635 L630 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | L632 L633 L628 | | | | | |
| L663 | 602 | L662 | US-PGPUB; USPAT; FPRS; EPO; DERWENT | OR | ON | ON | 2019/07/15 08:47 AM |
| L664 | 6159 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L665 | 7059 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L666 | 26673 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L667 | 1163 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L668 | 552 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L669 | 41307 | L664 L665 L666 L667 L668 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L670 | 262037 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L671 | 3673947 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L672 | 87 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2019/07/15 08:47 AM |
| L673 | 5 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2019/07/15 08:47 AM |
| L674 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2019/07/15 08:47 AM |
| L675 | 8 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2019/07/15 08:47 AM |
| L676 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L677 | 0 | L676 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L678 | 7 | L676 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L679 | 7745 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L680 | 3922 | L679 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L681 | 1472 | L680 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L682 | 404 | L681 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L683 | 6 | L682 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L684 | 2062 | L669 and L670 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2019/07/15 08:47 AM |
| L685 | 11 | ("20020161685"\|"20020169645"\|"20030004624"\|"20030182463"\|"20040088115"\|"20040231851"\|"20050108504"\|"20060240818"\|"20080208475"\|"20100295673"\|"20120316658").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L686 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L687 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L688 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L689 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L690 | 1 | ("20060149476").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L691 | 1 | ("20060271299").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L692 | 1 | ("20030065447").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L693 | 1 | ("4594665").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L694 | 1 | ("20050092523").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L695 | 1 | ("20060047527").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L696 | 4857 | L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L697 | 17 | (US-20090260829-$ or US-20020112860-$ or US-20040262008-$ or US-20070107903-$ or US-20040251030-$).did. or (US-7000693-$ or US-6420976-$ or US-7967066-$ or US-RE41173-$ or US-7148812-$ or US-6768700-$ or US-7845404-$ or US-6913083-$ or US-4636934-$ or US-5732776-$ or US-4052703-$ or US-7958938-$ or US-4755943-$).did. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L698 | 1 | ("7261162").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L699 | 162 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | | | | | |
| L700 | 1 | ("20040262008").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L701 | 1 | ("7148812").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L702 | 1 | ("7958938").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L703 | 1 | ("7967066").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L704 | 1 | ("7845404").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L705 | 1 | ("6913083").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L706 | 1 | ("20020112860").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L707 | 1 | ("5732776").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L708 | 1 | ("4052703").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L709 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L710 | 0 | L25 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L711 | 7 | L25 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L712 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L713 | 4138 | L28 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L714 | 1461 | L29 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L715 | 368 | L30 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L716 | 0 | L31 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L717 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L718 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L719 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L720 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L721 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L722 | 41358 | L33 L34 L35 L36 L37 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L723 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L724 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L725 | 1990 | L38 and L39 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L726 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L727 | 913 | L41 and (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L728 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L729 | 935 | L40 and L41 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L730 | 494 | L45 and L42 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L731 | 937 | L39 and L44 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L732 | 26 | L46 and L47 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L733 | 30 | ("2010/0147510").URPN. | USPAT | OR | ON | ON | 2021/02/18 10:21 AM |
| L734 | 162 | ("5331318" \| "5597042" \| "5662165" \| "5706892" \| "5706896" \| "5721538" \| "5730219" \| "5732776" \| "5803167" \| "5868201" \| "5934371" \| "5941307" \| "5959547" \| "5975204" \| "5992250" \| "6006832" \| "6012015" \| "6046685" \| "6068053" \| "6075462" \| "6125938" \| "6160492" \| "6161618" \| "6176312" \| "6179057" \| "6192980" \| "6192988" \| "6209640" \| "6247536" \| "6257332" \| "6271766" \| "6276454" \| "6279660" \| "6281489" \| "6288975" \| "6296066" \| "6422315" \| "6469636" \| "6498988" \| "6622799" \| "6670880" \| "6717501" \| "6788980" \| "6801135" \| "6816082" \| "6851444").PN. OR ("7261162").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L735 | 17 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | ("6801135").URPN. | | | | | |
| L736 | 34 | L39 and L44 and L38 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L737 | 937 | L39 and L44 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L738 | 724 | L53 and (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L739 | 576 | (local autonomous independent) and L45 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L740 | 550 | L55 not L54 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L741 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L742 | 20394 | L57 and L39 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L743 | 435 | L58 and L44 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L744 | 44 | ("20030004624"\|"20040088115"\|"20100147510"\|"5732776"\|"7931090"\|"7967066"\|"8312320"\|"20130144531"\|"8301386"\|"20050108504"\|"20100295673"\|"20110231024"\|"6061603"\|"8386059"\|"20100098507"\|"20030182463"\|"4052703"\|"6192980"\|"7958938"\|"8373418"\|"20130024026"\|"20040231851"\|"20060240818"\|"7148812"\|"7289994"\|"20120316658"\|"20040262008"\|"7921916"\|"8131510"\|"8290737"\|"20100326654"\|"20020161685"\|"20090149969"\|"7845404"\|"8179279"\|"20020112860"\|"20050096846"\|"5149443"\|"6801135"\|"6913083"\|"20130008645"\|"20020169645"\|"20080208475"\|"7591308").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L745 | 37 | (US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020161685-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$).did. or (WO-2008124765-$).did. | | | | | |
| L746 | 0 | L61 and oscillate | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L747 | 1 | L61 and (stuck adj3 valve) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L748 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L749 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L750 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L751 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L752 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L753 | 41358 | L64 L65 L66 L67 L68 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L754 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L755 | 394 | L69 and L70 and "240" | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L756 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L757 | 935 | L69 and L70 and L72 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L758 | 18 | L73 and (inoperative in-operative stuck) adj3 (valve part) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L759 | 417 | L70 and (stuck) adj3 (valve) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L760 | 417 | L70 and ((stuck) adj3 (valve)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L761 | 452 | L70 and ((frozen froze stuck) adj3 (valve)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L762 | 18 | ((move jerk oscillate move) near2 ((frozen froze stuck) adj3 (valve))) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L763 | 1 | ("4823749").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L764 | 1 | ("20010032518").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L765 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L766 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L767 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L768 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L769 | 20 | (US-20040262008-$ or US-20120316658-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L770 | 0 | L85 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L771 | 7 | L85 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L772 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L773 | 4138 | L88 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L774 | 1461 | L89 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L775 | 368 | L90 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L776 | 0 | L91 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L777 | 1990 | L69 and L70 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L778 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L779 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L780 | 935 | L72 and L93 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L781 | 494 | L96 and L94 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | 10:21 AM |
| L782 | 937 | L70 and L95 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L783 | 26 | L97 and L98 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L784 | 34 | L70 and L95 and L69 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L785 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L786 | 20394 | L101 and L70 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L787 | 435 | L102 and L95 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L788 | 5138 | L81 L82 L83 L84 L86 L87 L92 L99 L100 L103 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L789 | 75 | ("2004/0262008").URPN. | USPAT | OR | ON | ON | 2021/02/18 10:21 AM |
| L790 | 16 | ("20040262008" \| "20050035875" \| "4701756" \| "5959547" \| "6229453" \| "6816082").PN. OR ("7148812").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L791 | 1 | ("5959547").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L792 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L793 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L794 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L795 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L796 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L797 | 41358 | L108 L109 L110 L111 L112 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L798 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L799 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L800 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L801 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L802 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L803 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L804 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L805 | 0 | L120 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L806 | 7 | L120 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L807 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L808 | 4138 | L123 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L809 | 1461 | L124 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L810 | 368 | L125 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L811 | 0 | L126 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L812 | 1990 | L113 and L114 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L813 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L814 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L815 | 935 | L115 and L128 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L816 | 494 | L131 and L129 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L817 | 937 | L114 and L130 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L818 | 26 | L132 and L133 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L819 | 34 | L114 and L130 and L113 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L820 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L821 | 20394 | L136 and L114 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L822 | 435 | L137 and L130 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L823 | 5138 | L116 L117 L118 L119 L121 L122 L127 L134 L135 L138 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L824 | 5138 | L139 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L825 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L826 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | 10:21 AM |
| L827 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L828 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L829 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L830 | 41358 | L144 L145 L146 L147 L148 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L831 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L832 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L833 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L834 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L835 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L836 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L837 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L838 | 0 | L156 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L839 | 7 | L156 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L840 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L841 | 4138 | L159 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L842 | 1461 | L160 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L843 | 368 | L161 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L844 | 0 | L162 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L845 | 1990 | L149 and L150 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L846 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L847 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L848 | 935 | L151 and L164 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L849 | 494 | L167 and L165 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L850 | 937 | L150 and L166 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L851 | 26 | L168 and L169 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L852 | 34 | L150 and L166 and L149 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L853 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L854 | 20394 | L172 and L150 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L855 | 435 | L173 and L166 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L856 | 5138 | L152 L153 L154 L155 L157 L158 L163 L170 L171 L174 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L857 | 5138 | L175 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L858 | 5138 | L176 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L859 | 6439 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L860 | 1829 | L178 and L150 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L861 | 1197 | L179 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L862 | 46 | L180 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L863 | 59 | L178 and L166 and L165 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L864 | 5219 | L182 L183 L177 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L865 | 59 | ("4007450" \| "4888726" \| "5560005" \| "5724575" \| "5828851" \| "5838563" \| "5845230" \| "5956483" \| "6000045" \| "6131120" \| "6263487" \| "6701437" \| "6799077").PN. OR ("7289994").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L866 | 1 | ("20090055029").PN. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L867 | 46 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6801135-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L868 | 2 | L187 and pid | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L869 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L870 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L871 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L872 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L873 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L874 | 41358 | L189 L190 L191 L192 L193 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L875 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L876 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L877 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L878 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L879 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L880 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L881 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L882 | 0 | L201 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L883 | 7 | L201 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L884 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L885 | 4138 | L204 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L886 | 1461 | L205 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L887 | 368 | L206 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L888 | 0 | L207 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L889 | 1990 | L194 and L195 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L890 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L891 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L892 | 935 | L196 and L209 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L893 | 494 | L212 and L210 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L894 | 937 | L195 and L211 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L895 | 26 | L213 and L214 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L896 | 34 | L195 and L211 and L194 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L897 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L898 | 20394 | L217 and L195 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L899 | 435 | L218 and L211 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L900 | 5138 | L197 L198 L199 L200 L202 L203 L208 L215 L216 L219 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L901 | 5138 | L220 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L902 | 5138 | L221 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L903 | 6439 | G05D7/0676;G05B9/02;E | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 21B47/00;G05B2219/23472.cpc. | | | | | 10:21 AM |
| L904 | 1829 | L223 and L195 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L905 | 1197 | L224 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L906 | 46 | L225 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L907 | 59 | L223 and L211 and L210 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L908 | 5219 | L226 L227 L222 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L909 | 5219 | L228 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L910 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L911 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L912 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L913 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L914 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L915 | 41358 | L230 L231 L232 L233 L234 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L916 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L917 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L918 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L919 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L920 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L921 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L922 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L923 | 0 | L242 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L924 | 7 | L242 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L925 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L926 | 4138 | L245 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L927 | 1461 | L246 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L928 | 368 | L247 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L929 | 0 | L248 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L930 | 1990 | L235 and L236 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L931 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L932 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | adjust drive move close) | | | | | |
| L933 | 935 | L237 and L250 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L934 | 494 | L253 and L251 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L935 | 937 | L236 and L252 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L936 | 26 | L254 and L255 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L937 | 34 | L236 and L252 and L235 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L938 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L939 | 20394 | L258 and L236 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L940 | 435 | L259 and L252 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L941 | 5138 | L238 L239 L240 L241 L243 L244 L249 L256 L257 L260 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L942 | 5138 | L261 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L943 | 5138 | L262 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L944 | 6439 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L945 | 1829 | L264 and L236 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L946 | 1197 | L265 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L947 | 46 | L266 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L948 | 59 | L264 and L252 and L251 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L949 | 5219 | L267 L268 L263 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | 10:21 AM |
| L950 | 5219 | L269 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L951 | 5288 | L270 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L952 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L953 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L954 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L955 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L956 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L957 | 41358 | L276 L277 L278 L279 L280 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L958 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L959 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L960 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L961 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L962 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L963 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L964 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L965 | 0 | L288 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L966 | 7 | L288 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L967 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L968 | 4138 | L291 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L969 | 1461 | L292 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L970 | 368 | L293 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L971 | 0 | L294 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L972 | 1990 | L281 and L282 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L973 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L974 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L975 | 935 | L283 and L296 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L976 | 494 | L299 and L297 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L977 | 937 | L282 and L298 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L978 | 26 | L300 and L301 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L979 | 34 | L282 and L298 and L281 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L980 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L981 | 20394 | L304 and L282 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L982 | 435 | L305 and L298 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L983 | 5138 | L284 L285 L286 L287 L289 L290 L295 L302 L303 L306 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L984 | 5138 | L307 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L985 | 5138 | L308 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L986 | 6439 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L987 | 1829 | L310 and L282 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L988 | 1197 | L311 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L989 | 46 | L312 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L990 | 59 | L310 and L298 and L297 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L991 | 5219 | L313 L314 L309 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L992 | 5219 | L315 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L993 | 5288 | L316 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L994 | 5288 | L317 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L995 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L996 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L997 | 3 | L320 and (network adj2 (address addresses)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L998 | 2 | ("20020018399").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L999 | 17 | ("5941305" \| "5959547" \| "5978749" \| "6061603" \| "6670880").PN. OR ("6801135").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1000 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2008124765-$).did. | | | | | |
| L1001 | 29 | L324 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1002 | 12 | L325 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1003 | 2 | ("7096092").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | OFF | OFF | 2021/02/18 10:21 AM |
| L1004 | 1 | ("6967589").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1005 | 163 | ("5438329" \| "5717718" \| "5963650" \| "6062095" \| "6169488" \| "6305471" \| "6356205" \| "6369715" \| "6574652" \| "6693553" \| "6795319").PN. OR ("6967589").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1006 | 110 | L329 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1007 | 80 | L330 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1008 | 2 | ("20090055029").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1009 | 2 | ("20100033318").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1010 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1011 | 20 | L334 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1012 | 13 | L335 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1013 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or | US-PGPUB; USPAT | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1014 | 24 | L337 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1015 | 17 | L337 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1016 | 13 | L338 and L339 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1017 | 2546 | (web html) near4 (control controlling) near4 (actuator controller valve) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1018 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1019 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1020 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1021 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1022 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1023 | 41358 | L342 L343 L344 L345 L346 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1024 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1025 | 199025 | L348 L347 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1026 | 141 | L341 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1027 | 185 | L349 and L341 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1028 | 413 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1029 | 28 | L349 and L352 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1030 | 18 | L352 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1031 | 41 | L353 L354 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1032 | 2 | ("20020018399").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1033 | 2 | ("5805926").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1034 | 2 | ("20030052180").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1035 | 1 | ("6967589").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1036 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1037 | 2 | L360 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1038 | 2 | L360 and (leak adj4 sensor) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1039 | 8 | L360 and (private) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1040 | 6 | L360 and (carrier) | US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | FPRS; EPO | | | | 10:21 AM |
| L1041 | 2 | L360 and (validity) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1042 | 1 | ("20020156837").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1043 | 1 | ("6799195").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | OFF | OFF | 2021/02/18 10:21 AM |
| L1044 | 2 | ("20110051645").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1045 | 3 | ("5546301").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1046 | 141 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1047 | 24 | L370 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1048 | 54754 | (thread near4 (actuator sensor gui synchronize data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1049 | 10589 | (thread near4 (actuator sensor gui synchronize data)).ab. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1050 | 7966 | (thread near4 (actuator sensor gui synchronize data)).clm. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1051 | 54754 | L372 L373 L374 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1052 | 16487 | L373 L374 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1053 | 609 | L375 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1054 | 154 | L376 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1055 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1056 | 159 | (thread near4 (actuator and sensor)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1057 | 10 | L380 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1058 | 12 | ("6249241"\|"5819271"\|"6810386"\|"5805082"\|"5875305"\|"6208938").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1059 | 2 | ("6665568").PN. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1060 | 13 | ("5973696" \| "5982362" \| "6138150" \| "6170007" \| "6201996" \| "6311101").PN. OR ("6665568").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1061 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1062 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1063 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1064 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1065 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1066 | 41358 | L385 L386 L387 L388 L389 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1067 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1068 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1069 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1070 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1071 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1072 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1073 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1074 | 0 | L397 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1075 | 7 | L397 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1076 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1077 | 4138 | L400 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1078 | 1461 | L401 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1079 | 368 | L402 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1080 | 0 | L403 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1081 | 1990 | L390 and L391 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1082 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1083 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1084 | 935 | L392 and L405 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1085 | 494 | L408 and L406 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1086 | 937 | L391 and L407 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1087 | 26 | L409 and L410 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1088 | 34 | L391 and L407 and L390 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1089 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1090 | 20394 | L413 and L391 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1091 | 435 | L414 and L407 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1092 | 5138 | L393 L394 L395 L396 L398 L399 L404 L411 L412 L415 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1093 | 6439 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1094 | 59 | L417 and L407 and L406 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1095 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1096 | 3 | L419 and (network adj2 (address addresses)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1097 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1098 | 29 | L421 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1099 | 12 | L422 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1100 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1101 | 20 | L424 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1102 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US- | US-PGPUB; USPAT | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1103 | 24 | L426 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1104 | 17 | L426 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1105 | 13 | L427 and L428 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1106 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1107 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1108 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1109 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1110 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1111 | 41358 | L430 L431 L432 L433 L434 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1112 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1113 | 199025 | L436 L435 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1114 | 413 | ((web html) near4 (control | US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | controlling) near4 (actuator controller valve)).ab. | FPRS; EPO | | | | 10:21 AM |
| L1115 | 28 | L437 and L438 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1116 | 18 | L438 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1117 | 41 | L439 L440 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1118 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1119 | 2 | L442 and (leak adj4 sensor) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1120 | 8 | L442 and (private) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1121 | 6 | L442 and (carrier) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1122 | 2 | L442 and (validity) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1123 | 141 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1124 | 24 | L447 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1125 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1126 | 159 | (thread near4 (actuator and sensor)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1127 | 10 | L450 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1128 | 5371 | L416 L449 L451 L448 L443 L444 L445 L446 L441 L440 L439 L429 L428 L427 L425 L420 L422 L423 L418 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1129 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1130 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1131 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1132 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1133 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1134 | 41358 | L453 L454 L455 L456 L457 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1135 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1136 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1137 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1138 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1139 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1140 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1141 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1142 | 0 | L465 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1143 | 7 | L465 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1144 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1145 | 4138 | L468 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1146 | 1461 | L469 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1147 | 368 | L470 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1148 | 0 | L471 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1149 | 1990 | L458 and L459 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1150 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1151 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1152 | 935 | L460 and L473 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1153 | 494 | L476 and L474 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1154 | 937 | L459 and L475 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1155 | 26 | L477 and L478 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1156 | 34 | L459 and L475 and L458 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1157 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1158 | 20394 | L481 and L459 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1159 | 435 | L482 and L475 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1160 | 5138 | L461 L462 L463 L464 L466 L467 L472 L479 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | L480 L483 | | | | | |
| L1161 | 6439 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1162 | 59 | L485 and L475 and L474 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1163 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1164 | 3 | L487 and (network adj2 | US-PGPUB; USPAT; | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (address addresses)) | FPRS; EPO | | | | 10:21 AM |
| L1165 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1166 | 29 | L489 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1167 | 12 | L490 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1168 | 51 | (US-20120316658-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | 10:21 AM |
| L1169 | 20 | L492 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1170 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or | US-PGPUB; USPAT | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1171 | 24 | L494 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1172 | 17 | L494 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1173 | 13 | L495 and L496 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1174 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1175 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1176 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1177 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1178 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1179 | 41358 | L498 L499 L500 L501 L502 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1180 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1181 | 199025 | L504 L503 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1182 | 413 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1183 | 28 | L505 and L506 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1184 | 18 | L506 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1185 | 41 | L507 L508 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1186 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1187 | 2 | L510 and (leak adj4 sensor) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1188 | 8 | L510 and (private) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1189 | 6 | L510 and (carrier) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1190 | 2 | L510 and (validity) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1191 | 141 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1192 | 24 | L515 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1193 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1194 | 159 | (thread near4 (actuator and sensor)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1195 | 10 | L518 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1196 | 5371 | L484 L517 L519 L516 L511 L512 L513 L514 L509 L508 L507 L497 L496 L495 L493 L488 L490 L491 L486 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1197 | 5371 | L520 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1198 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1199 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1200 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1201 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1202 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1203 | 41358 | L526 L527 L528 L529 L530 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1204 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1205 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1206 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1207 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1208 | 13 | (AMPLISINE adj2 | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | LABS).as. | | | | | 10:21 AM |
| L1209 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1210 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1211 | 0 | L538 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1212 | 7 | L538 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1213 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1214 | 4138 | L541 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1215 | 1461 | L542 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1216 | 368 | L543 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1217 | 0 | L544 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1218 | 1990 | L531 and L532 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1219 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1220 | 34443 | (local autonomous independent) near2 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (controller control device) near2 (operate operat$4 adjust drive move close) | | | | | |
| L1221 | 935 | L533 and L546 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1222 | 494 | L549 and L547 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1223 | 937 | L532 and L548 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1224 | 26 | L550 and L551 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1225 | 34 | L532 and L548 and L531 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1226 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 command) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1227 | 20394 | L554 and L532 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1228 | 435 | L555 and L548 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1229 | 5138 | L534 L535 L536 L537 L539 L540 L545 L552 L553 L556 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1230 | 6439 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1231 | 59 | L558 and L548 and L547 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1232 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1233 | 3 | L560 and (network adj2 (address addresses)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1234 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1235 | 29 | L562 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1236 | 12 | L563 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1237 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1238 | 20 | L565 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1239 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US- | US-PGPUB; USPAT | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | | | | | |
| L1240 | 24 | L567 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1241 | 17 | L567 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1242 | 13 | L568 and L569 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1243 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1244 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1245 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1246 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1247 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1248 | 41358 | L571 L572 L573 L574 L575 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1249 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | G05B2219/31369 or G05B2219/23472).cpc. | | | | | |
| L1250 | 199025 | L577 L576 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1251 | 413 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1252 | 28 | L578 and L579 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1253 | 18 | L579 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1254 | 41 | L580 L581 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1255 | 54 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | |
| L1256 | 2 | L583 and (leak adj4 sensor) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1257 | 8 | L583 and (private) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1258 | 6 | L583 and (carrier) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1259 | 2 | L583 and (validity) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1260 | 141 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1261 | 24 | L588 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1262 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1263 | 159 | (thread near4 (actuator and sensor)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1264 | 10 | L591 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1265 | 5371 | L557 L590 L592 L589 L584 L585 L586 L587 L582 L581 L580 L570 L569 L568 L566 L561 L563 L564 L559 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1266 | 5430 | L593 | US-PGPUB; USPAT; FPRS; EPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1267 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1268 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1269 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1270 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1271 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1272 | 41358 | L595 L596 L597 L598 L599 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1273 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 (well site disposal station) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1274 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1275 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1276 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1277 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1278 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1279 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | | | | | |
| L1280 | 0 | L607 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1281 | 7 | L607 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1282 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1283 | 4138 | L610 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1284 | 1461 | L611 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1285 | 368 | L612 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1286 | 0 | L613 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1287 | 1990 | L600 and L601 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1288 | 4091205 | (internet network (web adj2 server)) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1289 | 34443 | (local autonomous independent) near2 (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1290 | 935 | L602 and L615 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1291 | 494 | L618 and L616 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1292 | 937 | L601 and L617 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1293 | 26 | L619 and L620 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1294 | 34 | L601 and L617 and L600 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1295 | 1139280 | (remote internet network) near2 (control monitor control$4 monitor$4 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | command) | | | | | |
| L1296 | 20394 | L623 and L601 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1297 | 435 | L624 and L617 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1298 | 5138 | L603 L604 L605 L606 L608 L609 L614 L621 L622 L625 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1299 | 6439 | G05D7/0676;G05B9/02;E21B47/00;G05B2219/23472.cpc. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1300 | 59 | L627 and L617 and L616 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1301 | 46 | (US-20040262008-$ or US-20020161685-$ or US-20090055029-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$).did. or (US-7289994-$ or US-6801135-$ or US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$).did. or (WO-2008124765-$).did. | | | | | |
| L1302 | 3 | L629 and (network adj2 (address addresses)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1303 | 47 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 5959547-$ or US-5941305-$).did. or (WO-2008124765-$).did. | | | | | |
| L1304 | 29 | L631 and (cell cellular wireless) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1305 | 12 | L632 and (web html) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1306 | 51 | (US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US- | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7096092-$).did. or (US-6967589-$ or US-6356205-$).did. or (WO-2008124765-$).did. | | | | | |
| L1307 | 20 | L634 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1308 | 48 | (US-20120029661-$ or US-20080077512-$ or US-20100179669-$ or US-20040125141-$ or US-20040075689-$ or US-20040064205-$ or US-20120041570-$ or US-20050027377-$ or US-20050027376-$ or US-20110173556-$ or US-20080208380-$ or US-20070179641-$ or US-20050120288-$ or US-20040186927-$ or US-20030233438-$ or US-20030225650-$ or US-20030107591-$ or US-20090327942-$ or US-20080189638-$ or US-20080125877-$ or US-20080065706-$ or US-20080065705-$ or US-20080034047-$ or US-20070239291-$).did. or (US-6931288-$ or US-7515977-$ or US-8677262-$ or US-8533619-$ or US-8356257-$ or US-7680546-$ or US-7526794-$ or US-6889096-$ or US-8516383-$ or US-7971151-$ or US-7783370-$ or US-7729792-$ or US-7526347-$ or US-7152072-$ or US-7117052-$ or US-7043311-$ or US-6834370-$ or US-6735596-$ or US-6442512-$ or US-6434500-$ or US-5631825-$ or US-6445963-$ or US-6522934-$ or US-6247020-$).did. | US-PGPUB; USPAT | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1309 | 24 | L636 and (address addresses) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1310 | 17 | L636 and (cell cellular) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1311 | 13 | L637 and L638 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1312 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1313 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1314 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1315 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1316 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1317 | 41358 | L640 L641 L642 L643 L644 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1318 | 159675 | (G05D7/0676 or H04L67/02 or G05B19/0428 or G06F3/0484 or E21B47/00 or G05B9/02 or G05B2219/24015 or G05B2219/25204 or G05B2219/31369 or G05B2219/23472).cpc. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1319 | 199025 | L646 L645 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1320 | 413 | ((web html) near4 (control controlling) near4 (actuator controller valve)).ab. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1321 | 28 | L647 and L648 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1322 | 18 | L648 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1323 | 41 | L649 L650 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1324 | 54 | (US-20120316658-$ or | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20040262008-$ or US-20020112860-$ or US-20090149969-$ or US-20100147510-$ or US-20050096846-$ or US-20110231024-$ or US-20020161685-$ or US-20120310582-$ or US-20010032518-$ or US-20140163749-$ or US-20090055029-$ or US-20020018399-$ or US-20100033318-$ or US-20080077512-$ or US-20030052180-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$ or US-5149443-$ or US-8386059-$ or US-8131510-$ or US-7289994-$ or US-8373418-$ or US-8312320-$ or US-8290737-$ or US-7931090-$ or US-7921916-$ or US-6061603-$ or US-6192980-$ or US-6435022-$ or US-4823749-$ or US-8208478-$ or US-7347271-$ or US-5959547-$ or US-5941305-$ or US-7096092-$).did. or (US-6967589-$ or US-6356205-$ or US-5805926-$).did. or (WO-2008124765-$).did. | | | | | 10:21 AM |
| L1325 | 2 | L652 and (leak adj4 sensor) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L1326 | 8 | L652 and (private) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1327 | 6 | L652 and (carrier) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1328 | 2 | L652 and (validity) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1329 | 141 | ("5247447" \| "5272642" \| "5353229").PN. OR ("5546301").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1330 | 24 | L657 and thread | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1331 | 0 | (thread near4 (actuator and sensor and synchronize and data)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1332 | 159 | (thread near4 (actuator and sensor)) | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1333 | 10 | L660 and 700/$.ccls. | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1334 | 5371 | L626 L659 L661 L658 L653 L654 L655 L656 L651 L650 L649 L639 L638 L637 L635 L630 L632 L633 L628 | US-PGPUB; USPAT; FPRS; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1335 | 5430 | L662 | US-PGPUB; USPAT; FPRS; EPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1336 | 6171 | 700/1,282,275,281,42.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1337 | 7062 | 702/6,13,183,188.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1338 | 26701 | 709/224.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1339 | 1170 | 166/336,363,250.1.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1340 | 553 | 340/853.3,853.2,856.3.ccls. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1341 | 41358 | L664 L665 L666 L667 L668 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1342 | 272113 | (oil hydrocarbon (hydro adj2 carbon) gas) near2 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (well site disposal station) | | | | | |
| L1343 | 3967670 | (controller control device) near2 (operate operat$4 adjust drive move close) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1344 | 70 | ((AARON) near2 (PHILLIPS)).INV. | US-PGPUB; USPAT; USOCR | OR | ON | ON | 2021/02/18 10:21 AM |
| L1345 | 3 | ((AARON) near2 (PHILLIPS)).INV. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1346 | 13 | (AMPLISINE adj2 LABS).as. | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1347 | 11 | real-time and onsite and internet and communication | EPO; JPO; DERWENT | OR | ON | ON | 2021/02/18 10:21 AM |
| L1348 | 20 | (US-20040262008-$ or US-20120316658-$ or US-20080208475-$ or US-20060271299-$ or US-20060240818-$ or US-20050092523-$ or US-20040231851-$ or US-20040088115-$ or US-20030182463-$ or US-20020169645-$ or US-20020112860-$).did. or (US-7148812-$ or US-7958938-$ or US-7967066-$ or US-7845404-$ or US-6913083-$ or US-5732776-$ or US-4052703-$ or US-8179279-$).did. or (WO-2008124765-$).did. | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1349 | 0 | L676 and (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1350 | 7 | L676 and (oil near2 water) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1351 | 8179 | (oil near2 water near2 separation) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1352 | 4138 | L679 and pump | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1353 | 1461 | L680 and (oil near2 well) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1354 | 368 | L681 and (oil near2 level) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | 10:21 AM |
| L1355 | 0 | L682 and ("700"/$.ccls. "702"/$.ccls.) | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |
| L1356 | 1990 | L669 and L670 | US-PGPUB; USPAT; EPO | OR | ON | ON | 2021/02/18 10:21 AM |

