

**CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION
UNDER 37 CFR 1.102(e) (Page 1 of 1)**

First Named Inventor:	Jared OEHRING	Nonprovisional Application Number (if known):	
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS		

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.

1. The processing fee set forth in 37 CFR 1.17(i)(1) and the prioritized examination fee set forth in 37 CFR 1.17(c) have been filed with the request. The publication fee requirement is met because that fee, set forth in 37 CFR 1.18(d), is currently \$0. The basic filing fee, search fee, and examination fee are filed with the request or have been already been paid. I understand that any required excess claims fees or application size fee must be paid for the application.
2. I understand that the application may not contain, or be amended to contain, more than four independent claims, more than thirty total claims, or any multiple dependent claims, and that any request for an extension of time will cause an outstanding Track I request to be dismissed.
3. The applicable box is checked below:

I. ☒ Original Application (Track One) - Prioritized Examination under § 1.102(e)(1)

- i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.
---OR---
(b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.
- ii. An executed inventor's oath or declaration under 37 CFR 1.63 or 37 CFR 1.64 for each inventor, or the application data sheet meeting the conditions specified in 37 CFR 1.53(f)(3)(i) is filed with the application.

II. ☐ Request for Continued Examination - Prioritized Examination under § 1.102(e)(2)

- i. A request for continued examination has been filed with, or prior to, this form.
- ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
- iii. The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
- iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
- v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

Signature <u>/K. Ron Derrington/</u>	Date <u>2016-07-22</u>
Name (Print/Typed) <u>K. Ron Derrington</u>	Practitioner Registration Number <u>44061</u>

Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.*

☐ *Total of _____ forms are submitted.

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.

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	085055.000020
		Application Number	
Title of Invention	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS		
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				Remove
Legal Name					
Prefix	Given Name	Middle Name	Family Name	Suffix	
	Jared		OEHRING		
Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service					
City	Houston	State/Province	TX	Country of Residence	US

Mailing Address of Inventor:

Address 1	16626 Grenada Falls Drive				
Address 2					
City	Houston	State/Province	TX		
Postal Code	77095	Country	US		

Inventor	2				Remove
Legal Name					
Prefix	Given Name	Middle Name	Family Name	Suffix	
	Brandon	Neil	HINDERLITER		
Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service					
City	Buckhannon	State/Province	WV	Country of Residence	US

Mailing Address of Inventor:

Address 1	83 Crystal Drive				
Address 2					
City	Buckhannon	State/Province	WV		
Postal Code	26201	Country	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).

HALLIBURTON EXHIBIT 1003

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	085055.000020
		Application Number	
Title of Invention	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS		

☐ An Address is being provided for the correspondence information of this application.

Customer Number	35979		
Email Address	docketing@bracewelllaw.com	Add Email	Remove Email

Application Information:

Title of the Invention	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS		
Attorney Docket Number	085055.000020	Small Entity Status Claimed	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	3	Suggested Figure for Publication (if any)	

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	35979		

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	085055.000020
		Application Number	
Title of Invention	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS		

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)
	Claims benefit of provisional	62196350	2015-07-24
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the Add button.			Add

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)ⁱ 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).

			Remove
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.			Add

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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	085055.000020
	Application Number	
Title of Invention	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS	

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.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	085055.000020
		Application Number	
Title of Invention	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS		

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	Remove
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	US Well Services LLC	
Mailing Address Information For Applicant:		
Address 1	770 South Post Oak Lane	
Address 2	Suite 405	
City	Houston	State/Province TX
Country	US	Postal Code 77056
Phone Number	832-562-3996	Fax Number 832-562-1745
Email Address		
Additional Applicant Data may be generated within this form by selecting the Add button. Add		

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.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	085055.000020
		Application Number	
Title of Invention	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS		

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.			
			Remove
If the Assignee or Non-Applicant Assignee is an Organization check here.			☒
Organization Name	JS Well Services LLC		
Mailing Address Information For Assignee including Non-Applicant Assignee:			
Address 1	770 South Post Oak Lane		
Address 2	Suite 405		
City	Houston	State/Province	TX
Country ⁱ	US	Postal Code	77056
Phone Number	832-562-3996	Fax Number	832-562-1745
Email Address			
Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.			Add

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	/Ron Derrington/		Date (YYYY-MM-DD)	2016-07-22	
First Name	K. Ron	Last Name	DERRINGTON	Registration Number	44061
Additional Signature may be generated within this form by selecting the Add button.				Add	

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	085055.000020
		Application Number	
Title of Invention	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS		

This collection of information is required by 37 CFR 1.76. 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 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet 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.**

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.

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- 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 inspections 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.

PATENT APPLICATION

ATTORNEY DOCKET NO.: 085055.000020

INVENTOR(S):
Jared Oehring
Brandon Hinderliter

Application Prepared By:
Bracewell LLP
P.O. Box 61389
Houston, TX 77208-1389

SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS

SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to and the benefit of, co-pending U.S. Provisional Application Serial No. 62/196,350, filed July 24, 2015 and is a continuation-in-part of, and claims priority to and the benefit of co-pending U.S. Patent Application Serial No. 13/679,689, filed November 16, 2012, the full disclosures of which are hereby incorporated by reference herein for all purposes.

BACKGROUND OF THE INVENTION

1. Field of Invention

[0002] The present disclosure relates to hydraulic fracturing of subterranean formations. In particular, the present disclosure relates to an electrical hydraulic fracturing system having different colored lights that are selectively illuminated to indicate an operational state of the fracturing system.

2. Description of Prior Art

[0003] Hydraulic fracturing is a technique used to stimulate production from some hydrocarbon producing wells. The technique usually involves injecting fluid into a wellbore at a pressure sufficient to generate fissures in the formation surrounding the wellbore. Typically the pressurized fluid is injected into a portion of the wellbore that is pressure isolated from the remaining length of the wellbore so that fracturing is limited to a designated portion of the formation. The fracturing fluid slurry, whose primary component is usually water, includes proppant (such as sand or ceramic) that migrate into the fractures with the fracturing fluid slurry

and remain to prop open the fractures after pressure is no longer applied to the wellbore. A primary fluid for the slurry other than water, such as nitrogen, carbon dioxide, foam (nitrogen and water), diesel, or other fluids is sometimes used as the primary component instead of water. Typically hydraulic fracturing fleets include a data van unit, blender unit, hydration unit, chemical additive unit, hydraulic fracturing pump unit, sand equipment, and other equipment.

[0004] Traditionally, the fracturing fluid slurry has been pressurized on surface by high pressure pumps powered by diesel engines. To produce the pressures required for hydraulic fracturing, the pumps and associated engines have substantial volume and mass. Heavy duty trailers, skids, or trucks are required for transporting the large and heavy pumps and engines to sites where wellbores are being fractured. Each hydraulic fracturing pump is usually composed of a power end and a fluid end. The hydraulic fracturing pump also generally contains seats, valves, a spring, and keepers internally. These parts allow the hydraulic fracturing pump to draw in low pressure fluid slurry (approximately 100 psi) and discharge the same fluid slurry at high pressures (over 10,000 psi). Recently electrical motors controlled by variable frequency drives have been introduced to replace the diesel engines and transmission, which greatly reduces the noise, emissions, and vibrations generated by the equipment during operation, as well as its size footprint.

[0005] On each separate unit, a closed circuit hydraulic fluid system is often used for operating auxiliary portions of each type of equipment. These auxiliary components may include dry or liquid chemical pumps, augers, cooling fans, fluid pumps, valves, actuators, greasers, mechanical lubrication, mechanical cooling, mixing paddles, landing gear, and other needed or desired components. This hydraulic fluid system is typically separate and independent of the main hydraulic fracturing fluid slurry that is being pumped into the wellbore. The lines carrying the

pressurized fluid from the pumps, often referred to as discharge iron, can fail without warning. Metal shrapnel or the high pressure fluid slurry from the failed discharge iron can cause personal injury to any personnel proximate the failure. While the best way to avoid personal injury is for operations personnel to avoid zones proximate the discharge iron, maintenance or inspection requires entry into these zones.

SUMMARY OF THE INVENTION

[0006] Disclosed herein is an example of a hydraulic fracturing system for fracturing a subterranean formation, and which includes a plurality of electric pumps fluidly connected to the formation, and powered by at least one electric motor, and configured to pump fluid at high pressure into a wellbore that intersects the formation, so that the fluid passes from the wellbore into the formation, and fractures the formation, a variable frequency drive connected to the electric motor to control the speed of the motor, wherein the variable frequency drive frequently performs electric motor diagnostics to prevent damage to the at least one electric motor, and a signal assembly that selectively emits a visual signal that is indicative of an operational state of the hydraulic fracturing system. In an example, the signal assembly includes a plurality of light assemblies arranged in a stack. In this example, each of the light assemblies selectively emit visual light of a color different from visual light emitted by other light assemblies. Further in this example, a distinctive operational state of the system is indicated by illumination of a combination of the light assemblies. Example operational states of the hydraulic fracturing system include, no electricity to the system, a supply of electricity to all electrically powered devices in the system, a supply of electricity to some of the electrically powered devices in the system, and a pressure in a discharge line of the pump having a magnitude that is at least that of a designated pressure. A controller can be included that is in communication with the variable frequency drive, a pressure indicator that senses pressure in a discharge line of a one of the pumps, and the signal assembly. In this example, the controller selectively activates the signal assembly in response to a communication signal from one of the variable frequency drive or the pressure indicator, or directly from a command signal from an operator controlled computer. Optionally the visual signal is made up of light in the visible spectrum, and that is optically

detectable by operations personnel disposed in a zone that is potentially hazardous due to fluid in piping that is pressurized by at least one of the pumps.

[0007] Also described herein is an example of a hydraulic fracturing system for fracturing a subterranean formation and which includes a pump having a discharge in communication with a wellbore that intersects the formation, an electric motor coupled to and that drives the pump, a variable frequency drive connected to the electric motor that controls a speed of the motor and performs electric motor diagnostics, a signal assembly that selectively emits different visual signals that are distinctive of an operational state of the system, and a controller in communication with the signal assembly, and that selectively transmits a command signal to the signal assembly in response to a monitoring signal received by the controller and transmitted from a device in the system. Examples exist wherein the device in the system that transmits the monitoring signal to the controller can be a variable frequency drive or a pressure monitor in fluid communication with the discharge of the pump. The signal assembly can be a stack of light assemblies. In one embodiment, light assemblies each are made up of an electrically powered light source, and that each emit light of a color that is different from a color of a light emitted by the other light assemblies. In an alternative, further included with the system is a pump controller and auxiliary equipment, and wherein the operational state of the system can be, the system being isolated from electricity, a fluid pressure of the discharge having a value at least as great as a designated value, the pump controller being energized, and the auxiliary equipment being energized but without a one of the motors being energized. The visual signals can selectively indicate when the system is safe for operations personnel, when the system is potentially unsafe for operations personnel, and when the system is currently unsafe for operations personnel.

[0008] An example of a method of fracturing a subterranean formation is also described herein and which includes pressurizing fracturing fluid with a pump, driving the pump with a motor that is powered by electricity, monitoring an operational state of a hydraulic fracturing system that comprises the pump and motor, and selectively emitting a visual signal that is indicative of the monitored operational state. The operational state of the system includes isolation from electricity, a fluid pressure of the discharge of the pump having a value at least as great as a designated value, the pump controller being energized, and the auxiliary equipment being energized but without a one of the motors being energized. Selectively emitting a visual signal can be emitting a light from one or more of a stack of light assemblies, where light from one of the stack of light assemblies is different from lights emitted from other light assemblies. The method can further include monitoring electricity to a variable frequency drive, wherein the variable frequency drive controls electricity to the motor. The method can optionally include monitoring a fluid pressure of the discharge of the pump.

BRIEF DESCRIPTION OF DRAWINGS

[0009] Some of the features and benefits of the present invention having been stated, others will become apparent as the description proceeds when taken in conjunction with the accompanying drawings, in which:

[0010] FIG. 1 is a schematic of an example of a hydraulic fracturing system.

[0011] FIG. 2 is a plan schematic view of an example of a fracturing pump system having signal assemblies.

[0012] FIG. 3 is a perspective view of an example of a signal assembly and which is in communication with a controller.

[0013] FIGS. 4A-4H are perspective views of examples of the signal assembly of FIG. 3 in different signal configurations.

[0014] While the invention will be described in connection with the preferred embodiments, it will be understood that it is not intended to limit the invention to that embodiment. On the contrary, it is intended to cover all alternatives, modifications, and equivalents, as may be included within the spirit and scope of the invention as defined by the appended claims.

DETAILED DESCRIPTION OF INVENTION

[0015] The method and system of the present disclosure will now be described more fully hereinafter with reference to the accompanying drawings in which embodiments are shown. The method and system of the present disclosure may be in many different forms and should not be construed as limited to the illustrated embodiments set forth herein; rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey its scope to those skilled in the art. Like numbers refer to like elements throughout. In an embodiment, usage of the term “about” includes +/- 5% of the cited magnitude. In an embodiment, usage of the term “substantially” includes +/- 5% of the cited magnitude.

[0016] It is to be further understood that the scope of the present disclosure is not limited to the exact details of construction, operation, exact materials, or embodiments shown and described, as modifications and equivalents will be apparent to one skilled in the art. In the drawings and specification, there have been disclosed illustrative embodiments and, although specific terms are employed, they are used in a generic and descriptive sense only and not for the purpose of limitation.

[0017] Figure 1 is a schematic example of a hydraulic fracturing system 10 that is used for pressurizing a wellbore 12 to create fractures 14 in a subterranean formation 16 that surrounds the wellbore 12. Included with the system 10 is a hydration unit 18 that receives fluid from a fluid source 20 via line 22, and also selectively receives additives from an additive source 24 via line 26. Additive source 24 can be separate from the hydration unit 18 as a stand-alone unit, or can be included as part of the same unit as the hydration unit 18. The fluid, which in one example is water, is mixed inside of the hydration unit 18 with the additives. In an embodiment,

the fluid and additives are mixed over a period of time to allow for uniform distribution of the additives within the fluid. In the example of Figure 1, the fluid and additive mixture is transferred to a blender unit 28 via line 30. A proppant source 32 contains proppant, which is delivered to the blender unit 28 as represented by line 34, where line 34 can be a conveyer. Inside the blender unit 28, the proppant and fluid/additive mixture are combined to form a fracturing slurry, which is then transferred to a fracturing pump assembly 36 via line 38; thus fluid in line 38 includes the discharge of blender unit 28, which is the suction (or boost) for the fracturing pump assembly 36. Blender unit 28 can have an onboard chemical additive system, such as with chemical pumps and augers. Optionally, additive source 24 can provide chemicals to blender unit 28; or a separate and standalone chemical additive system (not shown) can be provided for delivering chemicals to the blender unit 28. In an example, the pressure of the slurry in line 38 ranges from around 80 psi to around 100 psi. The pressure of the slurry can be increased up to around 15,000 psi by fracturing pump assembly 36. A motor 39, which connects to fracturing pump assembly 36 via connection 40, drives fracturing pump assembly 36 so that it can pressurize the slurry. After being discharged from fracturing pump assembly 36, slurry is injected into a wellhead assembly 41; discharge piping 42 connects discharge of fracturing pump assembly 36 with wellhead assembly 41 and provides a conduit for the slurry between the fracturing pump assembly 36 and the wellhead assembly 41. The fracturing pump assembly 36, motor 39, connection 40, lines 38, piping 42, VFD 72, and line 73 define one example of a fracturing pump system 43. In an alternative, hoses or other connections can be used to provide a conduit for the slurry between the pump assembly 36 and the wellhead assembly 41. Optionally, any type of fluid can be pressurized by the fracturing pump assembly 36 to form injection fracturing fluid that is then pumped into the wellbore 12 for fracturing the formation 14,

and is not limited to fluids having chemicals or proppant. Examples exist wherein the system 10 includes multiple fracturing pump assemblies 36, and multiple motors 39 for driving the multiple fracturing pump assemblies 36. Examples also exist wherein the system 10 includes the ability to pump down equipment, instrumentation, or other retrievable items through the slurry into the wellbore.

[0018] An example of a turbine 44 is provided in the example of Figure 1 and which receives a combustible fuel from a fuel source 46 via a feed line 48. In one example, the combustible fuel is natural gas, and the fuel source 46 can be a container of natural gas or a well (not shown) proximate the turbine 44. Combustion of the fuel in the turbine 44 in turn powers a generator 50 that produces electricity. Shaft 52 connects generator 50 to turbine 44. The combination of the turbine 44, generator 50, and shaft 52 define a turbine generator 53. In another example, gearing can also be used to connect the turbine 44 and generator 50. An example of a micro-grid 54 is further illustrated in Figure 1, and which distributes electricity generated by the turbine generator 53. Included with the micro-grid 54 is a transformer 56 for stepping down voltage of the electricity generated by the generator 50 to a voltage more compatible for use by electrical powered devices in the hydraulic fracturing system 10. In another example, the power generated by the turbine generator and the power utilized by the electrical powered devices in the hydraulic fracturing system 10 are of the same voltage, such as 4160 V so that main power transformers are not needed. In one embodiment, multiple 3500 kVA dry cast coil transformers are utilized. Electricity generated in generator 50 is conveyed to transformer 56 via line 58. In one example, transformer 56 steps the voltage down from 13.8 kV to around 600 V. Other stepped down voltages can include 4,160 V, 480 V, or other voltages. The output or low voltage side of the transformer 56 connects to a power bus 60, lines 62, 64, 66, 68, 70, and 71 connect to power bus

60 and deliver electricity to electrically powered end users in the system 10. More specifically, line 62 connects fluid source 20 to bus 60, line 64 connects additive source 24 to bus 60, line 66 connects hydration unit 18 to bus 60, line 68 connects proppant source 32 to bus 60, line 70 connects blender unit 28 to bus 60, and line 71 connects bus 60 to an optional variable frequency drive (“VFD”) 72. Line 73 connects VFD 72 to motor 39. In one example, VFD 72 selectively provides electrical power to motor 39 via line 73, and can be used to control operation of motor 39, and thus also operation of pump 36.

[0019] In an example, additive source 24 contains ten or more chemical pumps for supplementing the existing chemical pumps on the hydration unit 18 and blender unit 28. Chemicals from the additive source 24 can be delivered via lines 26 to either the hydration unit 18 and/or the blender unit 28. In one embodiment, the elements of the system 10 are mobile and can be readily transported to a wellsite adjacent the wellbore 12, such as on trailers or other platforms equipped with wheels or tracks.

[0020] Referring now to Figure 2 shown in a plan view is an alternate embodiment of a fracturing pump system 43 where a plurality of pumps 80_{1-n} , 82_{1-n} are shown mounted on a number of trailers 84_{1-n} . Also included in the fracturing pump system 43A are motors 86_{1-n} , 88_{1-n} which are mounted onto trailers 84_{1-n} and adjacent to each of the pumps 80_{1-n} , 82_{1-n} . A suction header 90 is shown connected to a line 38A and which provides fracturing fluid to a suction side of each of the pumps 80_{1-n} , 82_{1-n} via suction leads 92_{1-n} , 94_{1-n} . Similarly, fluid exits the pumps 80_{1-n} , 82_{1-n} via discharge leads 96_{1-n} , 98_{1-n} that connect to the discharge side of each of the pumps 80_{1-n} , 82_{1-n} . Discharge leads 96_{1-n} , 98_{1-n} each connect to a discharge header 99, which routes the pressurized discharge fluid from the leads 96_{1-n} , 98_{1-n} to discharge piping 42A, where the pressurized fracturing fluid can be transported to wellbore 12 of Figure 1. Signal assemblies

100_{1-n}, 102_{1-n} are shown provided on the trailers 84_{1-n} and which selectively emit visual signals that are indicative of an operational state of the fracturing pump system 43A. Examples of operational states include one where the trailers 84_{1-n} having the signal assemblies 100_{1-n}, 102_{1-n} have no electricity provided to them and thus are unpowered and are safe for maintenance. Another example of an operational state is when fluid in the discharge piping, such as the discharge leads 96_{1-n}, 98_{1-n} exceeds a designated value, for example, when discharge piping is at 100 pounds per square inch or greater. In the example of Figure 2, the signal assemblies 100_{1-n}, 102_{1-n} are shown mounted on radiators 104_{1-n}, 106_{1-n} that are provided on the motors 86_{1-n}, 88_{1-n}. However, signal assemblies 100_{1-n}, 102_{1-n} can be disposed at any location on trailers 84_{1-n}, or adjacent trailers 84_{1-n} so that operations personnel can readily view visible signals emitted by these signal assemblies 100_{1-n}, 102_{1-n}.