## PE2E SEARCH - Search History (Interference)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | British Equivalents | Time Stamp |
|---|---|---|---|---|---|---|---|
| N141 | 0 | (translating plurality commands translated commands encoded plurality protocols different from the first protocol each translated command being translated into a protocol among the plurality of protocols suitable for a fluid handling device to which the respective command is directed the at least some of the translated command being operative to cause a local controller of the given fluid-handling device to drive the given fluid-handling device to the plurality of different target states the local controller being responsive to the translated commands and feedback from the given fluid handling device indicative of whether the given fluid handling device is in a targeted state).clm. | US-PGPUB; USPAT | AND | ON | ON | 2013/10/25 01:15 PM |
| N142 | 0 | (translating plurality commands translated commands encoded plurality protocols different from the first protocol each translated command being translated into a protocol among the plurality of protocols | US-PGPUB; USPAT | AND | ON | ON | 2013/10/25 01:16 PM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | suitable for a fluid handling device to which the respective command is directed the at least some of the translated command being operative to cause a local controller of the given fluid-handling device).clm. | | | | | |
| N143 | 0 | (sending the translated commands to respective local controllers of the respective fluid handling devices to which the respective commands are directed).clm. | US-PGPUB; USPAT | AND | ON | ON | 2013/10/25 01:16 PM |
| N272 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions comprises after receiving the instructions determining a plurality of different target states of the at least one of the fluid handling devices, the plurality of different states each corresponding to different times after determining the plurality of different target states translating each received instructions into one or more translated instructions encoded in the selected respective protocol or protocols the one or more translated instructions including the determined plurality of different target states).clm. | US-PGPUB; USPAT | AND | ON | ON | 2015/09/21 08:51 AM |
| N273 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target | US-PGPUB; USPAT | AND | ON | ON | 2015/09/21 08:51 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | state of at least one of the fluid handling devices based on at least some of the plurality of instructions comprises after receiving the instructions determining a plurality of different target states of the at least one of the fluid handling devices).clm. | | | | | |
| N274 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state).clm. | US-PGPUB; USPAT | AND | ON | ON | 2015/09/21 08:51 AM |
| N275 | 0 | (the plurality of different states each corresponding to different times after determining the plurality of different target states translating each received instructions into one or more translated instructions encoded in the selected respective protocol or protocols the one or more translated instructions including the determined plurality of different target states).clm. | US-PGPUB; USPAT | AND | ON | ON | 2015/09/21 08:51 AM |
| N522 | 0 | (a computer-implemented web interface module modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a | US-PGPUB; USPAT | AND | ON | ON | 2017/09/26 08:20 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil or gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N523 | 0 | (a computer-implemented web interface module modules configured to send instructions to | US-PGPUB; USPAT | AND | ON | ON | 2017/09/26 08:20 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N524 | 0 | (actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas facilities the fourth account corresponds to | US-PGPUB; USPAT | AND | ON | ON | 2017/09/26 08:20 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N525 | 0 | (a computer-implemented web interface module modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being | US-PGPUB; USPAT | AND | ON | ON | 2017/09/26 08:20 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first).clm. | | | | | |
| N685 | 129 | (a computer-implemented user-interface module or modules configured to send respective instructions to present respective control interfaces on respective user computing devices logged in to respective ones of the accounts and to receive respective commands to control respective actuators from the respective user computing devices wherein the system is configured to receive with the user-interface module modules a user command to actuate an actuator entered via a presented control interface identify an address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of fluid-handling facilities, one or more users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of fluid-handling facilities the second account corresponds to a second group of fluid-handling facilities, the first group | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | being different from the second group one more users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of fluid-handling facilities the third account corresponds to the first group of fluid-handling facilities one more users of the third account being authorized to view reports of data from fluid handling devices at the first group of fluid-handling facilities the fourth account corresponds to the second group of fluid-handling facilities, one more users of the of the fourth account being authorized to view reports of data from fluid handling devices at the second group of fluid-handling facilities).clm. | | | | | |
| N686 | 0 | (user command to actuate an actuator entered via a presented control interface identify an address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of fluid-handling facilities, one or more users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of fluid-handling facilities the second account | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | corresponds to a second group of fluid-handling facilities, the first group being different from the second group one more users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of fluid-handling facilities the third account corresponds to the first group of fluid-handling facilities one more users of the third account being authorized to view reports of data from fluid handling devices at the first group of fluid-handling facilities the fourth account corresponds to the second group of fluid-handling facilities, one more users of the of the fourth account being authorized to view reports of data from fluid handling devices at the second group of fluid-handling facilities).clm. | | | | | |
| N687 | 0 | (translating plurality commands translated commands encoded plurality protocols different from the first protocol each translated command being translated into a protocol among the plurality of protocols suitable for a fluid handling device to which the respective command is directed the at least some of the translated command being operative to cause a local controller of the given fluid-handling device to drive the given fluid-handling device to the plurality of different target states the local controller being responsive to the translated commands and | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | feedback from the given fluid handling device indicative of whether the given fluid handling device is in a targeted state).clm. | | | | | |
| N688 | 0 | (translating plurality commands translated commands encoded plurality protocols different from the first protocol each translated command being translated into a protocol among the plurality of protocols suitable for a fluid handling device to which the respective command is directed the at least some of the translated command being operative to cause a local controller of the given fluid-handling device).clm. | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |
| N689 | 0 | (sending the translated commands to respective local controllers of the respective fluid handling devices to which the respective commands are directed).clm. | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |
| N690 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions comprises after receiving the instructions determining a plurality of different target states of the at least one of the fluid handling devices, the plurality of different states each corresponding to different times after determining the plurality of different target states translating each received instructions into one or | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | more translated instructions encoded in the selected respective protocol or protocols the one or more translated instructions including the determined plurality of different target states).clm. | | | | | |
| N691 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions comprises after receiving the instructions determining a plurality of different target states of the at least one of the fluid handling devices).clm. | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |
| N692 | 0 | (obtaining a target state of at least one of the fluid handling devices based on at least some of the plurality of instructions wherein obtaining a target state).clm. | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |
| N693 | 0 | (the plurality of different states each corresponding to different times after determining the plurality of different target states translating each received instructions into one or more translated instructions encoded in the selected respective protocol or protocols the one or more translated instructions including the determined plurality of different target states).clm. | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |
| N694 | 0 | (a computer-implemented web interface module modules configured to send instructions to | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil or gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | of oil gas facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N695 | 0 | (a computer-implemented web interface module modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N696 | 0 | (actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first group of oil gas facilities users of the third account being authorized to view reports of data from fluid handling devices at the first group of oil gas facilities the fourth account corresponds to the second group of oil gas facilities users of the fourth account being authorized to view reports of data from fluid handling devices at the second group of oil gas facilities).clm. | | | | | |
| N697 | 0 | (a computer-implemented web interface module modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices wherein the system is configured to receive with the web-interface module or modules a user command to actuate an actuator entered via a presented control interface identify a network address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module modules to the facility to actuate the actuator wherein the plurality of accounts include a first account a second account a third account and a | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | fourth account the first account corresponds to a first group of oil gas facilities users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of oil gas facilities the second account corresponds to a second group of oil gas facilities the first group being different from the second group users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of oil gas facilities the third account corresponds to the first).clm. | | | | | |
| N698 | 0 | N687 N688 N689 N690 N691 N692 N693 N694 N695 N696 N697 | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:45 AM |
| N699 | 0 | (a computer-implemented user-interface module modules configured to send respective instructions to present respective control interfaces on respective user computing devices logged in to respective ones of the accounts and to receive respective commands to control respective actuators from the respective user computing devices wherein the system is configured to receive with the user-interface module modules a user command to actuate an actuator entered via a presented control interface identify an address in the datastore corresponding to a facility at which the actuator is located and send instructions with the facility-interface module | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:46 AM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | modules to the facility to actuate the actuator the plurality of accounts include a first account a second account a third account and a fourth account the first account corresponds to a first group of fluid-handling facilities, one or more users of the first account being authorized to send commands to remotely control fluid handling devices at the first group of fluid-handling facilities the second account corresponds to a second group of fluid-handling facilities, the first group being different from the second group one more users of the second account being authorized to send commands to remotely control fluid handling devices at the second group of fluid-handling facilities the third account corresponds to the first group of fluid-handling facilities one more users of the third account being authorized to view reports of data from fluid handling devices at the first group of fluid-handling facilities the fourth account corresponds to the second group of fluid-handling facilities, one more users of the of the fourth account being authorized to view reports of data from fluid handling devices at the second group of fluid-handling facilities).clm. | | | | | |
| N700 | 0 | N698 N699 | US-PGPUB; USPAT | AND | ON | ON | 2019/07/15 08:46 AM |