[0021] Referring now to Figure 3, illustrated is a schematic example of how the signal assemblies 100_{1-n}, 102_{1-n} of Figure 2 are selectively illuminated. Here, example signal assemblies 100_i, 102_i are illustrated in perspective view and which are made up of individual light assemblies 108₁₋₃ that are set on one another to form a stack 110. In this example, each light assembly 108₁₋₃ includes a lens 112₁₋₃ which is a layer of translucent or transparent material that has a curved outer surface and circumscribes a light source 114₁₋₃ within the light assembly 108₁₋₃. Either the lens 112₁₋₃ or light source 114₁₋₃ can be formed of a different color from the other lenses 112₁₋₃ or light sources 114₁₋₃, so that if one of the light sources 114₁₋₃ is illuminated, light is projected from that illuminated light sources 114₁₋₃ that has a color that is different from a color of a light emitted by any of the other light assemblies 108₁₋₃. Example colors include green, orange, and red. Electricity for illuminating the light sources 114₁₋₃ can be provided from a power source 116 which connects to the signal light sources 114₁₋₃ via an electrically

conducting line 118. Individual leads 120_{1-3} are shown that connect line 118 to light sources 114_{1-3} , and which provide selective power to the light sources 114_{1-3} . In this way any combination of the light sources 114_{1-3} can be illuminated at one time. A controller 122 is schematically illustrated and which communicates with power source 116 via a communication means 124. Thus, control signals from controller 122 directed to power source 116 control the selective illumination of the individual light sources 114_{1-3} . Controller 122 is also in communication with a pressure indicator 126 which is shown on discharge leads 96_i , 98_i . Optionally, a pressure indicator 126 can be provided on discharge outlets of each of pumps 80_{1-n} , 82_{1-n} (Figure 2). In Figure 3, subscript “i” represents any of numbers 1 through n of Figure 2. Values of pressure measured by pressure indicator 126 within discharge leads 96_i , 98_i are transmitted to controller 122 via communication means 128. A check valve 130 is shown in the discharge leads 96_i , 98_i and upstream of where the leads 96_i , 98_i intersect with discharge header 99, and which allows flow from leads 96_i , 98_i to header 99, but is to block flow from header 99 to leads 96_i , 98_i . Further, communication means 132 provides communication between controller 122 and variable frequency drives (“VFD”) 134_i , 136_i . Each of the communication means 124, 128, 132 can be hard-wired, such as conductive elements or optical cables. Communication means 124, 128, 132 can be wireless as well. Variable frequency drives 134_i , 136_i , in one example, operate substantially similar to variable frequency drive 72 of Figure 1.

[0022] Referring back to Figure 2, variable frequency drives 134_{1-n} , 136_{1-n} are shown provided with each trailer 84_{1-n} and that are in electrical communication with electrical power downstream of transformer 56 via lines 138_{1-n} , 140_{1-n} . Electrical power from the VFDs 134_{1-n} , 136_{1-n} is selectively provided to motors 86_{1-n} , 88_{1-n} through lines 142_{1-n} , 144_{1-n} . The VFDs 134_{1-n} , 136_{1-n} provide control to the motors and can regulate wave forms of the electrical current in order to

operate the motors 86_{1-n}, 88_{1-n} at designated values of RPM, torque, or other operational parameters. Pump controllers 146_{1-n}, 147_{1-n} are shown that provide selective input to junction box controllers 148_{1-n}, 149_{1-n} via signal lines 150_{1-n}, 151_{1-n}. In the illustrated example junction box controllers 148_{1-n}, 149_{1-n} provide controlling functionality for many of the devices on trailers 84_{1-n}. In an example, each of junction box controllers 148_{1-n}, 149_{1-n} is equipped with a controller 122 (Figure 3) for controlling operation of signal assemblies 100_{1-n}, 102_{1-n}. Further illustrated is that junction box controllers 148_{1-n}, 149_{1-n} are in controlling communication with the VFDs 134_{1-n}, 136_{1-n} via signal lines 152_{1-n}, 153_{1-n}. As shown, the pump controllers 146_{1-n}, 147_{1-n} are remote from the fracturing pump system 43A and in one example are manipulated by operations personnel in order to operate the pumps 80_{1-n}, 82_{1-n} at designated operational conditions. Examples exist where pump controllers 146_{1-n}, 147_{1-n} are separate consoles for each pump 80_{1-n}, 82_{1-n}, or are combined into a single unit. Further schematically illustrated in Figure 2 are motor control center devices 154_{1-n} which represent devices that provide power to auxiliary devices provided with the trailers 84_{1-n}.

[0023] Figures 4A through 4H illustrate various combinations of how the light assemblies 108₁₋₃ might be illuminated to visually convey an indication of an operational state of the fracturing pump system 43A. As shown in Figure 4A, none of the light assemblies 108₁₋₃ are illuminated which in this examples indicates that no electrical power is being delivered to the particular VFD 134_{1-n}, 136_{1-n} (Figure 2) associated with the stack 110. For example, referring back to Figure 2, it should be pointed out that a signal assembly is associated with a particular VFD that distributes electricity to the motor 86_{1-n}, 88_{1-n} adjacent where the signal assembly 100_{1-n}, 102_{1-n} is located; thus in the example of Figure 2, signal assembly 100₁ is associated with VFD 134₁, signal assembly 102₁ is associated with VFD 136₁, and so on. Referring now to Figure 4B, light

assembly 108₃ is shown to be illuminated whereas light assemblies 108₁, 108₂ are not. In an example, selectively illuminating light assembly 108₃, while not illuminating the other light assemblies 108_{1, 2}, indicates that the fluid in discharge leads 96_{1-n}, 98_{1-n} is at or greater than a designated pressure. In this example, that designated pressure is at least 100 psi, which can indicate either that the plungers (not shown) within the particular pump 80_{1-n}, 82_{1-n} are not stroking and that the particular check valve 130 adjacent the pressure indicator 126 (Figure 3) has failed. A failed check valve 130 can allow pressure from the discharge header 99, which could be pressurized from a different pump, to enter into the discharge lead 96_{1-n}, 98_{1-n} thereby pressurizing the lead 96_{1-n}, 98_{1-n}. This light condition can also indicate that either light assembly 108₁ or light assembly 108₂ has failed. This is because illumination of light assembly 108₁ indicates there is electrical power to the particular trailer 84_{1-n} on which the light assemblies 108₁, 108₂ are located and that electricity is not flowing from the VFDs 134_{1-n}, 136_{1-n} to the motors 86_{1-n}, 88_{1-n}. Light assembly 108₂ being illuminated indicates there is electrical power being supplied to the trailer 84_{1-n} on which the light assemblies 108₁, 108₂ are located, and that electricity may be flowing from the VFDs 134_{1-n}, 136_{1-n} to the motors 86_{1-n}, 88_{1-n}. Light assembly 108₃ cannot be illuminated if there is no power to the trailer 84_{1-n}. Figure 4C shows where only light assembly 108₂ is illuminated. This example can represent when the pump controls 146_{1-n}, 147_{1-n} of Figure 2 are engaged, but a command signal has not yet been delivered to the VFDs 134_{1-n}, 136_{1-n} which would then allow electricity from lines 138_{1-n}, 140_{1-n} to the respective motors 86_{1-n}, 88_{1-n}. In Figure 4D, only light assembly 108₁ is illuminated. An optional operational state indicated by this visual signal is that the trailer is energized, and that devices other than the motors 86_{1-n}, 88_{1-n} and VFDs 134_{1-n}, 136_{1-n} are powered, such as the auxiliary devices 154_{1-n}, but not the motors 86_{1-n}, 88_{1-n}. In Figure 4E, light assemblies 108₂, 108₃

are illuminated but no light assembly 108₁. In one embodiment, this visual signal can indicate that the pump unit is pumping under the control of the pump operator and pump controls 146_{1-n}, 147_{1-n}. Thus, in this example, the pressure in the discharge leads 96₁, 98₁ and discharge header 99, as well as discharge line 42A, are at a pressure that in some instances can fracture the discharge iron.

[0024] When the lines or iron is subject to fracture this presents a hazardous situation that operations personnel should avoid being in the area. In one example, the area of hazard is designated by the zone Z of Figure 2; and which also includes the wellhead assembly 41 of Figure 1. Thus, operations personnel from a distance can view the visual signal emitted by the signal assemblies 100_{1-n}, 102_{1-n} and avoid the area, so that in the event of a failure of a line in the discharge circuit, operations personnel are not subject to a hazardous condition and can avoid personal injury. Shown in Figure 4F is where light assemblies 108₁, 108₃ are illuminated and light assembly 108₂ is not illuminated. In this example, a check valve failure can be indicated. This condition can also indicate that the pump drive is disabled, but pump pressure from a prior operation has not yet been relieved. In Figure 4G, light assemblies 108₁, 108₂ are depicted as being illuminated, whereas light assembly 108₃ is not illuminated. Based upon the logic in the previous examples, this is an operational state that is not attainable. Thus, could be an indication that the signal assembly 100_{1-n}, 102_{1-n} is malfunctioning. Similarly, in Figure 4H, each of the light assemblies 108₁₋₃ is shown as being illuminated. This is another example where these particular light assemblies should not be illuminated at the same time, possibly indicating a failure of the signal assemblies 100_{1-n}, 102_{1-n} themselves.

[0025] The present invention described herein, therefore, is well adapted to carry out the objects and attain the ends and advantages mentioned, as well as others inherent therein. While a

presently preferred embodiment of the invention has been given for purposes of disclosure, numerous changes exist in the details of procedures for accomplishing the desired results. For example, light assemblies 108₁₋₃ can be spaced apart from one another, and in an arrangement different from a stack 110, such as horizontal or diagonal. Further, the number of light assemblies 108₁₋₃ less than or greater than three. These and other similar modifications will readily suggest themselves to those skilled in the art, and are intended to be encompassed within the spirit of the present invention disclosed herein and the scope of the appended claims.