# Web Search History

| date, time | web site | search string |
|---|---|---|
| 2/18/2021 9:52:10 AM | Google | 14984422 |
| 2/18/2021 9:52:41 AM | Google | 15867077 |
| 2/18/2021 10:41:38 AM | Google Patents (old) | remote oil field control and monitoring system |
| 2/18/2021 10:41:38 AM | Google | remote oil field control and monitoring system |
| 2/18/2021 10:41:43 AM | Google Scholar | remote oil field control and monitoring system |
| 2/18/2021 10:45:33 AM | Google Patents (old) | remote oil field control and monitoring system using local and remote web servers |
| 2/18/2021 10:45:33 AM | Google | remote oil field control and monitoring system using local and remote web servers |
| 2/18/2021 10:45:37 AM | Google Scholar | remote oil field control and monitoring system using local and remote web servers |

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 NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|---|---|---|---|
| 16/656,319 | 10/17/2019 | Aaron Phillips | 034392-0508266 |

**CONFIRMATION NO. 2059**

909
Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102

**PUBLICATION NOTICE**




**Title:**REMOTE CONTROL OF FLUID-HANDLING DEVICES

**Publication No.**US-2020-0159258-A1
**Publication Date:**05/21/2020

## NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Public Records Division. The Public Records Division can be reached by telephone at (571) 272-3150 or (800) 972-6382, by facsimile at (571) 273-3250, by mail addressed to the United States Patent and Trademark Office, Public Records Division, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently https://portal.uspto.gov/pair/PublicPair. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

---

Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

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 NUMBER | FILING or 371(c) DATE | GRP ART UNIT | FIL FEE REC'D | ATTY.DOCKET.NO | TOT CLAIMS | IND CLAIMS |
|---|---|---|---|---|---|---|
| 16/656,319 | 10/17/2019 | 2652 | 865 | 034392-0508266 | 20 | 1 |

**CONFIRMATION NO. 2059**

**UPDATED FILING RECEIPT**

909
Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102

OC000000114731999

Date Mailed: 02/14/2020

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

**Please verify the accuracy of the data presented on this receipt.** If an error is noted on this Filing Receipt, please submit a written request for a corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections provided that the request is grantable.

**Inventor(s)**

Aaron Phillips, Lubbock, TX;

**Applicant(s)**

SitePro, Inc., Lubbock, TX;

**Power of Attorney:** The patent practitioners associated with Customer Number 00909

**Domestic Priority data as claimed by applicant**

This application is a CON of 15/867,077 01/10/2018 PAT 10488871
which is a CON of 14/984,422 12/30/2015 PAT 9898014
which is a CON of 14/147,190 01/03/2014 PAT 9342078
which is a CON of 13/708,557 12/07/2012 PAT 8649909

**Foreign Applications** for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
*Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.*

**Permission to Access Application via Priority Document Exchange:** Yes

**Permission to Access Search Results:** Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

**If Required, Foreign Filing License Granted:** 11/04/2019

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/656,319**

**Projected Publication Date:** 05/21/2020

**Non-Publication Request:** No

**Early Publication Request:** No
**** SMALL ENTITY ****
**Title**

REMOTE CONTROL OF FLUID-HANDLING DEVICES

**Preliminary Class**

379

**Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications:** No

## PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

## LICENSE FOR FOREIGN FILING UNDER

## Title 35, United States Code, Section 184

## Title 37, Code of Federal Regulations, 5.11 & 5.15

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

---

## *SelectUSA*

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 U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

## PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 16/656,319

### APPLICATION AS FILED - PART I

| FOR | (Column 1) NUMBER FILED | (Column 2) NUMBER EXTRA | SMALL ENTITY RATE($) | SMALL ENTITY FEE($) | OR | OTHER THAN SMALL ENTITY RATE($) | OTHER THAN SMALL ENTITY FEE($) |
|---|---|---|---|---|---|---|---|
| BASIC FEE (37 CFR 1.16(a), (b), or (c)) | N/A | N/A | N/A | 75 | | N/A | |
| SEARCH FEE (37 CFR 1.16(k), (i), or (m)) | N/A | N/A | N/A | 330 | | N/A | |
| EXAMINATION FEE (37 CFR 1.16(o), (p), or (q)) | N/A | N/A | N/A | 380 | | N/A | |
| TOTAL CLAIMS (37 CFR 1.16(i)) | 20 minus 20 = | * | x 50 = | 0.00 | OR | | |
| INDEPENDENT CLAIMS (37 CFR 1.16(h)) | 1 minus 3 = | * | x 230 = | 0.00 | | | |
| APPLICATION SIZE FEE (37 CFR 1.16(s)) | If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). | | | 0.00 | | | |
| MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j)) | | | | 0.00 | | | |
| * If the difference in column 1 is less than zero, enter "0" in column 2. | | | TOTAL | 785 | | TOTAL | |

### APPLICATION AS AMENDED - PART II

AMENDMENT A

| | (Column 1) CLAIMS REMAINING AFTER AMENDMENT | | (Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR | (Column 3) PRESENT EXTRA | SMALL ENTITY RATE($) | SMALL ENTITY ADDITIONAL FEE($) | OR | OTHER THAN SMALL ENTITY RATE($) | OTHER THAN SMALL ENTITY ADDITIONAL FEE($) |
|---|---|---|---|---|---|---|---|---|---|
| Total (37 CFR 1.16(i)) | * | Minus | ** | = | x = | | OR | x = | |
| Independent (37 CFR 1.16(h)) | * | Minus | *** | = | x = | | OR | x = | |
| Application Size Fee (37 CFR 1.16(s)) | | | | | | | | | |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) | | | | | | | OR | | |
| | | | | | TOTAL ADD'L FEE | | OR | TOTAL ADD'L FEE | |

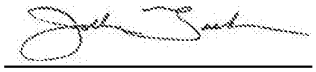
AMENDMENT B

| | (Column 1) CLAIMS REMAINING AFTER AMENDMENT | | (Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR | (Column 3) PRESENT EXTRA | RATE($) | ADDITIONAL FEE($) | | RATE($) | ADDITIONAL FEE($) |
|---|---|---|---|---|---|---|---|---|---|
| Total (37 CFR 1.16(i)) | * | Minus | ** | = | x = | | OR | x = | |
| Independent (37 CFR 1.16(h)) | * | Minus | *** | = | x = | | OR | x = | |
| Application Size Fee (37 CFR 1.16(s)) | | | | | | | | | |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) | | | | | | | OR | | |
| | | | | | TOTAL ADD'L FEE | | OR | TOTAL ADD'L FEE | |

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

**General Authorization for Payment of Fees**

The Commissioner is authorized to charge any additional fees that may be required to Deposit Account No. 033975.



Josh Tucker
Reg. No. 63809

# Electronic Patent Application Fee Transmittal

| | |
|---|---|
| **Application Number:** | 16656319 |
| **Filing Date:** | 17-Oct-2019 |
| **Title of Invention:** | REMOTE CONTROL OF FLUID-HANDLING DEVICES |
| **First Named Inventor/Applicant Name:** | Aaron Phillips |
| **Filer:** | Joshua L. Tucker/Amanda Childs |
| **Attorney Docket Number:** | 034392-0508266 |

Filed as Small Entity

**Filing Fees for Utility under 35 USC 111(a)**

| Description | Fee Code | Quantity | Amount | Sub-Total in USD($) |
|---|---|---|---|---|
| **Basic Filing:** | | | | |
| UTILITY FILING FEE (ELECTRONIC FILING) | 4011 | 1 | 75 | 75 |
| UTILITY SEARCH FEE | 2111 | 1 | 330 | 330 |
| UTILITY EXAMINATION FEE | 2311 | 1 | 380 | 380 |
| **Pages:** | | | | |
| **Claims:** | | | | |
| **Miscellaneous-Filing:** | | | | |
| LATE FILING FEE FOR OATH OR DECLARATION | 2051 | 1 | 80 | 80 |
| **Petition:** | | | | |

| Description | Fee Code | Quantity | Amount | Sub-Total in USD($) |
|---|---|---|---|---|
| Patent-Appeals-and-Interference: | | | | |
| Post-Allowance-and-Post-Issuance: | | | | |
| Extension-of-Time: | | | | |
| Miscellaneous: | | | | |
| | | Total in USD ($) | | 865 |

| Electronic Acknowledgement Receipt | |
|---|---|
| **EFS ID:** | 38215724 |
| **Application Number:** | 16656319 |
| **International Application Number:** | |
| **Confirmation Number:** | 2059 |
| **Title of Invention:** | REMOTE CONTROL OF FLUID-HANDLING DEVICES |
| **First Named Inventor/Applicant Name:** | Aaron Phillips |
| **Customer Number:** | 909 |
| **Filer:** | Joshua L. Tucker/Amanda Childs |
| **Filer Authorized By:** | Joshua L. Tucker |
| **Attorney Docket Number:** | 034392-0508266 |
| **Receipt Date:** | 06-JAN-2020 |
| **Filing Date:** | 17-OCT-2019 |
| **Time Stamp:** | 17:10:32 |
| **Application Type:** | Utility under 35 USC 111(a) |

## Payment information:

| | |
|---|---|
| Submitted with Payment | yes |
| Payment Type | DA |
| Payment was successfully received in RAM | $865 |
| RAM confirmation Number | E202016H11013997 |
| Deposit Account | 033975 |
| Authorized User | Amanda Childs |
| The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:<br>37 CFR 1.16 (National application filing, search, and examination fees)<br>37 CFR 1.17 (Patent application and reexamination processing fees) | |

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

## File Listing:

| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part /.zip | Pages (if appl.) |
|---|---|---|---|---|---|
| 1 | Fee Worksheet (SB06) | General_Auth_for_Payment.pdf | 189065<br>4d7851f5d76326bbf15deecba27557a14d43bf97 | no | 1 |
| **Warnings:** | | | | | |
| **Information:** | | | | | |
| 2 | Fee Worksheet (SB06) | fee-info.pdf | 37203<br>1184adce507035257617407ce21ad7a02771dc4b | no | 2 |
| **Warnings:** | | | | | |
| **Information:** | | | | | |
| | | **Total Files Size (in bytes):** | 226268 | | |

**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 NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|---|---|---|---|
| 16/656,319 | 10/17/2019 | Aaron Phillips | 034392-0508266 |

**CONFIRMATION NO. 2059**

909
Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102

**FORMALITIES LETTER**

*OC000000012370377*

Date Mailed: 11/05/2019

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

**FILED UNDER 37 CFR 1.53(b)**

***Filing Date Granted***

**Items Required To Avoid Abandonment:**

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.
- The application search fee must be submitted.
- The application examination fee must be submitted.
- Surcharge as set forth in 37 CFR 1.16(f) must be submitted.
  The surcharge is due for any one of:
  - late submission of the basic filing fee, search fee, or examination fee,
  - late submission of inventor's oath or declaration,
  - filing an application that does not contain at least one claim on filing, or
  - submission of an application filed by reference to a previously filed application.

**SUMMARY OF FEES DUE:**

The fee(s) required within **TWO MONTHS** from the date of this Notice to avoid abandonment is/are itemized below. Small entity discount is in effect. If applicant is qualified for micro entity status, an acceptable Certification of Micro Entity Status must be submitted to establish micro entity status. (See 37 CFR 1.29 and forms PTO/SB/15A and 15B.)

- $ **75** basic filing fee.
- $ **80** surcharge.
- $ **330** search fee.
- $ **380** examination fee.
- $( **0**) previous unapplied payment amount.
- $ **865** TOTAL FEE BALANCE DUE.

Replies must be received in the USPTO within the set time period or must include a proper Certificate of Mailing or Transmission under 37 CFR 1.8 with a mailing or transmission date within the set time period. For more information and a suggested format, see Form PTO/SB/92 and MPEP 512.