CLAIMS

What is claimed is.

1. A hydraulic fracturing system for fracturing a subterranean formation comprising:

a plurality of electric pumps fluidly connected to the formation, and powered by at least one electric motor, and configured to pump fluid at high pressure into a wellbore that intersects the formation, so that the fluid passes from the wellbore into the formation, and fractures the formation;

a variable frequency drive connected to the electric motor to control the speed of the motor, wherein the variable frequency drive frequently performs electric motor diagnostics to prevent damage to the at least one electric motor; and

a signal assembly that selectively emits a visual signal that is indicative of an operational state of the hydraulic fracturing system.
2. The hydraulic fracturing system of Claim 1, wherein the signal assembly comprises a plurality of light assemblies arranged in a stack.
3. The hydraulic fracturing system of Claim 2, wherein each of the light assemblies selectively emit visual light of a color different from visual light emitted by other light assemblies.
4. The hydraulic fracturing system of Claim 2, wherein a distinctive operational state of the system is indicated by illumination of a combination of the light assemblies.

5. The hydraulic fracturing system of Claim 1, wherein the operational states of the hydraulic fracturing system comprise, no electricity to the system, a supply of electricity to all electrically powered devices in the system, a supply of electricity to some of the electrically powered devices in the system, and a pressure in a discharge line of the pump having a magnitude that is at least that of a designated pressure.

6. The hydraulic fracturing system of Claim 1, further comprising a controller in communication with the variable frequency drive, a pressure indicator that senses pressure in a discharge line of a one of the pumps, and the signal assembly.

7. The hydraulic fracturing system of Claim 6, wherein the controller selectively activates the signal assembly in response to a communication signal from one of the variable frequency drive or the pressure indicator.

8. The hydraulic fracturing system of Claim 1, wherein the visual signal comprises light in the visible spectrum, and that is optically detectable by operations personnel disposed in a zone that is potentially hazardous due to fluid in piping that is pressurized by at least one of the pumps.

9. A hydraulic fracturing system for fracturing a subterranean formation comprising:

a pump having a discharge in communication with a wellbore that intersects the formation;

an electric motor coupled to and that drives the pump;

a variable frequency drive connected to the electric motor that controls a speed of the motor and performs electric motor diagnostics;

a signal assembly that selectively emits different visual signals that are distinctive of an operational state of the system; and

a controller in communication with the signal assembly, and that selectively transmits a command signal to the signal assembly in response to a monitoring signal received by the controller and transmitted from a device in the system.

10. The hydraulic fracturing system of Claim 9, wherein the device in the system that transmits the monitoring signal to the controller comprises one of the variable frequency drive, and a pressure monitor in fluid communication with the discharge of the pump.

11. The hydraulic fracturing system of Claim 9, wherein the signal assembly comprises a stack of light assemblies.

12. The hydraulic fracturing system of Claim 11, wherein the light assemblies each comprise an electrically powered light source, and that each emit light of a color that is different from a color of a light emitted by the other light assemblies.

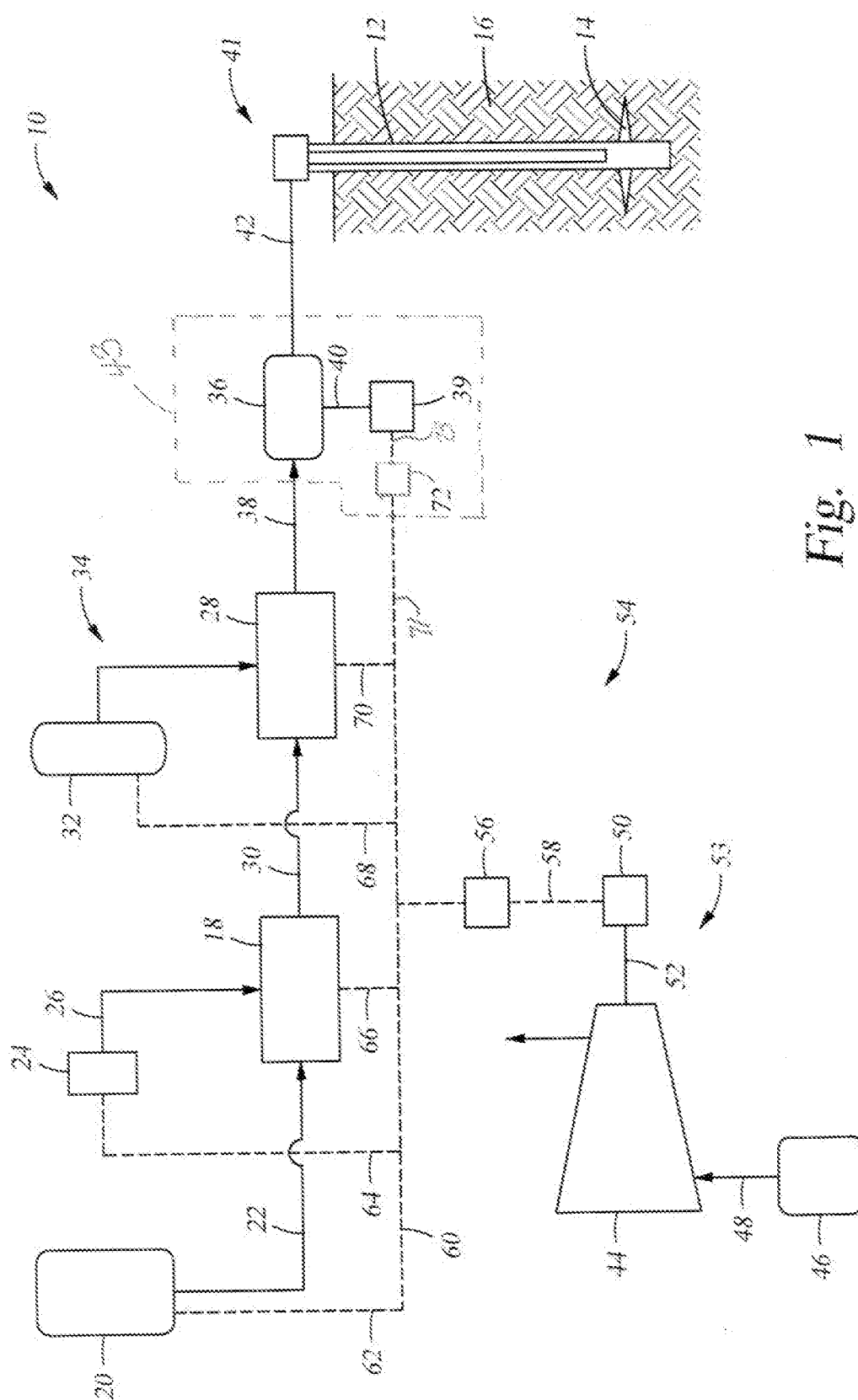
13. The hydraulic fracturing system of Claim 9 further comprising a pump controller and auxiliary equipment, and wherein the operational state of the system comprises, the system being isolated from electricity, a fluid pressure of the discharge having a value at least as great as a designated value, the pump drive being energized, and the auxiliary equipment being energized but without a one of the motors being energized.

14. The hydraulic fracturing system of Claim 9, wherein the visual signals selectively indicate when the system is safe for operations personnel, when the system is potentially unsafe for operations personnel, and when the system is currently unsafe for operations personnel.

15. A method of fracturing a subterranean formation comprising:
- pressurizing fracturing fluid with a pump;
- driving the pump with a motor that is powered by electricity;
- monitoring an operational state of a hydraulic fracturing system that comprises the pump and motor; and
- selectively emitting a visual signal that is indicative of the monitored operational state.
16. The method of Claim 15, wherein the operational state comprises the system being isolated from electricity, a fluid pressure of the discharge of the pump having a value at least as great as a designated value, the pump controller being energized, and the auxiliary equipment being energized but without a one of the pump motors being energized.
17. The method of Claim 15, wherein the step of selectively emitting a visual signal comprises emitting a light from one or more of a stack of light assemblies, where light from one of the stack of light assemblies is different from lights emitted from other light assemblies.
18. The method of Claim 15, further comprising monitoring electricity to a variable frequency drive, wherein the variable frequency drive controls electricity to the motor.
19. The method of Claim 15, further comprising monitoring a fluid pressure of the discharge of the pump.

ABSTRACT

[0026] A hydraulic fracturing system includes an electrically powered pump that pressurizes fluid, which is piped into a wellbore to fracture a subterranean formation. System components include a fluid source, an additive source, a hydration unit, a blending unit, a proppant source, a fracturing pump, and an electrically powered motor for driving the pump. Also included with the system is a signal assembly that visually displays operational states of the pump and motor, thereby indicating if fluid discharge lines from the pump contain pressurized fluid. The visual display of the signal assembly also can indicate if the motor is energized, so that the discharge lines might soon contain pressurized fluid.