Replies should be mailed to:

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web, including a copy of this Notice and selecting the document description "Applicant response to Pre-Exam Formalities Notice". https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/atesfaye/

## PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 16/656,319

### APPLICATION AS FILED - PART I

| FOR | (Column 1) NUMBER FILED | (Column 2) NUMBER EXTRA | SMALL ENTITY RATE($) | SMALL ENTITY FEE($) | OR | OTHER THAN SMALL ENTITY RATE($) | OTHER THAN SMALL ENTITY FEE($) |
|---|---|---|---|---|---|---|---|
| BASIC FEE (37 CFR 1.16(a), (b), or (c)) | N/A | N/A | N/A | 75 | | N/A | |
| SEARCH FEE (37 CFR 1.16(k), (i), or (m)) | N/A | N/A | N/A | 330 | | N/A | |
| EXAMINATION FEE (37 CFR 1.16(o), (p), or (q)) | N/A | N/A | N/A | 380 | | N/A | |
| TOTAL CLAIMS (37 CFR 1.16(i)) | 20 minus 20 = | * | x 50 = | 0.00 | OR | | |
| INDEPENDENT CLAIMS (37 CFR 1.16(h)) | 1 minus 3 = | * | x 230 = | 0.00 | | | |
| APPLICATION SIZE FEE (37 CFR 1.16(s)) | If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). | | | 0.00 | | | |
| MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j)) | | | | 0.00 | | | |
| * If the difference in column 1 is less than zero, enter "0" in column 2. | | | TOTAL | 785 | | TOTAL | |

### APPLICATION AS AMENDED - PART II

AMENDMENT A

| | (Column 1) CLAIMS REMAINING AFTER AMENDMENT | | (Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR | (Column 3) PRESENT EXTRA | SMALL ENTITY RATE($) | SMALL ENTITY ADDITIONAL FEE($) | OR | OTHER THAN SMALL ENTITY RATE($) | OTHER THAN SMALL ENTITY ADDITIONAL FEE($) |
|---|---|---|---|---|---|---|---|---|---|
| Total (37 CFR 1.16(i)) | * | Minus | ** | = | x = | | OR | x = | |
| Independent (37 CFR 1.16(h)) | * | Minus | *** | = | x = | | OR | x = | |
| Application Size Fee (37 CFR 1.16(s)) | | | | | | | | | |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) | | | | | | | OR | | |
| | | | | | TOTAL ADD'L FEE | | OR | TOTAL ADD'L FEE | |

AMENDMENT B

| | (Column 1) CLAIMS REMAINING AFTER AMENDMENT | | (Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR | (Column 3) PRESENT EXTRA | SMALL ENTITY RATE($) | SMALL ENTITY ADDITIONAL FEE($) | OR | OTHER THAN SMALL ENTITY RATE($) | OTHER THAN SMALL ENTITY ADDITIONAL FEE($) |
|---|---|---|---|---|---|---|---|---|---|
| Total (37 CFR 1.16(i)) | * | Minus | ** | = | x = | | OR | x = | |
| Independent (37 CFR 1.16(h)) | * | Minus | *** | = | x = | | OR | x = | |
| Application Size Fee (37 CFR 1.16(s)) | | | | | | | | | |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) | | | | | | | OR | | |
| | | | | | TOTAL ADD'L FEE | | OR | TOTAL ADD'L FEE | |

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

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 NUMBER | FILING or 371(c) DATE | GRP ART UNIT | FIL FEE REC'D | ATTY.DOCKET.NO | TOT CLAIMS | IND CLAIMS |
|---|---|---|---|---|---|---|
| 16/656,319 | 10/17/2019 | 2652 | 0.00 | 034392-0508266 | 20 | 1 |

**CONFIRMATION NO. 2059**

909
Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102

**FILING RECEIPT**

OC000000112370378

Date Mailed: 11/05/2019

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

**Please verify the accuracy of the data presented on this receipt.** If an error is noted on this Filing Receipt, please submit a written request for a corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections provided that the request is grantable.

**Inventor(s)**

Aaron Phillips, Lubbock, TX;

**Applicant(s)**

SitePro, Inc., Lubbock, TX;

**Power of Attorney:** The patent practitioners associated with Customer Number 00909

**Domestic Priority data as claimed by applicant**

This application is a CON of 15/867,077 01/10/2018
which is a CON of 14/984,422 12/30/2015 PAT 9898014
which is a CON of 14/147,190 01/03/2014 PAT 9342078
which is a CON of 13/708,557 12/07/2012 PAT 8649909

**Foreign Applications** for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
*Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.*

**Permission to Access Application via Priority Document Exchange:** Yes

**Permission to Access Search Results:** Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

**If Required, Foreign Filing License Granted:** 11/04/2019

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/656,319**

**Projected Publication Date:** To Be Determined - pending completion of Missing Parts

**Non-Publication Request:** No

**Early Publication Request:** No
**** SMALL ENTITY ****
**Title**

REMOTE CONTROL OF FLUID-HANDLING DEVICES

**Preliminary Class**

379

**Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications:** No

## PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

## LICENSE FOR FOREIGN FILING UNDER

## Title 35, United States Code, Section 184

## Title 37, Code of Federal Regulations, 5.11 & 5.15

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

---

## *SelectUSA*

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 U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

**STATEMENT REGARDING IDS PRACTICE**

Because the present application is a continuation patent application, Applicants are electing to not burden the Office with duplicate information disclosure statements to re-cite references considered with respect to the parent application. Applicants have chosen this course in view of the Manual of Patent Examination and Procedure[1] (MPEP) 609.02, which states as follows:

> When filing a continuing application that claims benefit under 35 U.S.C. 120 to a parent application (other than an international application that designated the U.S.), it will not be necessary for the applicant to submit an information disclosure statement in the continuing application that lists the prior art cited by the examiner in the parent application unless the applicant desires the information to be printed on the patent issuing from the continuing application (for continued prosecution applications filed under 37 CFR 1.53(d), see subsection A.1. below). The examiner of the continuing application will consider information which has been considered by the Office in the parent application.
>
> ...
>
> The examiner will consider information which has been considered by the Office in a parent application when examining: (A) a continuation application filed under 37 CFR 1.53(b), (B) a divisional application filed under 37 CFR 1.53(b), or (C) a continuation-in-part application filed under 37 CFR 1.53(b). A listing of the information need not be resubmitted in the continuing application unless the applicant desires the information to be printed on the patent.

Applicants understanding is that the Examiner will consider the references listed on the face of (or otherwise indicated as being considered against) parent applications.

Moreover, to avoid later mischaracterizations of the examination process by accused infringers before judges or juries less familiar with the intricacies of the MPEP, Applicants wish to note on the record that, as a result of this practice of the U.S. Patent Office, the face of a patent issuing from the present application will not necessarily contain a full list of references considered. One must also review the file history of the parent applications to ascertain the full corpus of references considered against the present application.

---

[1] The forward to the MPEP states as follows: "This Manual is published to provide U.S. Patent and Trademark Office (USPTO) patent examiners, applicants, attorneys, agents, and representatives of applicants with a reference work on the practices and procedures relative to the prosecution of patent applications before the USPTO. It contains instructions to examiners, as well as other material in the nature of information and interpretation, and outlines the current procedures which the examiners are required or authorized to follow in appropriate cases in the normal examination of a patent application."

## ABSTRACT

**[0070]** Provided is a process, including: receiving, via the network interface, from a remote user device, a command to change a state of the fluid-handling device to a target state; translating the received command into a translated command operative to cause a local controller of the fluid-handling device to drive the fluid-handling equipment to the target state, the local controller being responsive to the command and feedback from the fluid-handling device indicative of whether the fluid-handling device is in the target state; and sending the translated command to the local controller

## CLAIMS

What is claimed is:

1. A hosted, web-based, remote industrial monitoring and control system for geographically distributed facilities in oil and gas fields, the system comprising:

a computer-implemented datastore storing:

a plurality of accounts, each account corresponding to an entity operating one or more geographically distributed oil or gas facilities, the accounts associating different oil or gas facilities with different entities; and

network addresses by which industrial monitoring or control equipment at the facilities is accessible via cellular network connections, the monitoring or control equipment including sensors or actuators;

a computer-implemented facility-interface module or modules configured to obtain data from the sensors at the facilities and send commands to the actuators at the facilities via the cellular network connections; and

a computer-implemented web-interface module or modules configured to send instructions to present control interfaces in web browsers executing on user computing devices logged in to the accounts and to receive commands to control actuators from the user computing devices,

wherein the system is configured to receive, with the web-interface module or modules, a user command to actuate an actuator entered via a presented control interface, identify a network address in the datastore corresponding to a facility at which the actuator is located, and send instructions with the facility-interface module or modules to the facility to actuate the actuator.

2. The system of claim 1, wherein the sensors include a tank level sensor of a tank at one of the facilities, and wherein the datastore includes a record associating the tank with the facility, data from the tank being unavailable to users without an account associated with the tank.

3. The system of claim 1, wherein the sensors include a level sensor of an oil/water separation tank at one of the facilities configured to indicate a level at which oil meets water, and wherein the datastore includes a record associating the tank with the facility.

4. The system of claim 1, wherein the sensors include a leak detector at one of the facilities, and wherein the datastore includes a record associating the leak detector with the facility.

5. The system of claim 1, wherein:

the web-interface module or modules comprises a web server; and

the facility-interface module or modules comprises a site server distinct from the web server.

6. The system of claim 5, wherein:

the web server communicates with user devices via a first network port of a computing device executing the web server; and

the site server communicates with facilities via a second network port of the computing device, the second network port being different from the first network port.

7. The system of claim 1, wherein:

the data store stores subscription information associated with at least some of the accounts.

8. The system of claim 1, wherein the facility-interface module or modules comprise:

means for interfacing with a plurality of site controllers associated with the facilities.

9. The system of claim 1, wherein the web-interface module or modules comprise:

means for sending instructions to present a control interface on the user devices.

10. The system of claim 1, wherein the datastore stores accounts for more than one hundred facilities, and the web-interface module or modules are configured interface with more than one hundred user devices.

11. The system of claim 1, wherein the facility-interface module or modules are configured to send pull requests to facilities to retrieve data buffered at the facilities.

12. The system of claim 1, comprising:

a controller at one of the facilities communicatively coupled to an actuator or a sensor.

13. The system of claim 12, comprising at least four of the following as distinct threads from one another:

a thread configured to sends and receive data requests;

a thread configured to synchronize other threads with updated information;

a thread configured to set a target state of actuators;

a thread configured to obtain updated sensor readings;

a thread configured to process user interactions; and

a thread that eliminates other threads upon detecting a problem with the eliminated threads.

14. The system of claim 12, comprising at least two of the following as distinct threads from one another:

a thread configured to sends or receive data request;

a thread configured to synchronize other threads with updated information;

a thread configured to set a target state of actuators;

a thread configured to obtain updated sensor readings;

a thread configured to process user interactions; and

a thread that eliminates other threads upon detecting a problem with the eliminated threads.

15. The system of claim 12, wherein the controller is communicatively coupled to the actuator or sensor via a private local area network.

16. The system of claim 12, wherein controller is communicatively coupled to the actuator or sensor via a frame-based carrier-sense multiple access protocol with collision detection.

17. The system of claim 12, wherein controller is configured to periodically push buffered data to the facility-interface module or modules.

18. The system of claim 12, comprising:

means for ensuring at least some data is not lost if network access ceases intermittently.

19. The system of claim 12, comprising:

means for translating a command for an actuator from an input format to a format configured to effectuate changes in the actuator.

20. The system of claim 19, comprising:

means for executing control routines implicated by translated commands on an individual actuator or sensor.

**PATENT APPLICATION**

# REMOTE CONTROL OF FLUID-HANDLING DEVICES

## CROSS-REFERENCE TO RELATED APPLICATIONS

**[001]** The present application is a continuation of U.S. Patent Application 15/867,077 filed 10 January 2018, and titled REMOTE CONTROL OF FLUID-HANDLING DEVICES, which is a continuation of U.S. Patent Application 14/984,422 filed 30 December 2015, and titled REMOTE CONTROL OF FLUID-HANDLING DEVICES, which is a continuation of U.S. Patent Application 14/147,190, issued as U.S. Patent 9,342,078, filed 03 January 2014, titled REMOTE CONTROL OF FLUID-HANDLING DEVICES, which is a continuation of U.S. Patent Application 13/708,557, issued as U.S. Patent 8,649,909, filed 07 December 2012, and titled REMOTE CONTROL OF FLUID-HANDLING DEVICES, the entire contents of each of which are hereby incorporated by reference for all purposes.

## BACKGROUND OF THE INVENTION

### 1. Field of the Invention

**[002]** The present invention relates generally to fluid-handling devices and, more specifically, to remote control of fluid-handling devices.

### 2. Description of the Related Art

**[003]** Fluid-handling devices, such as valves, pumps, and various other forms of process equipment, in many use cases, are widely geographically distributed. For example, when such devices are used to extract petroleum products from an oil well, the associated fluid source or receptacle may be in a relatively remote location, as oil wells are generally distributed relative to one another and located remote from metropolitan areas. Similar issues arise in relation to petro-water disposal facilities, re-injection facilities, and petroleum pumping stations, all of which tend to be geographically distributed and include fluid-handling equipment.

**[004]** When monitoring or controlling such sites, it can be time-consuming and expensive for a technician to manually adjust or otherwise control fluid-handling devices, as the technician will incur costs and delays by traveling to the device to make adjustments or gather data in person. And these adjustments and inspections often occur relatively frequently, as process conditions and market demand fluctuate, thereby further increasing costs.

**[005]** Some systems exist for exercising remote monitoring of fluid-handling devices, such as various supervisory control and data acquisition (SCADA) systems, but many of these systems fail when a network connection is lost. Remote logic controlling such systems generally ceases to exercise control when the remote logic is disconnected in the event of a network failure. Further, some SCADA systems require the installation of special-purpose software on a computing device in order to exercise control remotely, which tends to deter users from exercising remote control of fluid-handling devices due to the burden of configuring each computer from which remote control is exercised.

## SUMMARY OF THE INVENTION

**[006]** The following is a non-exhaustive listing of some aspects of the present techniques. These and other aspects are described in the following disclosure.

**[007]** In some aspects, the present techniques include a system for remotely controlling fluid-handling device of an oil well, a petro water disposal or re-injection facility, or a petroleum pumping station, the system including: an input/output module operable to communicate with a fluid-handling device; a network interface; memory; and one or more processors communicatively coupled to the input/output module, the network interface, and the memory, wherein the memory stores instructions that when executed by the processors cause the processors to effectuate steps including: receiving, via the network interface, from a remote user device, a command to change a state of the fluid-handling device to a target state; translating the received command into a translated command operative to cause a local controller of the fluid-handling device to drive the fluid-handling equipment to the target state, the local controller being responsive to the command and feedback from the fluid-handling device indicative of whether the fluid-handling device is in the target state; and sending the translated command to the local controller..

**[008]** Some aspects include a tangible, non-transitory machine-readable medium storing instructions that when executed by a data processing apparatus cause the data processing apparatus to perform operations including: receiving, via the network interface, from a remote user device, a command to change a state of the fluid-handling device to a target state; translating the received command into a translated command operative to cause a local controller of the fluid-handling device to drive the fluid-handling equipment to the target state, the local controller being responsive to the command and feedback from the fluid-handling device indicative of whether the fluid-handling device is in the target state; and sending the translated command to the local controller.

**[009]** Some aspects include a process, including: receiving, via the network interface, from a remote user device, a command to change a state of the fluid-handling device to a target state; translating the received command into a translated command operative to cause a local controller of the fluid-handling device to drive the fluid-handling equipment to the target state, the local controller being responsive to the command and feedback from the fluid-handling device indicative of whether the fluid-handling device is in the target state; and sending the translated command to the local controller.

## BRIEF DESCRIPTION OF THE DRAWINGS

**[0010]** The above-mentioned aspects and other aspects of the present techniques will be better understood when the present application is read in view of the following figures in which like numbers indicate similar or identical elements:

**[0011]** Figure 1 illustrates an example of a command-center server and site master-controller in accordance with some embodiments;

**[0012]** Figure 2 illustrates an example of a process by which remote control of fluid-handling devices is exercised in accordance with some embodiments; and

**[0013]** Figure 3 illustrates an example of a computing device by which the hardware and processes of Figures 1 and 2 may be implemented.

**[0014]** While the invention is susceptible to various modifications and alternative forms, specific embodiments thereof are shown by way of example in the drawings and will herein be described in detail. The drawings may not be to scale. It should be understood, however, that the drawings and detailed description thereto are not intended to limit the invention to the particular form disclosed, but to the contrary, the intention is to cover all modifications, equivalents, and alternatives falling within the spirit and scope of the present invention as defined by the appended claims.

## DETAILED DESCRIPTION OF CERTAIN EMBODIMENTS

**[0015]** Figure 1 illustrates a computing environment 10 having a control system 12 that, in some implementations, addresses some or all of the above-mentioned deficiencies in certain SCADA systems for exercising remote control of fluid-handling devices. As explained in greater detail below, the control system 12 of this embodiment includes a command-center server 14 and site master-controllers 16 (specifically, in this example, three such site master-controllers 18, 20, and 22) that cooperate to facilitate remote control at a fluid-handling site 24 from user devices 26 or 28 via the Internet 30. Each site master-controller 16 may be co-located with a corresponding fluid-handling site 24 and, in some embodiments, may include logic that implements remotely issued commands, such that once a command is issued from user devices 26 or 28 and received at a site master-controller 16, the site master-controller 16, in some embodiments, executes the command to completion, even if Internet access is lost before the command is fully executed. Further, the site master-controller 16 of some embodiments may be operative to translate commands into various device-specific protocols, such that a single implementation of the site master-controller 16 is relatively versatile regardless of the type of fluid-handling device being controlled. And in some implementations, the command-center server 14 may be operative to present a command interface and receive commands via a web interface in a web browser on user devices 26 and 28, such that fluid-handling devices can be controlled remotely without the need to install special-purpose software on the computing device through which remote control is exercised. It should be noted, however, that not all embodiments provide all of these benefits, as various engineering and cost trade-offs are envisioned, and some embodiments may provide other or none of these benefits.

**[0016]** In some embodiments, the command-center server 14 includes a web server 32, a data store 34, and a site server 36. The command-center server 14 may act as a central node through which any of a plurality of user devices, such as user devices 26 and 28 (e.g., laptops, tablets, desktop computers, smartphones, and the like), issue commands to any of a plurality site master-controller 16, provided that such access is authorized. Only two user devices and three site master-controllers are shown for simplicity of explanation, but implementations including substantially more of each are envisioned, such as more than several hundred or several thousand user devices and more than several hundred or several thousand site master-controllers, for example. That said, embodiments are also consistent with a single user device and a single site master-controller.