43A

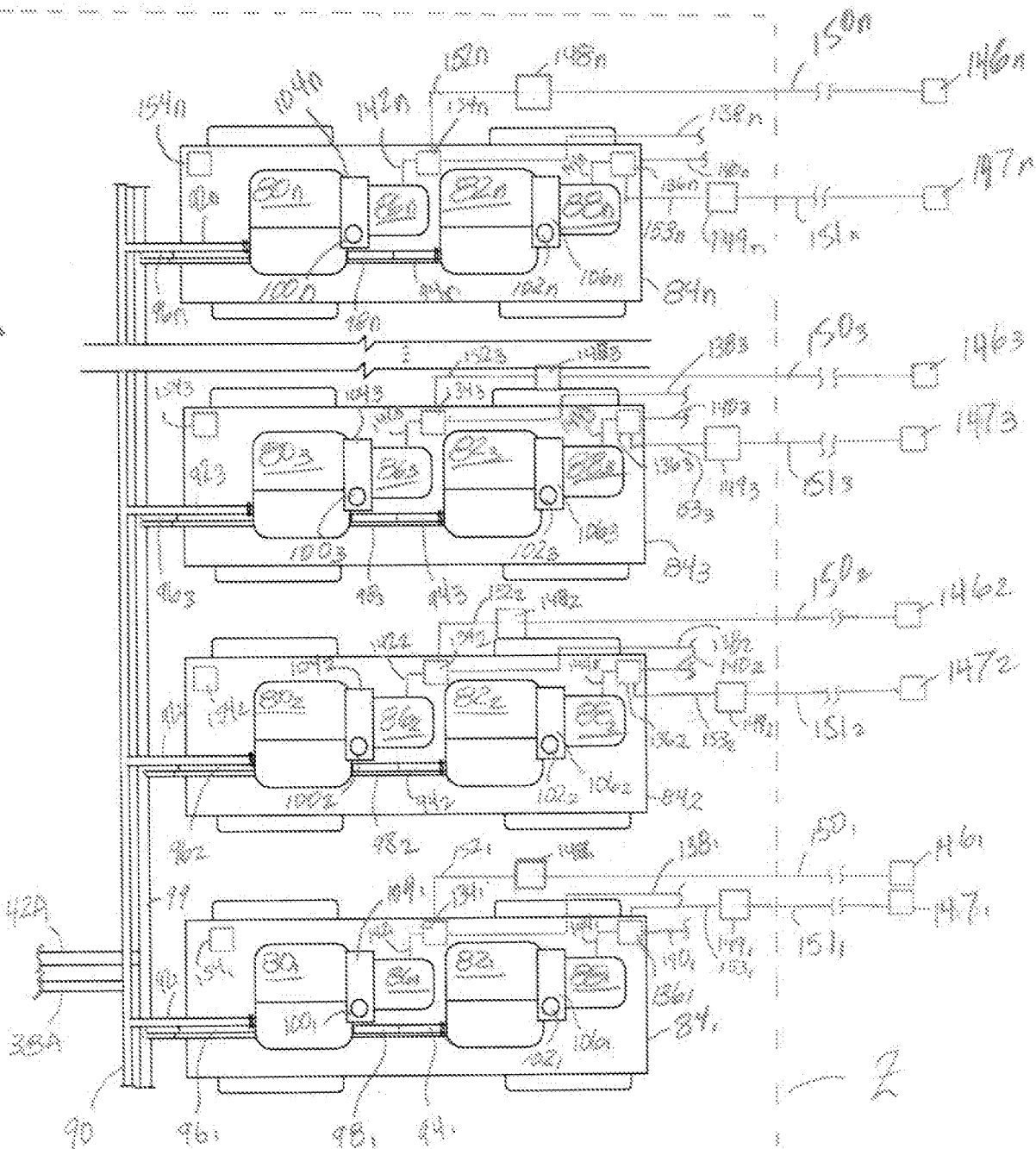
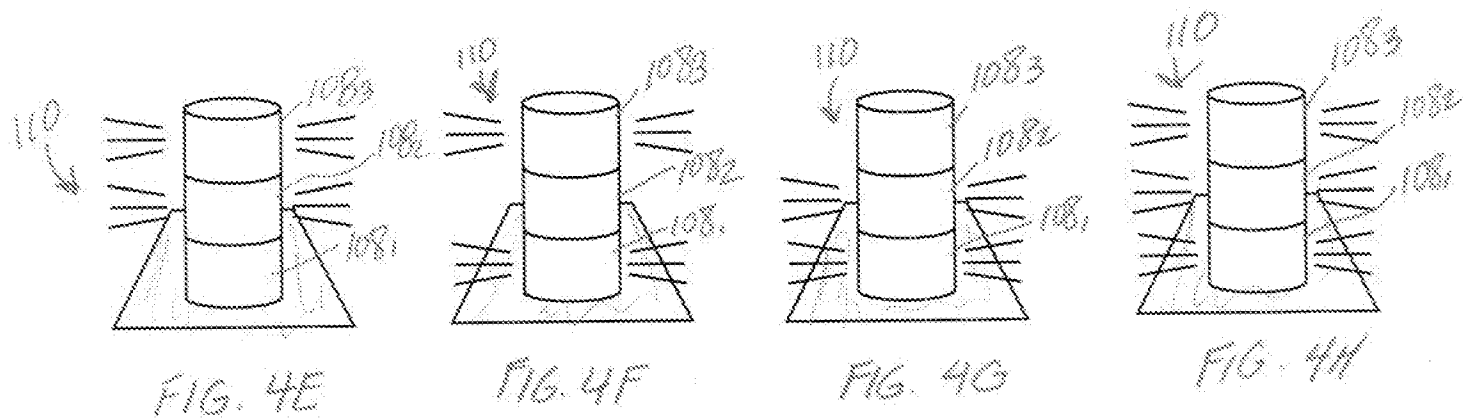
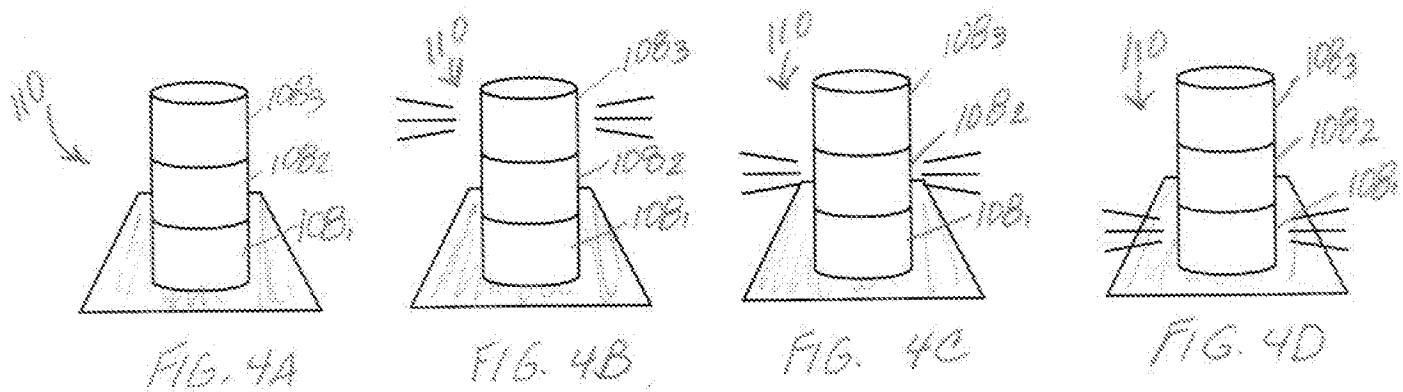
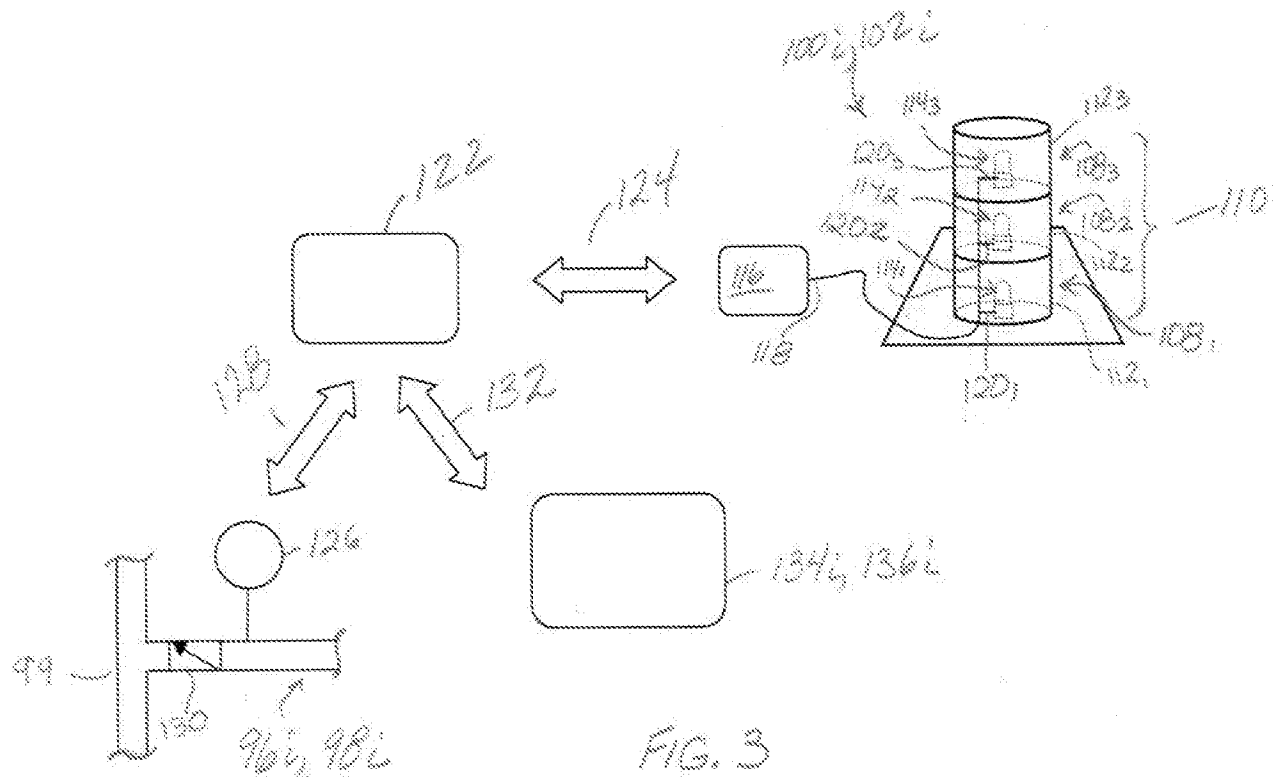


FIG. 2



Electronic Patent Application Fee Transmittal				
Application Number:				
Filing Date:				
Title of Invention:		SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS		
First Named Inventor/Applicant Name:		JARED OEHRING		
Filer:		Keith Ronald Derrington/Theresa M. Evenbly paralegal to K. Ron Derrington		
Attorney Docket Number:		085055.000020		
Filed as Large Entity				
Filing Fees for Track I Prioritized Examination - Nonprovisional Application under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Utility application filing	1011	1	280	280
Utility Search Fee	1111	1	600	600
Utility Examination Fee	1311	1	720	720
Request for Prioritized Examination	1817	1	4000	4000
Pages:				
Claims:				
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Publ. Fee- Early, Voluntary, or Normal	1504	1	0	0
PROCESSING FEE, EXCEPT PROV. APPLS.	1830	1	140	140
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				5740

Electronic Acknowledgement Receipt

EFS ID:	26429184
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	JARED OEHRING
Customer Number:	35979
Filer:	Keith Ronald Derrington/Theresa M. Evenbly paralegal to K. Ron Derrington
Filer Authorized By:	Keith Ronald Derrington
Attorney Docket Number:	085055.000020
Receipt Date:	22-JUL-2016
Filing Date:	
Time Stamp:	13:44:55
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$5740
RAM confirmation Number	14
Deposit Account	
Authorized User	

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

HALLIBURTON EXHIBIT 1003

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	TrackOne Request	085055-000020Track1.pdf	113897	no	2
			b54889394a069db883f899cf83292105d27bf880		
Warnings:					
Information:					
2	Application Data Sheet	085055-000020-ApplicationDataSheet.pdf	1823068	no	8
			264280d2917d2591d4033ac8bcfb72428375da7c		
Warnings:					
Information:					
3		085055-000020-v2-Conversion_Application.pdf	198216	yes	23
			50a09852799f403226d29e3a644f2a75af6e50bc		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	18	
	Claims		19	22	
	Abstract		23	23	
Warnings:					
Information:					
4	Drawings-only black and white line drawings	085055-000020Drawings.pdf	334013	no	3
			69176454755ebe27c87d269b0e6994d6afa3c379		
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	40435	no	2
			990088f13a67e0d47eee61cdf984fd989472978		
HALLIBURTON EXHIBIT 1003					

Warnings:	
Information:	
Total Files Size (in bytes):	2509629
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. <u>New Applications Under 35 U.S.C. 111</u> 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. <u>National Stage of an International Application under 35 U.S.C. 371</u> 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. <u>New International Application Filed with the USPTO as a Receiving Office</u> 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.	

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 15/217,040			
APPLICATION AS FILED - PART I									
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY			
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)		
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	280		
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A	600		
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	720		
TOTAL CLAIMS (37 CFR 1.16(j))	19	minus 20 = *			OR	x 80 =	0.00		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3	minus 3 = *				x 420 =	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			TOTAL	1600		
APPLICATION AS AMENDED - PART II									
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus **	=		OR	x	=	
	Independent (37 CFR 1.16(h))	*	Minus ***	=		OR	x	=	
	Application Size Fee (37 CFR 1.16(s))					OR			
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					OR			
			TOTAL ADD'L FEE			OR	TOTAL ADD'L FEE		
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus **	=		OR	x	=	
	Independent (37 CFR 1.16(h))	*	Minus ***	=		OR	x	=	
	Application Size Fee (37 CFR 1.16(s))					OR			
	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.									



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United States Patent and Trademark Office
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www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
15/217,040	07/22/2016	Jared OEHRING	085055.000020

CONFIRMATION NO. 6810

FORMALITIES LETTER



OC000000084876066

35979
Bracewell & Giuliani LLP
P.O. Box 61389
Houston, TX 77208-1389

Date Mailed: 08/05/2016

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).

- 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. No entity status discount is in effect. If applicant is qualified for small entity status, a written assertion of small entity status must be submitted to establish small entity status. (See 37 CFR 1.27). 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.)

- \$ 140 surcharge.
- \$(0) previous unapplied payment amount.
- \$ 140 TOTAL FEE BALANCE DUE.

Items Required To Avoid Processing Delays:

Applicant is notified that the above-identified application contains the deficiencies noted below. No period for reply is set forth in this notice for correction of these deficiencies. However, if a deficiency relates to the inventor's oath or declaration, the applicant must file an oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each actual inventor no later than the expiration of the time period set in the "Notice of Allowability" to avoid abandonment. See 37 CFR 1.53(f).

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):
Jared OEHRING
Brandon Neil HINDERLITER

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://portal.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.

/mhaile/



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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
15/217,040	07/22/2016	3674	1600	085055.000020	19	3

CONFIRMATION NO. 6810

FILING RECEIPT



Date Mailed: 08/05/2016

35979
Bracewell & Giuliani LLP
P.O. Box 61389
Houston, TX 77208-1389

Receipt is acknowledged of this non-provisional 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 APPLICANT, 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 Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections 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**

Inventor(s)

Jared OEHRING, Houston, TX;
Brandon Neil HINDERLITER, Buckhannon, WV;

Applicant(s)

US Well Services LLC, Houston, TX

Assignment For Published Patent Application

US Well Services LLC, Houston, TX

Power of Attorney: None

Domestic Priority data as claimed by applicant

This appln claims benefit of 62/196,350 07/24/2015

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: 08/04/2016

page 1 of 3

HALLIBURTON EXHIBIT 1003

Halliburton Energy Services, Inc. v. U.S. Well Services, LLC, IPR2023-00557, Page 45

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 15/217,040**

Projected Publication Date: 01/26/2017

Non-Publication Request: No

Early Publication Request: No

Title

SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS

Preliminary Class

166

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

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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 Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

In re Patent Application of:	§	
Jared Oehring, et al	§	Confirmation No.: 6810
	§	
Serial No.: 15/217,040	§	Examiner:
	§	
Filed: July 22, 2016	§	Group Art Unit: 3674
	§	
For: SAFETY INDICATOR LIGHTS	§	Attorney Docket No.: 085055.000020
FOR HYDRAULIC FRACTURING	§	
PUMPS	§	

TRANSMITTAL LETTER FOR REPLACEMENT DRAWINGS

Dear Sir:

Enclosed are the formal drawing replacement sheets 1-4 for this application in compliance with 37 CFR 1.84 and 37 CFR 1.21(d). The replacement sheets are submitted to replace informal drawings with formal drawings having greater clarity and line quality. No substantive changes have been made, and no new matter is introduced. Applicants respectfully request that these replacement drawing sheets be entered into the contents of the application to replace the originally filed drawing sheets.

Should the Commissioner deem any fees as being due, the Commissioner is authorized to debit said fees from Bracewell LLP, USPTO Deposit Account Number 50-0259, Reference No. 085055.000020.

Respectfully submitted,



K. Ron Derrington
Registration No. 44,061

Date: September 17, 2016

Bracewell LLP
P. O. Box 61389
Houston, Texas 77208-1389
Tel: (713) 221-1515
Fax: (713) 437-5320
docketing@bracewelllaw.com