**[0017]** The illustrated web server 32 may be operative to send instructions to present a control interface on the user devices 26 and 28, for example in a web browser on an operating system executed by processors and stored by memory of the user devices 26 or 28. The web server 32 may be operative to receive a request for such an interface from one of the user devices 26 or 28, send instructions (for example HTML JavaScript, and cascading stylesheets) to the user devices 26 that when rendered in a browser of the user devices 26 or 28, presents the control interface. The control interface may include buttons, text-input fields, and the like, that when interacted with by a user (e.g., touching, clicking, keying in text, and the like) generated events handled by the control interface and which cause corresponding commands to be sent from the user devices 26 or 28 to the command-center server 14. Other embodiments may have a special-purpose application executing on the user devices 26 and 28 for presenting the control interface and sending commands to the command-center server 14, e.g., a smartphone app that communicates via a web-based application program interface. The command-center server may interact with the user devices 26 and 28 via an Internet Protocol (IP) address of the command-center server and a port, such as port 80, which may be different from a port by which the command-center server 14 communicates with the various site master-controller 16, as described below, to keep traffic from the different components separate.

**[0018]** The web server 32 may also be operative to send instructions to present reports, and interfaces by which such reports are selected, to the user devices 26 or 28 responsive to user requests for such information or interfaces. As explained in greater detail below, the site master-

controller 16 may report various process data, and the web server 32 may present this process data to users upon request. This process data may be stored in the data store 34.

**[0019]** In the data store 34 of some embodiments, the site master-controllers 16 may be organized according to user accounts, with each site master-controller 16 corresponding to at least one user account and some user accounts corresponding to multiple site master-controllers 16, as some users may have, for example, a plurality of oil wells or other facilities which the user wishes to control or monitor. In some embodiments, the data store 34 includes a plurality of account records, each account record having one or more user names, one or more user passwords, billing information (e.g., billing address, subscription price, and invoicing data), and identifiers of one or more site master-controllers (e.g. an IP address of each site master-controller) with which users under the corresponding account are authorized to interact (e.g., issue commands or view reports of data from the site master-controller). The data store 34 may encode such arrangements of data in a variety of formats, including a relational database, program state, hierarchical key-value pairs, a flat file, or other information encoded in a tangible, non-transitory, machine-readable medium, such as a hard drive or random access memory.

**[0020]** The illustrated site server 36 may be operative to interface between the command-center server 14 and the site master-controllers 16 by directing commands received via the web server 32 to the site master-controller 16 to which the command is addressed and receiving process data from the respective site master-controllers to be stored in the data store 34 or presented to the users via the web server 32. In some embodiments, the site server 36 is operative to receive a command via the web server 32, identify an IP address of the site master-controller 16 to which the command is addressed, and send the command to the respective site master-controller 16, for example via an IP address of the command set center server (which may be the same as that of the web server 32 or different) and via a port of the command-center server 14 (which may be different from a port used for the web server 32, or some embodiments may use the same port).

**[0021]** The data store 34, web server 32, and site server 36 may be co-located, for example in a single computing device, or these components 32 and 34 may be distributed across a number of computing devices, either co-located or physically distributed. The web server 32 and site server 36 may be operative to issue queries to the data store 34 to implement requests from the user

devices 26 or 28, and the web server 32 may communicate with the site server 36 to effectuate commands.

**[0022]** In some embodiments, each site master-controller 16 controls a respective fluid-handling site 24 (only one of which is shown for site master-controller 18, though each of the other site master-controllers 20 and 22 may be associated with their own, differently located fluid-handling site, or some sites may have multiple site master controllers). The site master-controller 16 may receive commands from the command-center server 14 and implement those commands to completion, for example without further feedback to, and control signals from, the command-center server 14, such that the command can be executed even if a network connection to the command-center server 14 is temporarily lost. Further, the site master-controller 16 may be operative to report process data to the command-center server 14 for storage in the data store 34 and presentation via the web server 32 on user devices 26 and 28.

**[0023]** In some embodiments, the site master-controllers 16 are physically located at an associated fluid-handling site 24. For example, the site master-controller 18 may be connected to the fluid-handling site via a private network through which communications are sent without passing through the public Internet, and in some cases, the site master-controller 18 may be within a mile of the fluid-handling site 24, to give one example of co-location. The site master-controllers 16 may be geographically remote from one another, the command-center server 14, and the user devices 26 and 28 (each of which may also be remote from one another). For example, each of these components may be more than 1 mile from one another or not connected to one another via a private network. In some cases, though, some sites may have multiple site master-controllers co-located at a single site or some user devices may be co-located.

**[0024]** To execute commands at the fluid-handling site 24, the site master-controller 18 translates the received commands into a protocol appropriate for a corresponding fluid-handling device 38 (identified individually by reference numbers 40, 42, 44, 46, and 48). Accordingly, the features of the fluid-handling site 24 are described before addressing internal components of the exemplary site master-controller 18 to explain the environment in which the site master-controller 18 operates.

**[0025]** In this embodiment, the fluid-handling site 24 includes a plurality of fluid-handling devices 38 that are fluidly coupled to a fluid source 50 or a fluid receptacle 52, such that fluids (e.g., liquids or gases) can flow to, from, or through the respective fluid-handling device 38. The illustrated embodiment includes five fluid-handling devices, but other embodiments may include different numbers of such devices coupled to the various site master-controllers 16.

**[0026]** The fluid-handling devices may be any of a variety of different types of devices that handle fluids. For example, the fluid-handling devices may be a valve, a pump, a process chamber (for instance a oil/water separation tank), or a process filter, or level switch. In some cases, the fluid-handling device may include an actuator, for instance an electric motor or a hydraulic drive, by which fluid flow or other parameters are manipulated, a sensor 56 by which process parameters are measured, or a local controller 58 by which power to the actuator 54 is modulated. Fluid-handling devices 38 may include a variety of types of sensors, for instance, a temperature, viscosity, flowrate, fluid level, pressure, conductivity, or other parameter sensor.

**[0027]** The illustrated fluid-handling device 40 is shown with feedback control of the actuator 54 by the local controller 58 based on measurements from the sensor 56, but other embodiments may include an actuator with feed-forward control, including actuators controlled by an on-off switch without sensor feedback. The local controller 58 may be operative to receive a command to drive the actuator 54 from a current setpoint to a target setpoint and control the flow of power (e.g. hydraulic or electric power) to the actuator 54 to implement the requested change of state. For instance, the controller 58 may receive a command to change a speed, pressure, or flowrate of a pump and may respond by increasing or decreasing a flow of electric or hydraulic power to an electrical or hydraulic motor driving such a pump. Or the controller 58 may receive a command to open or close a valve and, in response, may increase or decrease a flow of electric or hydraulic power to a corresponding actuator that opens or closes the valve.

**[0028]** In some cases, the local controllers 58 may have relatively limited processing power, such that more complicated changes in state are executed responsive to multiple commands to the respective fluid-handling device 38. For example, a fluid-handling device 38 with feed-forward control may receive a command to adjust to a target setpoint, return sensor data to the site master-controller 18, and received a subsequent command to adjust further based on a

determination made by the site master-controller 18 based on the sensor data. In another example, a stuck-valve may be loosened by a series of commands issued from the site master-controller 18 causing a local controller 58 to oscillate between states, working the stuck-valve loose. Similarly, shocks to up-stream or down-stream fluid-handling devices may be mitigated by a series of commands gradually changing the state of a given fluid-handling device, for instance gradually ramping up or down the speed of a pump or gradually opening or closing a valve. In some embodiments, an action that affects the system, yet originates from outside the system, may use logic from a controller in the local system, such as a relatively drastic or rapid reduction in a specific tank level, which may indicate that a leak in a tank may exists, and the outside logic may provide which tank is experiencing the leak.

**[0029]** The site master-controller 18, in some embodiments, communicates with the fluid-handling devices 38 via a plurality of control buses 60 (individually labeled as 62, 64, and 66). Each control bus 60 may be operative to convey commands to one or more of the fluid-handling devices 38 using a different protocol. In this example, control bus 66 communicates with fluid-handling devices 42 and 40, control bus 64 communicates with fluid-handling device 44, and control bus 62 communicates with fluid-handling devices 46 and 48, but this arrangement is merely exemplary, and other embodiments may include more or fewer control buses, more or fewer fluid-handling devices per control bus, and more or fewer control buses per fluid-handling device. The control buses 60 may be serial or parallel control buses conveying digital or analog signals.

**[0030]** In one particular implementation, intended to serve merely as an example, the control bus 66 conveys commands and data using a serial communication protocol, such as the Modbus remote terminal unit (RTU) protocol, in which commands and other data are encoded in binary signals packaged in frames having redundant bits for detecting errors. The fluid-handling devices 40 and 42 on the bus 66, in this example, each have a unique address on the bus 66 by which commands from the site master-controller 68 are addressed to specific fluid-handling devices 40 or 42, and these addresses may be stored in memory of the site master-controller 18 as described in greater detail below. In some examples, site master-controller 18 acts as a master device on the bus 66, controlling which devices are permitted to transmit signals on the bus 66 at a given point in time. In this example, the fluid-handling devices 42 and 40 may include a bus interface

that detects when a command is addressed to the respective fluid-handling device and stores the command for further processing, for example by a local controller 58 that implements the command. For example, fluid-handling device 40 may be a pump, and the bus 66 may convey commands to the local controller 58 to increase the speed of the actuator 54, for example an electric motor speed, to increase a pumping flowrate or pressure. In another example, the site master-controller 18 may issue a command on bus 66 to fluid-handling device 40 to return a value sensed by sensor 56, for example a measured pump speed, pressure, or flowrate.

**[0031]** In another aspect of this particular exemplary implementation, the bus 64 conveys a single value, for example a binary on/off value encoded in a voltage or current, or an analog control signal, encoded in a current or voltage, to one fluid-handling device 44 via a single wire (or pair of wires, if a reference different from ground is used). In some cases, the value may be a voltage ranging from 0 to 5 V, or some other range, in which a relatively low voltage, below a threshold, corresponds to an off signal, and a relatively high voltage, above a threshold, corresponds to an on signal. In some cases, the same command may be conveyed to multiple fluid-handling devices connected in series or parallel, or multiple commands may be conveyed by multiple wires in parallel to a single fluid-handling device or multiple fluid-handling devices, for instance one on-off signal per fluid-handling device. As explained in greater detail below, one or more instances the bus 64 may connect to a data acquisition board of the site master-controller 18 for manipulating voltage or current to encode commands. In one example, the bus 64 conveys a binary value to a local controller for a valve actuator as a voltage-high or voltage-low signal, commanding the valve to open or close, respectively. In some cases, instances of the bus 64 may also return data to the site master-controller 18, for example as an analog signal indicating the state of a sensor. In some embodiments, instances of the bus 64 may connect to sensors on fluid-handling devices that are also connected to the bus 66 or the bus 62, e.g., returning sensor values, while the other buses convey commands.

**[0032]** In another aspect of this particular exemplary implementation, the bus 62 is an Ethernet bus, forming a private local area network by which the site master-controller 18 communicates with fluid-handling devices 46 and 48 via the Ethernet protocol. Examples of various forms of constraints and set point targeting that might be implemented with such communication are described below with reference to local controllers. In this example, data is conveyed in frames

of binary data, and each of the site master-controller 18 and the fluid-handling devices 46 and 48 are associated with a respective network address that, when included in such a frame, indicates that the frame is addressed to the associated device. Frames may include redundancy to detect corrupted frames, and access to the bus 62 may be controlled in a distributed fashion, by each device sensing whether a transmission by the device caused a collision on the bus 62, e.g., using carrier-sense multiple-access techniques with collision detection. In this example, fluid-handling devices 46 and 48 may include network interfaces, such as network interface cards or integrated devices that detect frames addressed to the corresponding fluid-handling device 46 or 48, capture the frames, and store commands encoded in the frames (e.g., in a buffer) for subsequent processing by a local controller. Similarly, the fluid-handling devices 46 and 48 may return data to the site master-controller 18, for example data from sensors of the fluid-handling devices, using the Ethernet protocol.

**[0033]** As noted above, the site master-controller 18, in this embodiment, like the other site master-controller 20 and 22, is operative to receive commands from the command-center server 14 and translate those commands in accordance with both protocols of the respective buses 62, 64, or 66 and command formats supported by the fluid-handling devices 38 (e.g., command codes, on-off signals, application-program interfaces, and the like, depending on the device). To this end, in this embodiment, the site master-controller 18 includes a network interface 68, a site management module 70, a protocol multiplexer 72, command translators 74 (individually labeled as 76, 78, 80), controllers 82 (individually labeled as 84, 86, 88, 90, 92, and 94), and input/output modules 96 (individually labeled as 98, 100, and 102). The site master-controller 18 may also include a report buffer 104 that stores data to be reported back to the command-center server 14.

**[0034]** The illustrated network interface 68 is operative to communicate with the command-center server 14 via the Internet 30 (e.g., via the Internet and other networks, such as a local area network, a cellular network, or the like). In some embodiments, the site management module 70 communicates with the network interface 68 via application program interfaces of an operating system in which the site master-controller 18 is executed.

**[0035]** The illustrated site-management module 70 is operative to coordinate the operation of the other components of the site master-controller 18. In some cases, the site management module 70

monitors a network socket defined by an Internet protocol address and port of the site master-controller 18 and handles events, e.g., incoming commands, from the network socket. In some embodiments, the site-management module 70 is implemented with multiple threads, in a system in which one thread sends and receives data request; one thread controls and monitors the current state of the system, causing other threads to be synced with current information; one thread writes to writeable devices (e.g., devices having memory) to set the target state of each device; one thread that handles server interaction for updating and receiving; one thread that handles user interaction (e.g., presenting interfaces on an local display, receiving user input, and handling events from such input); and one thread that eliminates threads that become problematic.

**[0036]** The site manager module 70 may also be operative to transmit data with the network socket, using the network interface 68, to the command-center server 14. For example, the site manager module 70 may periodically retrieve data from the report buffer 104, such as alarms, measurements from sensors, and other data associated with the fluid-handling site 24, and push this data to the command-center server 14. Or the site management module 70 may be operative to receive requests for such data being pulled from the command-center server 14, and retrieve the corresponding data from the report buffer 104 for transmission back to the command-center server 14. Further, the site manager module 70 may be operative to request measurements, alarms, and other data from the fluid-handling devices via the components 72, 74, 82, and 96, and store this data in the report buffer 104 for transmission to the command-center server 14.

**[0037]** In this embodiment, when the site management module 70 receives a command via the network interface 68, or issues its own command (e.g., to poll sensors or alarm logs), the command is conveyed to a protocol multiplexer 72, which may be operative to determine which control bus 60 and fluid-handling device 38 will receive a corresponding translated command. For example, the protocol multiplexer 72 may store in memory records for communicating with the fluid-handling devices 38. Each record may correspond to a individual fluid-handling device 38 or an individual actuator or sensor of a fluid-handling device, and each record may include a unique identifier of the corresponding device, actuator, or sensor; a control bus address of the device, actuator, or sensor (for those components on a control bus that is addressable); an identifier of the control bus 62, 64, or 66 through which the site master-controller 18

communicates with the device, actuator, or sensor; and an identifier of the protocol through which such communication occurs.

**[0038]** When a command is received at the protocol multiplexer 72, in some embodiments, the command includes the identifier of the device, actuator, or sensor to which the command is directed, and using this identifier, the protocol multiplexer 72 retrieves the corresponding record from memory to identify the appropriate protocol. In this example, based on the protocol in the record, the protocol multiplexer 72 selects among the command translators 74, each of which corresponds to a different protocol. For example, the command translator 80 may correspond to a protocol of control bus 66, such as the modbus RTU protocol; the command translator 78 may corresponds to a protocol of the control bus 64, such as a binary or analog voltage or current signal conveyed via a data acquisition board; and the command translator 76 may corresponds to a protocol of the control bus 62, such as the Ethernet protocol.

**[0039]** The command translators 74 may be operative to translate a received command from an input format to a format configured to effectuate changes in the fluid-handling devices 38. For instance, a generic command to open a valve may be sent from the control-center server 14, and that command may be translated to differently depending on the specific protocol used to communicate with the corresponding valve at a given site, with different sites potentially employing different protocols for the task. Translating commands may abstract the details of the site-specific implementations away from those implementing the command-center server 14, facilitating relatively rapid deployment of new features or sites.

**[0040]** In one example of translation, the command translator 80 may receive a command to increase a pump speed, and the command translator may determine a corresponding command via calculation or look-up table, such as a modbus function code and associated data, that when conveyed via the control bus 66 causes a corresponding fluid-handling device 40 or 42 to change state. In some embodiments, prior to execution, the command is checked for validity, to ensure the current conditions of the system warrant that the commanded action occur to preventing harm to the fluid-handling devices.

**[0041]** For example, some embodiments may store in memory accessible to the command translator 80 system constraints describing acceptable patterns of input and output parameters.

The system constraints may be selected to prevent damage to the system, e.g., a maximum speed for a pump, a maximum or minimum liquid height for a tank, a maximum or minimum fluid pressure, a maximum or minimum flow rate, an impermissible pattern of open valves that would leak oil outside of the system, etc. A command may be compared against these constraints to determine whether the command would cause the system to violate one of the constraints. In response to determining that the command would violate a constraint, the command may be rejected, an override confirmation may be requested from the operator, or the command may be executed to the extent permitted by the constraints, for instance.