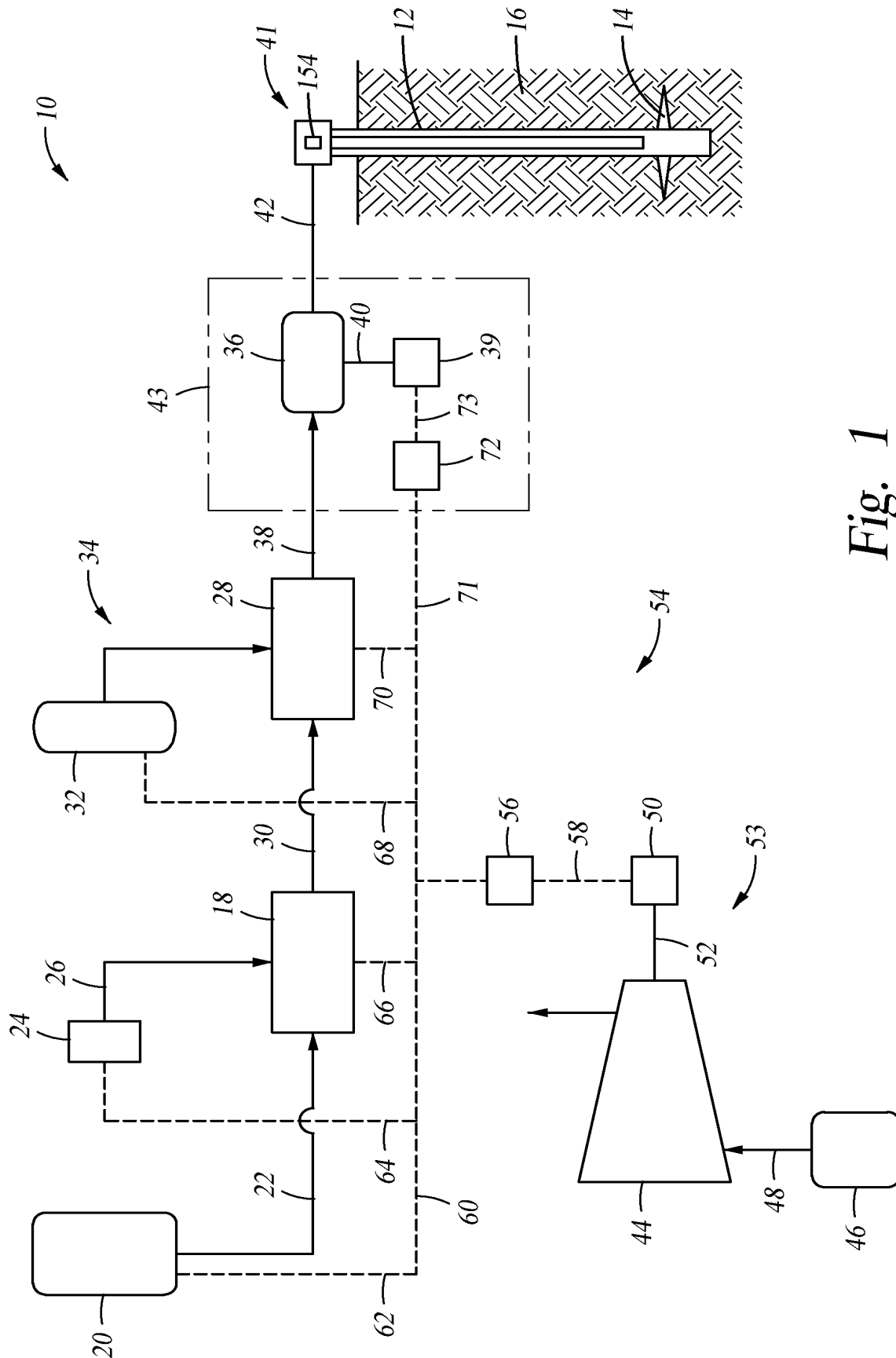


Fig. 1

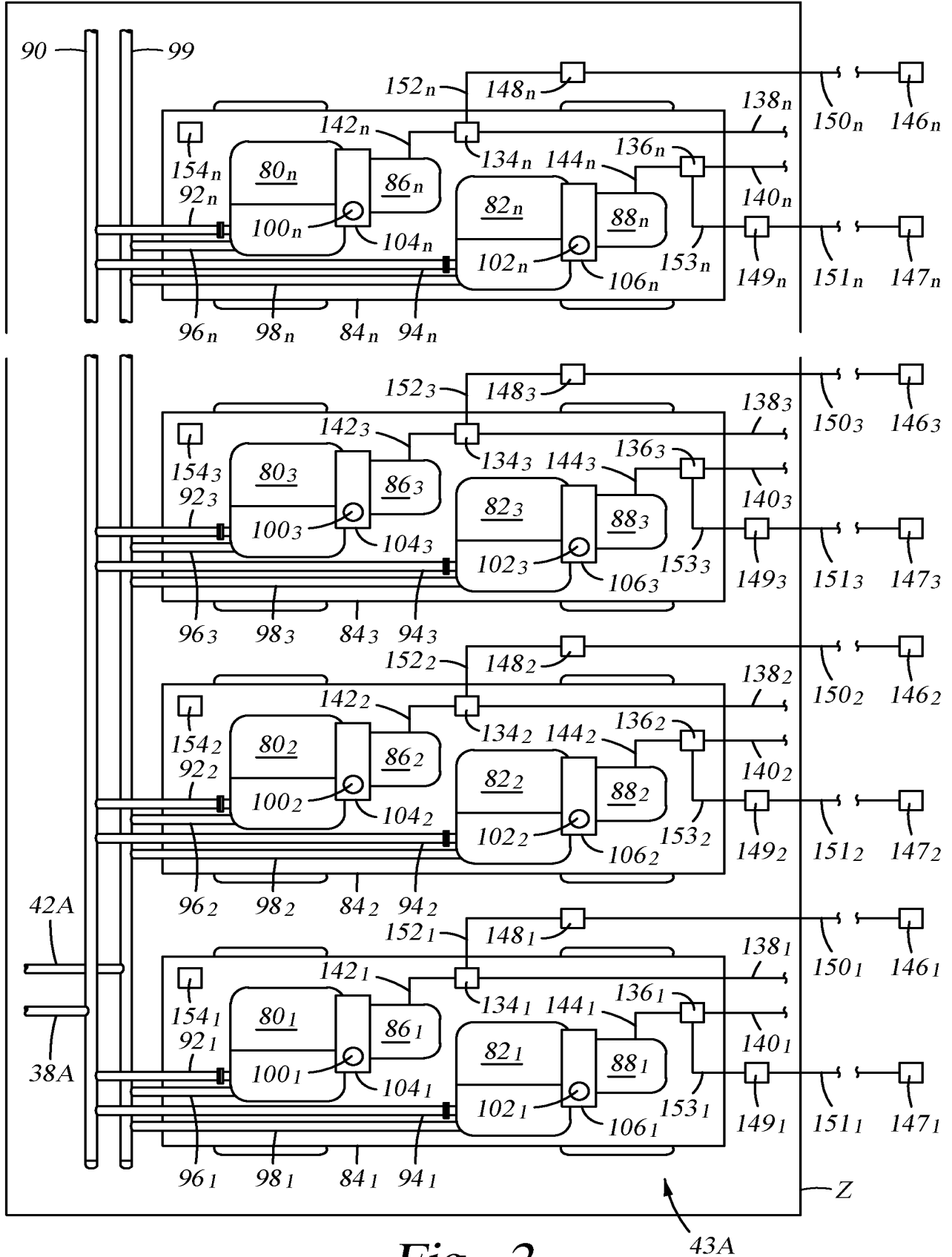


Fig. 2

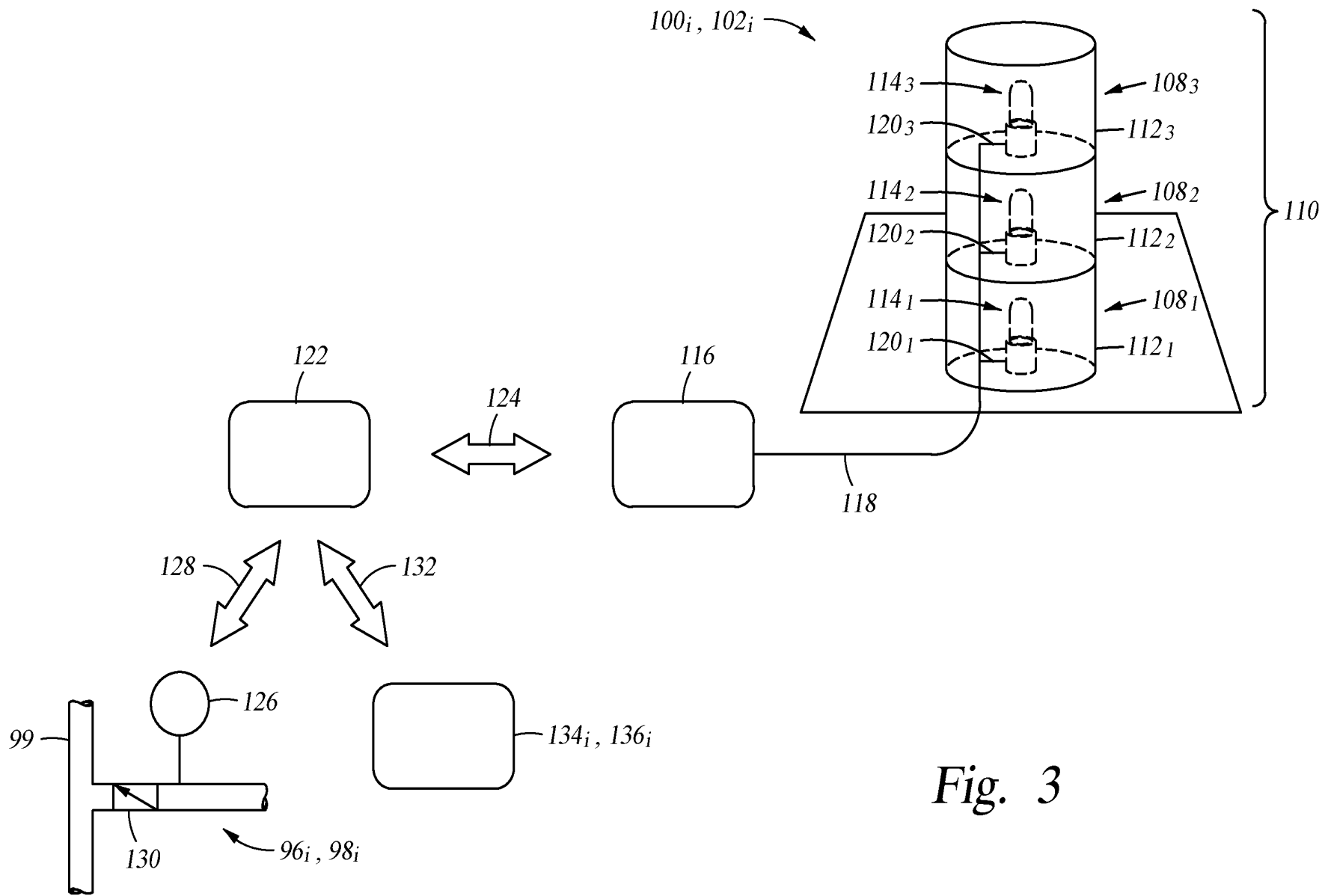


Fig. 3

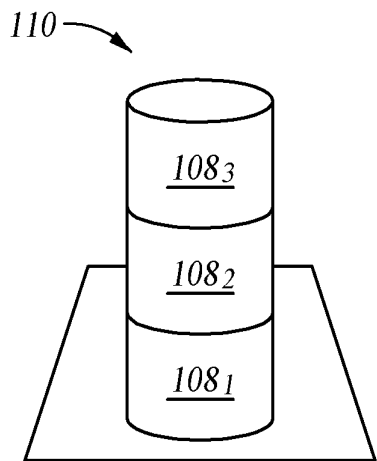


Fig. 4A

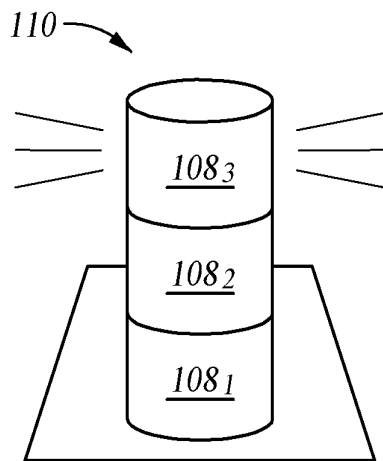


Fig. 4B

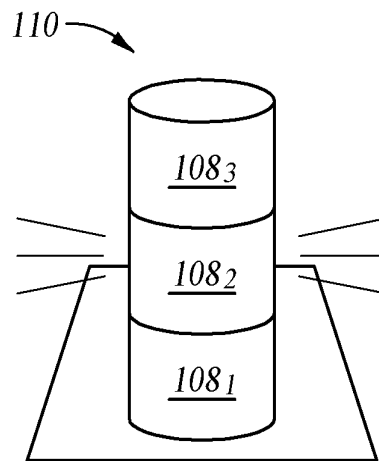


Fig. 4C

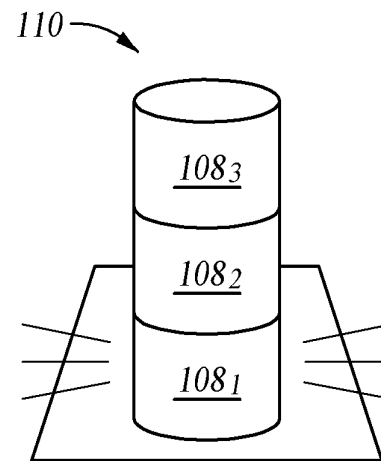


Fig. 4D

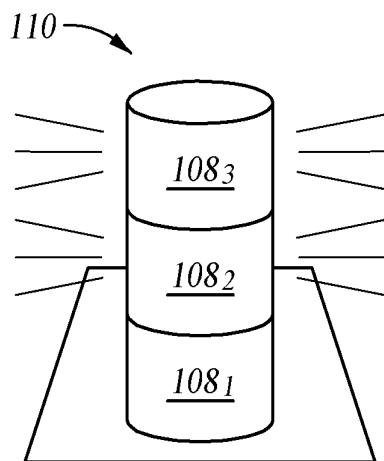


Fig. 4E

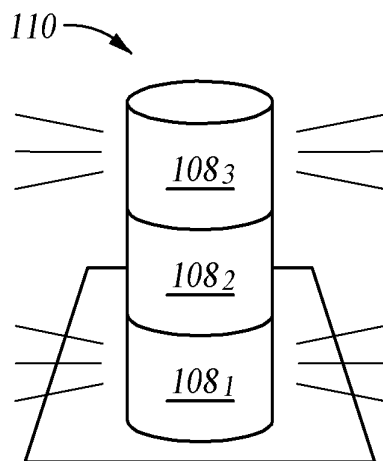


Fig. 4F

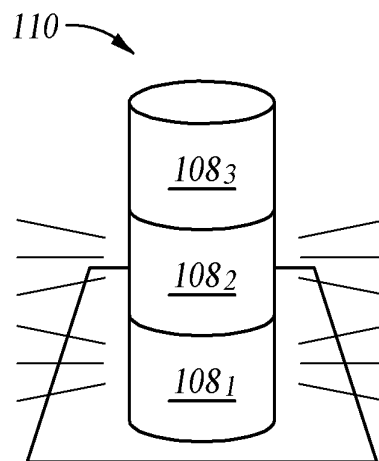


Fig. 4G

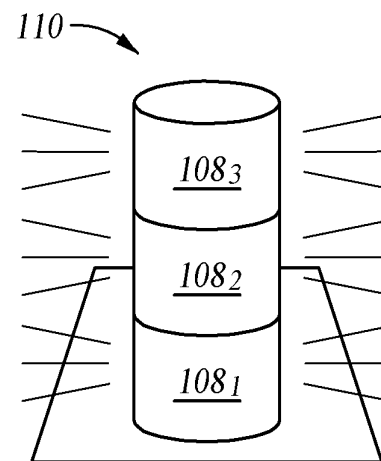


Fig. 4H

Electronic Patent Application Fee Transmittal

Application Number:	15217040			
Filing Date:	22-Jul-2016			
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS			
First Named Inventor/Applicant Name:	Jared OEHRING			
Filer:	Keith Ronald Derrington/Theresa M. Evenbly paralegal to K. Ron Derrington			
Attorney Docket Number:	085055.000020			
Filed as Large 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:				
Late Filing Fee for Oath or Declaration	1051	1	140	140
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				140

Electronic Acknowledgement Receipt

EFS ID:	26957520
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	Jared OEHRING
Customer Number:	35979
Filer:	Keith Ronald Derrington/Theresa M. Evenbly paralegal to K. Ron Derrington
Filer Authorized By:	Keith Ronald Derrington
Attorney Docket Number:	085055.000020
Receipt Date:	17-SEP-2016
Filing Date:	22-JUL-2016
Time Stamp:	15:58:50
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 140
RAM confirmation Number	6981
Deposit Account	
Authorized User	

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

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File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	085055_000020__transmittal_of_formal_dwgs.pdf	116720 b14dea7b05c175925791f98891b23810f3f06a42	no	1
Warnings:					
Information:					
2	Drawings-only black and white line drawings	085055-000020ReplacementDrawings.pdf	631553 769c8a7575104ec2b441bae4549721689c80b519	no	4
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30476 3125c0129bcec1f70b4d82410fac8db4b5b58aa1	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			778749		
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15/217,040	07/22/2016	Jared OEHRING	085055.000020

CONFIRMATION NO. 6810

INFORMAL NOTICE



35979
Bracewell & Giuliani LLP
P.O. Box 61389
Houston, TX 77208-1389

Date Mailed: 09/26/2016

INFORMATIONAL NOTICE TO APPLICANT

Applicant is notified that the above-identified application contains the deficiencies noted below. No period for reply is set forth in this notice for correction of these deficiencies. However, if a deficiency relates to the inventor's oath or declaration, the applicant must file an oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each actual inventor no later than the expiration of the time period set in the "Notice of Allowability" to avoid abandonment. See 37 CFR 1.53(f).

The item(s) indicated below are also required and should be submitted with any reply to this notice to avoid further processing delays.

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):
Jared OEHRING
Brandon Neil HINDERLITER

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.

/dtdinh/



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
15/217,040	07/22/2016	3674	1740	085055.000020	19	3

35979
Bracewell & Giuliani LLP
P.O. Box 61389
Houston, TX 77208-1389

CONFIRMATION NO. 6810
UPDATED FILING RECEIPT



Date Mailed: 09/26/2016

Receipt is acknowledged of this non-provisional 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 APPLICANT, 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 Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections 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**

Inventor(s)

Jared OEHRING, Houston, TX;
Brandon Neil HINDERLITER, Buckhannon, WV;

Applicant(s)

US Well Services LLC, Houston, TX

Assignment For Published Patent Application

US Well Services LLC, Houston, TX

Power of Attorney: None

Domestic Priority data as claimed by applicant

This appln claims benefit of 62/196,350 07/24/2015

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: 08/04/2016

page 1 of 3

HALLIBURTON EXHIBIT 1003

Halliburton Energy Services, Inc. v. U.S. Well Services, LLC, IPR2023-00557, Page 58

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 15/217,040**

Projected Publication Date: 01/26/2017

Non-Publication Request: No

Early Publication Request: No

Title

SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS

Preliminary Class

166

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 Assets Control, 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