**[0042]** Some embodiments may execute the translated commands in different modes. For instance, in an automatic mode, the command translator 80 may select set points to keep the system within the above-described constraints, execute a process recipe in which a collection of set points are targeted, or to target other output set points given the above described constraints. In another example, the system may operate in a mixed automatic mode in which the user selects which devices are manually controlled while other devices are automatically controlled. In a third example, a manual mode, each of the devices may be controlled manually.

**[0043]** In another example, the command translator 78 may be operative to determine whether a command corresponds to a particular voltage or current on an individual instance of the control bus 64. For example, a command to dislodge a stuck valve may be translated by the command translator 78 into a sequence of on and off signals conveyed via a high and low voltage on an individual wire corresponding to bus 64.

**[0044]** In another example, the command translator 76 may be operative to translate commands into a format configured to change the state of fluid-handling devices 46 or 48. Or in some embodiments, command translator 76 is operative to pass through and un-translated command if appropriately formatted as received from the command-center server 14.

**[0045]** Some embodiments may include controllers 82 operative to execute control routines implicated by the translated commands on an individual device 38, actuator 54, or sensor 56. To this end, the commands translator 74, in addition to transmitting commands, may also route the translated command to a controller 82 corresponding to the specific device, actuator, or sensor to which the command is directed. The controllers 82 may determine set points corresponding to

(or conveyed in) the command, send control signals configured to drive the fluid-handling device to the set points, and receive feedback from the fluid-handling device 38 indicative of whether the fluid-handling device 38 has achieved the target set point. In some embodiments, the controllers 82 include proportional-integral-derivative controllers for exercising feedback control, or the controllers 82 may include feed forward control algorithms (e.g., look-up tables or formulas for calculating commands based on set points). Further, in some embodiments, the controllers 82 may change the set point over time in accordance with the received command, for example a command to gradually ramp up a motor speed, a command to gradually open a valve, or a command to oscillate the position of a valve to dislodge a stuck valve. Algorithms for changing the set point may be stored in memory accessible to the controllers 82 responsive to a translated command implicating the specific algorithm.

**[0046]** The illustrated input/output modules 26 include, in some embodiments, link-layer devices that accommodate the particular features of the physical medium with which control buses 62, 64, and 66 are implemented. In some cases, the input/output modules 96 also perform encoding and decoding at the network and transport layer, for example packaging data in appropriately structured frames for the respective control bus 60. In one example, the input/output module 102 includes a modbus modem, the input/output module 100 includes a data acquisition board (for example a printed circuit board having one or more digital-to-analog converters or analog-to-digital converters), and the input/output module 98 includes an Ethernet network interface card.

**[0047]** The site master-controller 18, thus, may be operative to receive commands from the site server 36 of the command-center server 14, translate those commands, identify the appropriate control bus 60 and, if needed, address on the control bus, and implement the command once received, even if network access is lost after the command is issued from the command-center server 14. Further, the site master-controller 18, in some embodiments, is operative to retrieve sensor data, alarms, and other site data, and buffer such data in the report buffer 104, before the data is periodically returned to the command-center server 14, such that buffered data is not lost if network access ceases intermittently. Accordingly, some embodiments provide control and monitoring of remote fluid handling sites 24 that is relatively robust to interruptions in network service, and some embodiments facilitate such monitoring and control via a web browser on user devices 26 and 28, such that the addition of new devices or users is relatively simple compared to

systems that require special purpose applications. Again though, not all embodiments provide these benefits, and some embodiments may provide other benefits.

**[0048]** The components of the site master-controller 18 and command-center server 14 are described above with reference to discrete functional blocks and as discrete unitary components, but it should be understood that software or hardware by which these functional blocks or components are implemented may be distributed across multiple computing systems or multiple processes within a computing system, and code, stored in a tangible, non-transitory, machine-readable medium, for providing this functionality or the functionality described below may be intermingled, conjoined, divided, or otherwise differently organized than the manner in which the functional blocks are illustrated.

**[0049]** Figure 2 illustrates an embodiment of a process 104 for exercising remote control of a fluid-handling site. The process 104 may be performed by the above-described site master-controllers 16, though embodiments are not limited to the implementations described above. Further, embodiments may include additional steps, fewer steps, and steps in a different order from the manner in which the process 104 is illustrated, which is not to suggest that any other feature described herein is required in all embodiments or cannot be modified.

**[0050]** In some embodiments, the process 104 includes receiving, via a network interface, from a remote user device, (e.g., via a command-center server) a command to change a state of a fluid-handling device to a target state, as illustrated by block 106. The command may be received from, for example, the above-describes site server 36, which may have received the command from a remote user device via a web browser of the user device. Further, the command to change the fluid-handling device to a target state may include a command that changes the fluid-handling device to a plurality of different states over time, such as a command to ramp up or down a motor speed or oscillate some parameter.

**[0051]** In some embodiments, the process 104 includes identifying a protocol and control bus of the fluid-handling device, as illustrated by block 108. Identifying a protocol and control bus may include parsing an identifier of a device, actuator, or sensor from the received command and retrieving a corresponding record based on the identifier, the record including an identifier of the

protocol and control bus. In some embodiments, the retrieved record may also include an identifier of a control bus address of the corresponding device, actuator, or sensor.

**[0052]** In some embodiments, the process 104 includes translating the received command into a translated command based on the identified protocol, as illustrated by block 110. Examples of such translation are described above with reference to the command translators 74.

**[0053]** The process 104 may also include sending the translated command to a local controller of the fluid-handling device via the identified control bus, as illustrated by block 112. Sending the translated command may include exercising feedback control of the fluid-handling device based on sensor data received from the fluid-handling device by adjusting a set point sent to the local controller. Or in some use cases, sending the translated command may include sending a sequence of set points that change over time.

**[0054]** In some embodiments, the process 104 includes receiving sensor data from the fluid-handling device confirming that the command was executed, as illustrated by block 114. As with the other features described herein, not all embodiments include this step. Using this data, some embodiments may exercise feedback control or may retrieve sensor measurements following the execution of a command for reporting to the user device. In some cases, the sensor data is retrieved regardless of whether a command was issued, for example periodically to monitor the state of the fluid-handling device. In one example, the fluid-handling device is an oil/water separation tank, and a set point of a pump is adjusted to change a fluid level in the tank, e.g., a level at which oil meets water or a level of the oil.

**[0055]** In some embodiments, the received sensor data is stored in local memory, as illustrated by block 116. For example, the received sensor data may be stored in the above-described report buffer 104.

**[0056]** In some embodiments, the process 104 further includes periodically sending the sensor data to the remote server for reporting to the user device, as illustrated by block 118. Periodically, data from the report buffer may be transmitted to the above-described command-center server 14 for compilation of reports requested by user devices 26 to 28. Similarly, alarms

or other log data issued by fluid-handling devices may also be retrieved, stored, and transmitted to the command-center server 14 for reporting.

**[0057]** Thus, systems implementing the process 104, in some embodiments, offer relatively robust control and monitoring of fluid-handling devices that are geographically distributed. This is expected to lower the costs associated with operating such fluid-handling devices and facilitate the extraction of petroleum products and other processing of fluids.

**[0058]** Figure 3 is a diagram that illustrates an exemplary computing system 1000 in accordance with embodiments of the present technique. Various portions of systems and methods described herein, may include or be executed on one or more computer systems similar to computing system 1000. Further, processes and modules described herein may be executed by one or more processing systems similar to that of computing system 1000.

**[0059]** Computing system 1000 may include one or more processors (e.g., processors 1010a-1010n) coupled to system memory 1020, an input/output I/O device interface 1030 and a network interface 1040 via an input/output (I/O) interface 1050. A processor may include a single processor or a plurality of processors (e.g., distributed processors). A processor may be any suitable processor capable of executing or otherwise performing instructions. A processor may include a central processing unit (CPU) that carries out program instructions to perform the arithmetical, logical, and input/output operations of computing system 1000. A processor may execute code (e.g., processor firmware, a protocol stack, a database management system, an operating system, or a combination thereof) that creates an execution environment for program instructions. A processor may include a programmable processor. A processor may include general or special purpose microprocessors. A processor may receive instructions and data from a memory (e.g., system memory 1020). Computing system 1000 may be a uni-processor system including one processor (e.g., processor 1010a), or a multi-processor system including any number of suitable processors (e.g., 1010a-1010n). Multiple processors may be employed to provide for parallel or sequential execution of one or more portions of the techniques described herein. Processes, such as logic flows, described herein may be performed by one or more programmable processors executing one or more computer programs to perform functions by operating on input data and generating corresponding output. Processes described herein may be

performed by, and apparatus can also be implemented as, special purpose logic circuitry, e.g., an FPGA (field programmable gate array) or an ASIC (application specific integrated circuit). Computing system 1000 may include a plurality of computing devices (e.g., distributed computer systems) to implement various processing functions.

**[0060]** I/O device interface 1030 may provide an interface for connection of one or more I/O devices 1060 to computer system 1000. I/O devices may include devices that receive input (e.g., from a user) or output information (e.g., to a user). I/O devices 1060 may include, for example, graphical user interface presented on displays (e.g., a cathode ray tube (CRT) or liquid crystal display (LCD) monitor), pointing devices (e.g., a computer mouse or trackball), keyboards, keypads, touchpads, scanning devices, voice recognition devices, gesture recognition devices, printers, audio speakers, microphones, cameras, or the like. I/O devices 1060 may be connected to computer system 1000 through a wired or wireless connection. I/O devices 1060 may be connected to computer system 1000 from a remote location. I/O devices 1060 located on remote computer system, for example, may be connected to computer system 1000 via a network and network interface 1040.

**[0061]** Network interface 1040 may include a network adapter that provides for connection of computer system 1000 to a network. Network interface may 1040 may facilitate data exchange between computer system 1000 and other devices connected to the network. Network interface 1040 may support wired or wireless communication. The network may include an electronic communication network, such as the Internet, a local area network (LAN), a wide area (WAN), a cellular communications network or the like.

**[0062]** System memory 1020 may be configured to store program instructions 1100 or data 1110. Program instructions 1100 may be executable by a processor (e.g., one or more of processors 1010a-1010n) to implement one or more embodiments of the present techniques. Instructions 1100 may include modules of computer program instructions for implementing one or more techniques described herein with regard to various processing modules. Program instructions may include a computer program (which in certain forms is known as a program, software, software application, script, or code). A computer program may be written in a programming language, including compiled or interpreted languages, or declarative or

procedural languages. A computer program may include a unit suitable for use in a computing environment, including as a stand-alone program, a module, a component, a subroutine. A computer program may or may not correspond to a file in a file system. A program may be stored in a portion of a file that holds other programs or data (e.g., one or more scripts stored in a markup language document), in a single file dedicated to the program in question, or in multiple coordinated files (e.g., files that store one or more modules, sub programs, or portions of code). A computer program may be deployed to be executed on one or more computer processors located locally at one site or distributed across multiple remote sites and interconnected by a communication network.

**[0063]** System memory 1020 may include a tangible program carrier having program instructions stored thereon. A tangible program carrier may include a non-transitory computer readable storage medium. A non-transitory computer readable storage medium may include a machine readable storage device, a machine readable storage substrate, a memory device, or any combination thereof. Non-transitory computer readable storage medium may include, non-volatile memory (e.g., flash memory, ROM, PROM, EPROM, EEPROM memory), volatile memory (e.g., random access memory (RAM), static random access memory (SRAM), synchronous dynamic RAM (SDRAM)), bulk storage memory (e.g., CD-ROM and/or DVD-ROM, hard-drives), or the like. System memory 1020 may include a non-transitory computer readable storage medium may have program instructions stored thereon that are executable by a computer processor (e.g., one or more of processors 1010a-1010n) to cause the subject matter and the functional operations described herein. A memory (e.g., system memory 1020) may include a single memory device and/or a plurality of memory devices (e.g., distributed memory devices). In some embodiments, the program may be conveyed by a propagated signal, such as a carrier wave or digital signal conveying a stream of packets.

**[0064]** I/O interface 1050 may be configured to coordinate I/O traffic between processors 1010a-1010n, system memory 1020, network interface 1040, I/O devices 1060 and/or other peripheral devices. I/O interface 1050 may perform protocol, timing or other data transformations to convert data signals from one component (e.g., system memory 1020) into a format suitable for use by another component (e.g., processors 1010a-1010n). I/O interface 1050 may include support for devices attached through various types of peripheral buses, such as a variant of the

Peripheral Component Interconnect (PCI) bus standard or the Universal Serial Bus (USB) standard.

**[0065]** Embodiments of the techniques described herein may be implemented using a single instance of computer system 1000, or multiple computer systems 1000 configured to host different portions or instances of embodiments. Multiple computer systems 1000 may provide for parallel or sequential processing/execution of one or more portions of the techniques described herein.

**[0066]** Those skilled in the art will appreciate that computer system 1000 is merely illustrative and is not intended to limit the scope of the techniques described herein. Computer system 1000 may include any combination of devices or software that may perform or otherwise provide for the performance of the techniques described herein. For example, computer system 1000 may include or be a combination of a cloud-computing system, a data center, a server rack, a server, a virtual server, a desktop computer, a laptop computer, a tablet computer, a server device, a client device, a mobile telephone, a personal digital assistant (PDA), a mobile audio or video player, a game console, a vehicle-mounted computer, or a Global Positioning System (GPS), or the like. Computer system 1000 may also be connected to other devices that are not illustrated, or may operate as a stand-alone system. In addition, the functionality provided by the illustrated components may in some embodiments be combined in fewer components or distributed in additional components. Similarly, in some embodiments, the functionality of some of the illustrated components may not be provided or other additional functionality may be available.

**[0067]** Those skilled in the art will also appreciate that, while various items are illustrated as being stored in memory or on storage while being used, these items or portions of them may be transferred between memory and other storage devices for purposes of memory management and data integrity. Alternatively, in other embodiments some or all of the software components may execute in memory on another device and communicate with the illustrated computer system via inter-computer communication. Some or all of the system components or data structures may also be stored (e.g., as instructions or structured data) on a computer-accessible medium or a portable article to be read by an appropriate drive, various examples of which are described above. In some embodiments, instructions stored on a computer-accessible medium separate

from computer system 1000 may be transmitted to computer system 1000 via transmission media or signals such as electrical, electromagnetic, or digital signals, conveyed via a communication medium such as a network or a wireless link. Various embodiments may further include receiving, sending or storing instructions or data implemented in accordance with the foregoing description upon a computer-accessible medium. Accordingly, the present invention may be practiced with other computer system configurations.

**[0068]** It should be understood that the description and the drawings are not intended to limit the invention to the particular form disclosed, but to the contrary, the intention is to cover all modifications, equivalents, and alternatives falling within the spirit and scope of the present invention as defined by the appended claims. Further modifications and alternative embodiments of various aspects of the invention will be apparent to those skilled in the art in view of this description. Accordingly, this description and the drawings are to be construed as illustrative only and are for the purpose of teaching those skilled in the art the general manner of carrying out the invention. It is to be understood that the forms of the invention shown and described herein are to be taken as examples of embodiments. Elements and materials may be substituted for those illustrated and described herein, parts and processes may be reversed or omitted, and certain features of the invention may be utilized independently, all as would be apparent to one skilled in the art after having the benefit of this description of the invention. Changes may be made in the elements described herein without departing from the spirit and scope of the invention as described in the following claims. Headings used herein are for organizational purposes only and are not meant to be used to limit the scope of the description.

**[0069]** As used throughout this application, the word “may” is used in a permissive sense (i.e., meaning having the potential to), rather than the mandatory sense (i.e., meaning must). The words “include”, “including”, and “includes” and the like mean including, but not limited to. As used throughout this application, the singular forms “a”, “an” and “the” include plural referents unless the content explicitly indicates otherwise. Thus, for example, reference to “an element” or "a element" includes a combination of two or more elements, notwithstanding use of other terms and phrases for one or more elements, such as “one or more.” The term "or" is, unless indicated otherwise, non-exclusive, i.e., encompassing both "and" and "or." Terms describing conditional relationships, e.g., "in response to X, Y," "upon X, Y,", “if X, Y,” "when X, Y," and the like,

encompass causal relationships in which the antecedent is a necessary causal condition, the antecedent is a sufficient causal condition, or the antecedent is a contributory causal condition of the consequent, e.g., "state X occurs upon condition Y obtaining" is generic to "X occurs solely upon Y" and "X occurs upon Y and Z." Such conditional relationships are not limited to consequences that instantly follow the antecedent obtaining, as some consequences may be delayed, and in conditional statements, antecedents are connected to their consequents, e.g., the antecedent is relevant to the likelihood of the consequent occurring. Further, unless otherwise indicated, statements that one value or action is "based on" another condition or value encompass both instances in which the condition or value is the sole factor and instances in which the condition or value is one factor among a plurality of factors. Unless specifically stated otherwise, as apparent from the discussion, it is appreciated that throughout this specification discussions utilizing terms such as "processing", "computing", "calculating", "determining" or the like refer to actions or processes of a specific apparatus, such as a special purpose computer or a similar special purpose electronic processing/computing device. In the context of this specification, a special purpose computer or a similar special purpose electronic processing or computing device is capable of manipulating or transforming signals, for instance signals represented as physical electronic, optical, or magnetic quantities within memories, registers, or other information storage devices, transmission devices, or display devices of the special purpose computer or similar special purpose processing or computing device.

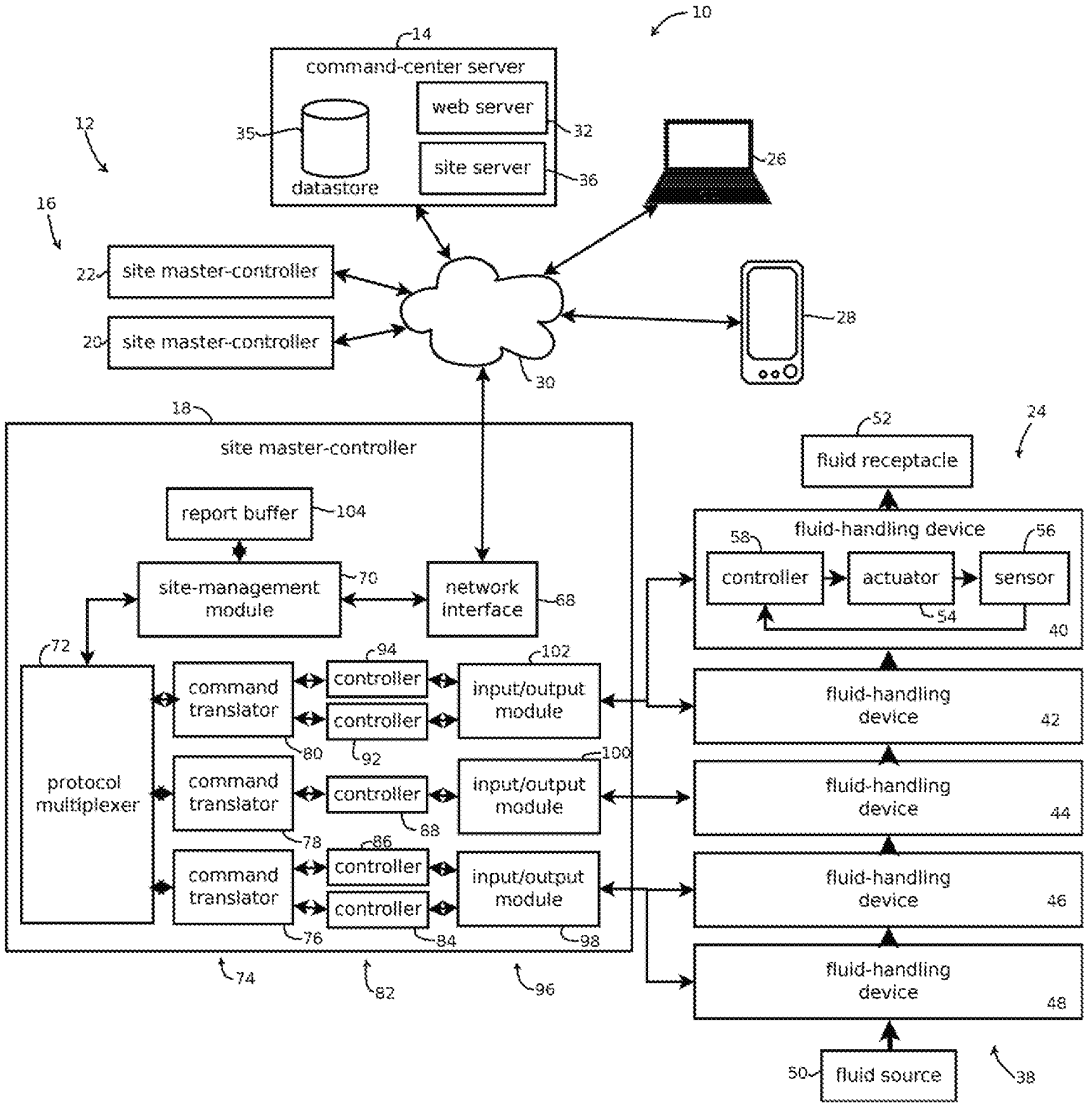

10
14
command-center server
web server
32
35
datastore
site server
36
12
26
16
22
site master-controller
20
site master-controller
28
30
18
site master-controller
report buffer
104
site-management module
70
network interface
68
72
protocol multiplexer
command translator
80
controller
94
controller
92
input/output module
102
command translator
78
controller
88
input/output module
100
command translator
76
controller
86
controller
84
input/output module
98
74
82
96
24
52
fluid receptacle
fluid-handling device
58
controller
actuator
54
sensor
56
40
fluid-handling device
42
fluid-handling device
44
fluid-handling device
46
fluid-handling device
48
50
fluid source
38

FIG. 1

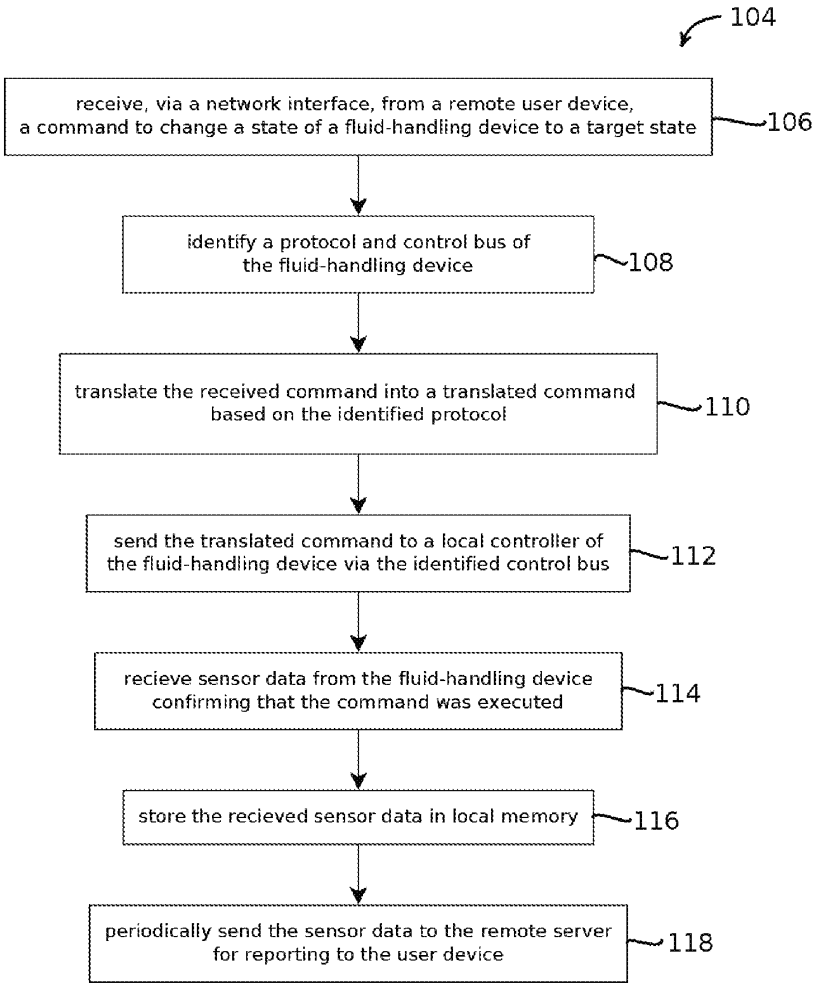

104
receive, via a network interface, from a remote user device, a command to change a state of a fluid-handling device to a target state
106
identify a protocol and control bus of the fluid-handling device
108
translate the received command into a translated command based on the identified protocol
110
send the translated command to a local controller of the fluid-handling device via the identified control bus
112
recieve sensor data from the fluid-handling device confirming that the command was executed
114
store the recieved sensor data in local memory
116
periodically send the sensor data to the remote server for reporting to the user device
118

FIG. 2

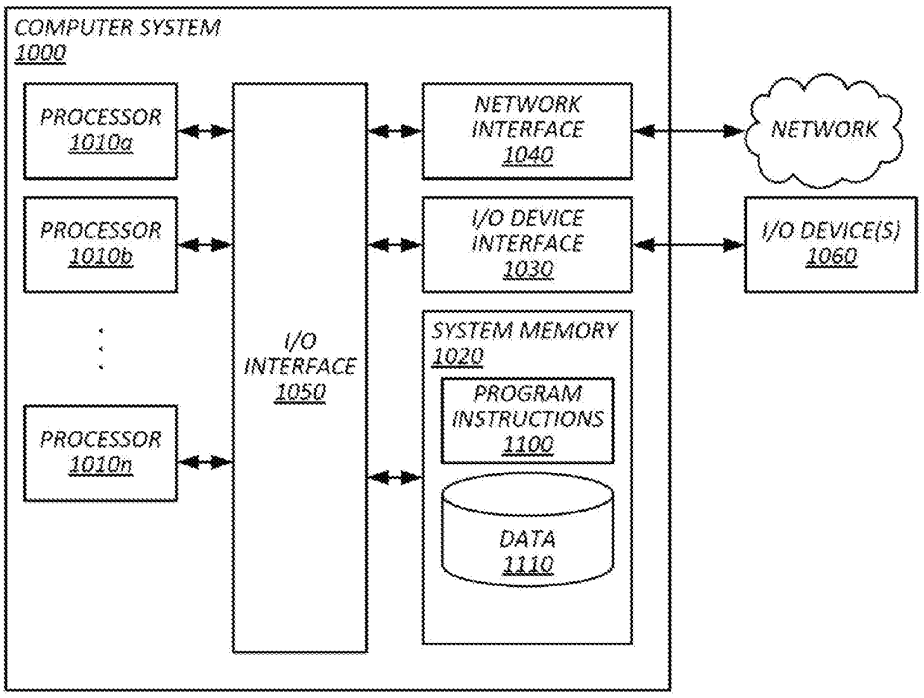

COMPUTER SYSTEM
1000
PROCESSOR
1010a
PROCESSOR
1010b
PROCESSOR
1010n
I/O
INTERFACE
1050
NETWORK
INTERFACE
1040
I/O DEVICE
INTERFACE
1030
SYSTEM MEMORY
1020
PROGRAM
INSTRUCTIONS
1100
DATA
1110
NETWORK
I/O DEVICE(S)
1060

FIG. 3

| Electronic Acknowledgement Receipt | |
|---|---|
| **EFS ID:** | 37485925 |
| **Application Number:** | 16656319 |
| **International Application Number:** | |
| **Confirmation Number:** | 2059 |
| **Title of Invention:** | REMOTE CONTROL OF FLUID-HANDLING DEVICES |
| **First Named Inventor/Applicant Name:** | Aaron Phillips |
| **Customer Number:** | 909 |
| **Filer:** | Joshua L. Tucker/Amanda Childs |
| **Filer Authorized By:** | Joshua L. Tucker |
| **Attorney Docket Number:** | 034392-0508266 |
| **Receipt Date:** | 17-OCT-2019 |
| **Filing Date:** | |
| **Time Stamp:** | 17:55:55 |
| **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 | Application Data Sheet | WebADS.pdf | 127549<br>f29a274c50d62b2871e8b5a57c86648f310dee41 | no | 8 |
| **Warnings:** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Information:** | | | | | |
| 2 | Oath or Declaration filed | 034392-0508266-Dec.pdf | 1956751<br>fc438430afda6ea36c26c509ad5bc63a5f0a202d | no | 2 |
| **Warnings:** | | | | | |
| **Information:** | | | | | |
| 3 | | 034392-0508266-POA.pdf | 7989094<br>5ea3224d0b2fa89dfa507046e56c553f248e0c0a | yes | 16 |

| | Multipart Description/PDF files in .zip description | | |
|---|---|---|---|
| | **Document Description** | **Start** | **End** |
| | Assignee showing of ownership per 37 CFR 3.73 | 3 | 16 |
| | Power of Attorney | 1 | 2 |

| | | | | | |
|---|---|---|---|---|---|
| **Warnings:** | | | | | |
| **Information:** | | | | | |
| 4 | Information Disclosure Statement (IDS) Form (SB08) | No_dup_IDS_for_cons.pdf | 192310<br>fc65f478f546d7ee81b4fe407ec5ac423be6a385 | no | 1 |
| **Warnings:** | | | | | |
| **Information:** | | | | | |
| This is not an USPTO supplied IDS fillable form | | | | | |
| 5 | | 034392_0508266_Application.pdf | 197372<br>f01fe69dfb62d5251c8e4c4dcf5c954033eafdb1 | yes | 28 |

| | Multipart Description/PDF files in .zip description | | |
|---|---|---|---|
| | **Document Description** | **Start** | **End** |
| | Abstract | 28 | 28 |
| | Claims | 24 | 27 |
| | Specification | 1 | 23 |

| | | | | | |
|---|---|---|---|---|---|
| **Warnings:** | | | | | |
| **Information:** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 6 | Drawings-only black and white line drawings | 034392-0508266-Drawings.pdf | 332090<br>2d04868e8f92d28c4f351f9aa8c226d3b6ee6af4 | no | 3 |
| **Warnings:** | | | | | |
| **Information:** | | | | | |
| | | | **Total Files Size (in bytes):** | 10795166 | |

**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.**

| Application Data Sheet 37 CFR 1.76 | Attorney Docket Number | 034392-0508266 |
|---|---|---|
| | Application Number | |
| Title of Invention | REMOTE CONTROL OF FLUID-HANDLING DEVICES | |

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

## Secrecy Order 37 CFR 5.2:

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

## Inventor Information:

**Inventor 1**

**Legal Name**

| Prefix | Given Name | Middle Name | Family Name | Suffix |
|---|---|---|---|---|
| | Aaron | | Phillips | |

**Residence Information (Select One)** ◉ US Residency ○ Non US Residency ○ Active US Military Service

| City | Lubbock | State/Province | TX | Country of Residence i | US |
|---|---|---|---|---|---|

**Mailing Address of Inventor:**

| Address 1 | 9502 Highway 87 | | |
|---|---|---|---|
| Address 2 | | | |
| City | Lubbock | State/Province | TX |
| Postal Code | 79423 | Country i | US |

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

## Correspondence Information:

**Enter either Customer Number or complete the Correspondence Information section below.**
**For further information see 37 CFR 1.33(a).**

☐ **An Address is being provided for the correspondence Information of this application.**

| Customer Number | 909 | | |
|---|---|---|---|
| Email Address | | Add Email | Remove Email |

## Application Information:

| Title of the Invention | REMOTE CONTROL OF FLUID-HANDLING DEVICES | | |
|---|---|---|---|
| Attorney Docket Number | 034392-0508266 | Small Entity Status Claimed | ☒ |
| Application Type | Nonprovisional | | |
| Subject Matter | Utility | | |
| Total Number of Drawing Sheets (if any) | 3 | Suggested Figure for Publication (if any) | |

PTO/AIA/14 (08-15)
Approved for use through 04/30/2017. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| **Application Data Sheet 37 CFR 1.76** | Attorney Docket Number | 034392-0508266 |
|---|---|---|
| | Application Number | |
| Title of Invention | REMOTE CONTROL OF FLUID-HANDLING DEVICES | |

## Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

| Application number of the previously filed application | Filing date (YYYY-MM-DD) | Intellectual Property Authority or Country |
|---|---|---|
| | | |

## Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

## Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

| Please Select One: | ◉ Customer Number | ○ US Patent Practitioner | ○ Limited Recognition (37 CFR 11.9) |
|---|---|---|---|
| Customer Number | 00909 | | |

| Prefix | **Given Name** | Middle Name | **Family Name** | Suffix | Remove |
|---|---|---|---|---|---|
| | | | | | |
| Registration Number | | | | | |
| Prefix | **Given Name** | Middle Name | **Family Name** | Suffix | Remove |
| | | | | | |
| Registration Number | | | | | |

Additional Representative Information blocks may be generated within this form by selecting the **Add** button.

PTO/AIA/14 (08-15)
Approved for use through 04/30/2017. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| Application Data Sheet 37 CFR 1.76 | Attorney Docket Number | 034392-0508266 |
|---|---|---|
| | Application Number | |
| Title of Invention | REMOTE CONTROL OF FLUID-HANDLING DEVICES | |

## Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.
When referring to the current application, please leave the "Application Number" field blank.

| Prior Application Status | Pending | | Remove |
|---|---|---|---|
| Application Number | Continuity Type | Prior Application Number | Filing or 371(c) Date (YYYY-MM-DD) |
| | Continuation of | 15867077 | 2018-01-10 |

| Prior Application Status | Patented | | | Remove | |
|---|---|---|---|---|---|
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) | Patent Number | Issue Date (YYYY-MM-DD) |
| 15867077 | Continuation of | 14984422 | 2015-12-30 | 9898014 | 2018-02-20 |

| Prior Application Status | Patented | | | Remove | |
|---|---|---|---|---|---|
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) | Patent Number | Issue Date (YYYY-MM-DD) |
| 14984422 | Continuation of | 14147190 | 2014-01-03 | 9342078 | 2016-05-17 |

| Prior Application Status | Patented | | | Remove | |
|---|---|---|---|---|---|
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) | Patent Number | Issue Date (YYYY-MM-DD) |
| 14147190 | Continuation of | 13708557 | 2012-12-07 | 8649909 | 2014-02-11 |

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.

## Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX) the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

| Application Number | Country[i] | Filing Date (YYYY-MM-DD) | Access Code[i] (if applicable) |
|---|---|---|---|
| | | | |

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

PTO/AIA/14 (08-15)
Approved for use through 04/30/2017. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| **Application Data Sheet 37 CFR 1.76** | | Attorney Docket Number | 034392-0508266 |
|---|---|---|---|
| | | Application Number | |
| Title of Invention | REMOTE CONTROL OF FLUID-HANDLING DEVICES | | |

## Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

PTO/AIA/14 (08-15)
Approved for use through 04/30/2017. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| Application Data Sheet 37 CFR 1.76 | | Attorney Docket Number | 034392-0508266 |
|---|---|---|---|
| | | Application Number | |
| Title of Invention | REMOTE CONTROL OF FLUID-HANDLING DEVICES | | |

## Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

**NOTE**: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

**1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)**

**A. Priority Document Exchange (PDX)** - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

**B. Search Results from U.S. Application to EPO** - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

**2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)**

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

**NOTE:** Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

PTO/AIA/14 (08-15)
Approved for use through 04/30/2017. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| **Application Data Sheet 37 CFR 1.76** | Attorney Docket Number | 034392-0508266 |
|---|---|---|
| | Application Number | |
| Title of Invention | REMOTE CONTROL OF FLUID-HANDLING DEVICES | |

## Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

**Applicant 1**

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

Clear

| | | |
|---|---|---|
| ◉ Assignee | ○ Legal Representative under 35 U.S.C. 117 | ○ Joint Inventor |
| ○ Person to whom the inventor is obligated to assign. | ○ Person who shows sufficient proprietary interest | |

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

| | |
|---|---|
| Name of the Deceased or Legally Incapacitated Inventor: | |

If the Applicant is an Organization check here. ☒

| | |
|---|---|
| Organization Name | SitePro, Inc. |

**Mailing Address Information For Applicant:**

| | | | |
|---|---|---|---|
| **Address 1** | 9502 Highway 87 | | |
| Address 2 | | | |
| **City** | Lubbock | **State/Province** | TX |
| **Country** [i] | US | Postal Code | 79423 |
| Phone Number | | Fax Number | |
| Email Address | | | |

Additional Applicant Data may be generated within this form by selecting the Add button.

PTO/AIA/14 (08-15)
Approved for use through 04/30/2017. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| **Application Data Sheet 37 CFR 1.76** | Attorney Docket Number | 034392-0508266 |
|---|---|---|
| | Application Number | |
| Title of Invention | REMOTE CONTROL OF FLUID-HANDLING DEVICES | |

## Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

**Assignee 1**

Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

If the Assignee or Non-Applicant Assignee is an Organization check here. ☐

| Prefix | **Given Name** | Middle Name | **Family Name** | Suffix |
|---|---|---|---|---|
| | | | | |

**Mailing Address Information For Assignee including Non-Applicant Assignee:**

| | | | |
|---|---|---|---|
| **Address 1** | | | |
| Address 2 | | | |
| **City** | | **State/Province** | |
| **Country** i | | Postal Code | |
| Phone Number | | Fax Number | |
| Email Address | | | |

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.

PTO/AIA/14 (08-15)
Approved for use through 04/30/2017. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| **Application Data Sheet 37 CFR 1.76** | Attorney Docket Number | 034392-0508266 |
|---|---|---|
| | Application Number | |
| Title of Invention | REMOTE CONTROL OF FLUID-HANDLING DEVICES | |

## Signature:

**NOTE:** This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). **However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).**

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e. g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

| **Signature** | /Joshua Tucker/ | | | Date (YYYY-MM-DD) | |
|---|---|---|---|---|---|
| First Name | Joshua | Last Name | Tucker | Registration Number | 63809 |

Additional Signature may be generated within this form by selecting the Add button.

PTO/AIA/01 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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.

# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

| Title of Invention | REMOTE CONTROL OF FLUID-HANDLING DEVICES |
|---|---|

As the below named inventor, I hereby declare that:

This declaration is directed to:

☐ The attached application, or

☒ United States application or PCT international application number 14147190

filed on 03-JAN-2014.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

## WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Aaron Phillips Date (Optional) :

Signature:

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 1.11 and 1.14. This collection is estimated to take 1 minute 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, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

## 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 regulation.

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

# STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: SitePro, Inc.

Application No./Patent No.: Not yet assigned Filed/Issue Date: Filed herewith

Titled: REMOTE CONTROL OF FLUID-HANDLING DEVICES

SitePro, Inc., a corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☑ The assignee of the entire right, title, and interest.

2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):

   ☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.

   ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (*e.g.*, bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

B. ☑ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Aaron Phillips To: AmpliSine Labs, LLC

   The document was recorded in the United States Patent and Trademark Office at

   Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: AmpliSine Labs, LLC To: SitePro, LLC

   The document was recorded in the United States Patent and Trademark Office at

   Reel _____, Frame _____, or for which a copy thereof is attached.



This collection of information is required by 37 CFR 3.73(b). 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 1.11 and 1.14. This collection is estimated to take 12 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, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

## STATEMENT UNDER 37 CFR 3.73(c)

3. From: SitePro, LLC To: SitePro, Inc.

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☑ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

| /Joshua Tucker/ | October 17, 2019 |
|---|---|
| Signature | Date |
| Joshua Tucker | 63809 |
| Printed or Typed Name | Title or Registration Number |

# ASSIGNMENT

WHEREAS, Aaron Phillips, who resides 2806 87th St., Lubbock, TX 79423, (hereinafter referred to as "**ASSIGNOR**"), has made certain improvements or inventions in a United States patent application titled **REMOTE CONTROL OF FLUID-HANDLING DEVICES** ("US Patent Application"), and has executed the US patent application No 13/208,557 with the United States Patent and Trademark Office herewith and

WHEREAS, AmpliSine Labs, LLC, with a business address at 9502 HWY 87, Lubbock, TX 79423, (hereinafter referred to as "**ASSIGNEE**"), is desirous of acquiring the same.

NOW, THEREFORE, This Indenture Witnesseth: That for good and valuable consideration, receipt whereof is hereby acknowledged, said **ASSIGNOR** does hereby sell, assign, and transfer to said **ASSIGNEE**, its successors and assigns, all right, title, and interest in and to said US Patent Application set forth above, the invention or inventions therein shown and described and any improvements on said invention heretofore or hereafter made, any divisions, provisionals, non-provisionals, continuations, or continuations-in-part of said US Patent Application, and all patents, United States and foreign, to be granted upon any such applications or for the invention or inventions thereof, any reissues, reexaminations, continuations, continuations-in-part, or extensions of said patents, and all rights for past and present infringement related to any patents issued or to be issued thereon; and said **ASSIGNOR** does hereby authorize and request the Commissioner of Patents to issue all patents on said US Patent Application or for the invention or inventions hereof, in accordance with this assignment.

And said **ASSIGNOR** for said consideration hereby covenants and agrees that the said **ASSIGNOR** is the owner of the full title herein conveyed and has the right to convey the same, and agrees that said **ASSIGNOR** will communicate to said **ASSIGNEE** any facts known to said **ASSIGNOR** respecting said invention or inventions, and testify in any legal proceedings when called upon by said **ASSIGNEE**, sign all lawful papers deemed by said **ASSIGNEE** as expedient to vest in it the legal title herein sought to be conveyed or for the filing and

prosecution of all applications and patents, United States and foreign, including any disclaimers related thereto, and otherwise aid said **ASSIGNEE**, its successors and assigns, in obtaining full patent protection on said invention and enforcing proper protection under said patents, but in every instance at the **ASSIGNEE'S** expense.

EXECUTED THIS 6 day of December, 2012.

Aaron Phillips

Corporations Section
P.O.Box 13697
Austin, Texas 78711-3697

Rolando B. Pablos
Secretary of State

# Office of the Secretary of State

## CERTIFICATE OF FILING
## OF

SitePro, LLC
801189847

[formerly: AmpliSine Labs LLC]

The undersigned, as Secretary of State of Texas, hereby certifies that a Certificate of Amendment for the above named entity has been received in this office and has been found to conform to the applicable provisions of law.

ACCORDINGLY, the undersigned, as Secretary of State, and by virtue of the authority vested in the secretary by law, hereby issues this certificate evidencing filing effective on the date shown below.

Dated: 07/31/2018

Effective: 07/31/2018

Rolando B. Pablos
Secretary of State

Corporations Section
P.O.Box 13697
Austin, Texas 78711-3697

David Whitley
Secretary of State

# Office of the Secretary of State

December 31, 2018

CT Corporation System
701 Brazos, Ste. 720
Austin, TX 78701 USA

RE: SitePro, Inc.
File Number: [Entity not of Record, Filing Number Not Available]

It has been our pleasure to approve and place on record the filing instrument effecting a conversion. The appropriate evidence is attached for your files. Payment of the filing fee is acknowledged by this letter.

If we can be of further service at any time, please let us know.

Sincerely,

Corporations Section
Business & Public Filings Division
(512) 463-5555

Enclosure

Corporations Section
P.O.Box 13697
Austin, Texas 78711-3697

David Whitley
Secretary of State

# Office of the Secretary of State

## CERTIFICATE OF CONVERSION

The undersigned, as Secretary of State of Texas, hereby certifies that a filing instrument for

SitePro, LLC
File Number: 801189847

Converting it to

SitePro, Inc.
File Number: [Entity not of Record, Filing Number Not Available]

has been received in this office and has been found to conform to law. ACCORDINGLY, the undersigned, as Secretary of State, and by virtue of the authority vested in the secretary by law, hereby issues this certificate evidencing the acceptance and filing of the conversion on the date shown below.

Dated: 12/28/2018

Effective: 01/01/2019

David Whitley
Secretary of State

**Form 636**
**(Revised 05/11)**

Return in duplicate to:
Secretary of State
P.O. Box 13697
Austin, TX 78711-3697
512 463-5555
FAX: 512 463-5709

**Filing Fee: See Instructions**

# Certificate of Conversion of a Limited Liability Company Converting to a Corporation

This space reserved for office use.

FILED
In the Office of the
Secretary of State of Texas
DEC 28 2018
Corporations Section

## Converting Entity Information

The name of the converting limited liability company is:
SitePro, LLC

The jurisdiction of formation of the limited liability company is : Texas

The date of formation of the limited liability company is: November 4, 2009

The file number, if any, issued to the limited liability company by the secretary of state is: 801189847

## Plan of Conversion—Alternative Statements

The limited liability company named above is converting to a: ☒ for-profit corporation ☐ professional corporation ☐ nonprofit corporation. The name of the corporation is:
SitePro, Inc.

The corporation will be formed under the laws of : Delaware

☐ The plan of conversion is attached.

*If the plan of conversion is not attached, the following statements must be completed.*

☒ Instead of attaching the plan of conversion, the limited liability company certifies to the following statements:

A signed plan of conversion is on file at the principal place of business of the limited liability company, the converting entity. The address of the principal place of business of the limited liability company is:

| 9502 HWY 87 | Lubbock | TX | USA | 79423 |
|---|---|---|---|---|
| *Street or Mailing Address* | *City* | *State* | *Country* | *Zip Code* |

A signed plan of conversion will be on file after the conversion at the principal place of business of the corporation, the converted entity. The address of the principal place of business of the corporation is:

| 9502 HWY 87 | Lubbock | TX | USA | 79423 |
|---|---|---|---|---|
| *Street or Mailing Address* | *City* | *State* | *Country* | *Zip Code* |

A copy of the plan of conversion will be furnished on written request without cost by the converting

entity before the conversion or by the converted entity after the conversion to any owner or member of the converting or converted entity.

**Certificate of Formation for the Converted Entity**

☐ The converted entity is a Texas corporation. The certificate of formation of the Texas corporation is attached to this certificate either as an attachment or exhibit to the plan of conversion, or as an attachment or exhibit to this certificate of conversion if the plan has not been attached to the certificate of conversion.

**Approval of the Plan of Conversion**

The plan of conversion has been approved as required by the laws of the jurisdiction of formation and the governing documents of the converting entity.

**Effectiveness of Filing** (Select either A, B, or C.)

A. ☐ This document becomes effective when the document is accepted and filed by the secretary of state.

B. ☒ This document becomes effective at a later date, which is not more than ninety (90) days from the date of signing. The delayed effective date is: January 1, 2019

C. ☐ This document takes effect upon the occurrence of the future event or fact, other than the passage of time. The 90th day after the date of signing is: _____

The following event or fact will cause the document to take effect in the manner described below:

_____

_____

**Tax Certificate**

☐ Attached hereto is a certificate from the comptroller of public accounts that all taxes under title 2, Tax Code, have been paid by the limited liability company.

☒ In lieu of providing the tax certificate, the corporation as the converted entity is liable for the payment of any franchise taxes.

**Execution**

The undersigned signs this document subject to the penalties imposed by law for the submission of a materially false or fraudulent instrument.

Date: December 27, 2018

David Bateman, Co-Chief Executive Officer

Signature and title of authorized person on behalf of the converting entity

# Delaware

The First State



*I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF CORRECTION OF "SITEPRO, INC.", FILED IN THIS OFFICE ON THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2018, AT 5:08 O'CLOCK P.M.*

*A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.*






7214746 8100
SR# 20188452500

Authentication: 202012448
Date: 01-03-19

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 05:08 PM 12/31/2018
FILED 05:08 PM 12/31/2018
SR 20188452500 - File Number 7214746

# STATE OF DELAWARE
# CERTIFICATE OF CORRECTION

SITEPRO, INC., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware.

**DOES HEREBY CERTIFY:**

1. The name of the corporation is SITEPRO, INC.
2. That a Certificate of FORMATION
(Title of Certificate Being Corrected)
was filed by the Secretary of State of Delaware on 12/28/2018 and that said Certificate requires correction as permitted by Section 103 of the General Corporation Law of the State of Delaware.
3. The inaccuracy or defect of said Certificate is: (must be specific)

| |
|---|
| No effective date included in the Articles due to clerical error. |

4. Article XIII of the Certificate is added to read as follows:

| |
|---|
| Pursuant to Section 103(d) of the Delaware General Corporation Law, the foregoing Certificate of Conversion shall be effective on January 1, 2019. |

**IN WITNESS WHEREOF**, said corporation has caused this Certificate of Correction this 31 day of DECEMBER, A.D. 2018.

By: /s/ David Bateman
Authorized Officer
Name: David Bateman
Print or Type
Title: Authorized Person

# Delaware

The First State



*I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF CORRECTION OF "SITEPRO, INC.", FILED IN THIS OFFICE ON THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2018, AT 4:40 O'CLOCK P.M.*

*A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.*






7214746 8100
SR# 20188451623

Authentication: 202012454
Date: 01-03-19

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 04:40 PM 12/31/2018
FILED 04:40 PM 12/31/2018
SR 20188451623 - File Number 7214746

# STATE OF DELAWARE
# CERTIFICATE OF CORRECTION

SITEPRO, INC., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware.

**DOES HEREBY CERTIFY:**

1. The name of the corporation is SITEPRO, INC.
2. That a Certificate of CONVERSION
   (Title of Certificate Being Corrected)
   was filed by the Secretary of State of Delaware on 12/28/2018
   and that said Certificate requires correction as permitted by Section 103 of the General Corporation Law of the State of Delaware.
3. The inaccuracy or defect of said Certificate is: (must be specific)

   No effective date inlcuded due to clerical error.

4. Article _____ of the Certificate is corrected to read as follows:

   Pursuant to Section 103(d) of the Delaware General Corporation Law, the foregoing Certificate of Conversion shall be effective on January 1, 2019.

**IN WITNESS WHEREOF**, said corporation has caused this Certificate of Correction this 31 day of DECEMBER, A.D. 2018.

By: /s/ David Bateman
Authorized Officer
Name: David Bateman
Print or Type
Title: Authorized Person

DE013 - 08/27/2007 C T System Online

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82A (07-13)
Approved for use through 03/31/2021. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

# TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

| | |
|---|---|
| Application Number | Not yet assigned |
| Filing Date | Filed herewith |
| First Named Inventor | Aaron Phillips |
| Title | REMOTE CONTROL OF FLUID-HANDLING DEVICES |
| Art Unit | Not yet assigned |
| Examiner Name | Not yet assigned |
| Attorney Docket Number | 034392-0508266 |

**SIGNATURE of Applicant or Patent Practitioner**

| | | | |
|---|---|---|---|
| Signature | /Joshua Tucker/ | Date (Optional) | |
| Name | Joshua Tucker | Registration Number | 63809 |
| Title (if Applicant is a juristic entity) | | | |
| Applicant Name (if Applicant is a juristic entity) | | | |

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.

☐ *Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. 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 1.11 and 1.14. This collection is estimated to take 3 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, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

PTO/AIA/80 (07-17)
Approved for use through 03/31/2021. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it displays a valid OMB control number

# POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(c).

I hereby appoint:

[X] Practitioners associated with Customer Number: 00909

**OR**

[ ] Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

| Name | Registration Number | Name | Registration Number |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

As attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(c).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(c) to:

[X] The address associated with Customer Number: 00909

**OR**

[ ]

| | | |
|---|---|---|
| Firm or individual name | | |
| Address | | |
| City | State | Zip |
| Country | | |
| Telephone | Email | |

Assignee name and address: SITEPRO, INC.
3502 HIGHWAY 87
LUBBOCK, TEXAS 79423

**A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of the practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.**

**SIGNATURE of Assignee of Record**

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee.

| | |
|---|---|
| Signature DLB | Date 5-6-19 |
| Name David Bateman | Telephone 806 687-5326 |
| Title Co-CEO & Board Member | |

This collection of information is required by 37 CFR 1.31, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public, which is to update (and by the USPTO to process) the file of a patent or reexamination proceeding. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 18 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, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*