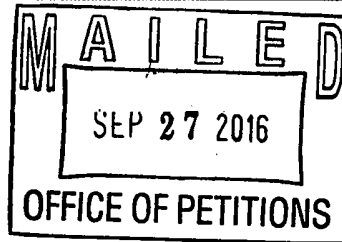
The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through 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 15/217,040			
APPLICATION AS FILED - PART I									
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY			
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)		
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	280		
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A	600		
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	720		
TOTAL CLAIMS (37 CFR 1.16(j))	19	minus 20 = *			OR	x 80 =	0.00		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3	minus 3 = *				x 420 =	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		TOTAL	1600		
APPLICATION AS AMENDED - PART II									
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus **	=		OR	x	=	
	Independent (37 CFR 1.16(h))	*	Minus ***	=		OR	x	=	
	Application Size Fee (37 CFR 1.16(s))					OR			
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					OR			
				TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE		
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus **	=		OR	x	=	
	Independent (37 CFR 1.16(h))	*	Minus ***	=		OR	x	=	
	Application Size Fee (37 CFR 1.16(s))					OR			
	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

Bracewell & Giuliani LLP
P.O. Box 61389
Houston TX 77208-1389



Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

Doc Code: TRACK1.GRANT

Decision Granting Request for Prioritized Examination (Track I or After RCE)	Application No.: 15/217,040
1. THE REQUEST FILED <u>July 22, 2016</u> IS GRANTED. The above-identified application has met the requirements for prioritized examination A. ☒ for an original nonprovisional application (Track I). B. ☐ for an application undergoing continued examination (RCE). 2. The above-identified application will undergo prioritized examination. The application will be accorded special status throughout its entire course of prosecution until one of the following occurs: A. filing a <u>petition for extension of time</u> to extend the time period for filing a reply; B. filing an <u>amendment to amend the application to contain more than four independent claims, more than thirty total claims</u>, or a multiple dependent claim; C. filing a <u>request for continued examination</u>; D. filing a notice of appeal; E. filing a request for suspension of action; F. mailing of a notice of allowance; G. mailing of a final Office action; H. completion of examination as defined in 37 CFR 41.102; or I. abandonment of the application. Telephone inquiries with regard to this decision should be directed to Brian W. Brown at 571-272-5338. /Brian W. Brown/ [Signature] Petitions Examiner, Office of Petitions (Title)	

U.S. Patent and Trademark Office
PTO-2298 (Rev. 02-2012)

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**REQUEST FOR WITHDRAWAL
AS ATTORNEY OR AGENT AND
CHANGE OF
CORRESPONDENCE ADDRESS**

Application Number	15/217,040
Filing Date	07-22-2016
First Named Inventor	Jared Oehring
Art Unit	3674
Examiner Name	-
Practitioner Docket Number	085055.000020

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Please withdraw me as attorney or agent for the above-identified patent application, and

- ☐ all the practitioners of record;
- ☐ the practitioners (with registration numbers) of record listed on the attached paper(s); or
- ☒ the practitioners of record associated with Customer Number: 35979

NOTE: The immediately preceding box should only be marked when the practitioners were appointed using the listed Customer Number.

The reason(s) for this request are those described in 37 CFR:

- | | | |
|--|---------------------------------------|---------------------------------------|
| ☐ 11.116(a)(1) | ☐ 11.116(a)(2) | ☐ 11.116(a)(3) |
| ☒ 11.116(b)(1) | ☐ 11.116(b)(2) | ☐ 11.116(b)(3) |
| ☐ 11.116(b)(4) | ☐ 11.116(b)(5) | ☐ 11.116(b)(6) |
| ☒ 11.116(b)(7) Please explain below: | | |

Client has retained new counsel.

Certifications**Check each box below that is factually correct. WARNING: If a box is left unchecked, the request will likely not be approved.**

- ☒ I/We have given reasonable notice to the client, prior to the expiration of the response period, that the practitioner(s) intend to withdraw from employment.
- ☒ I/We have delivered to the client or a duly authorized representative of the client all papers and property (including funds) to which the client is entitled.
- ☒ I/We have notified the client of any responses that may be due and the time frame within which the client must respond.

Please provide an explanation, if necessary:

[Page 1 of 2]

This collection of information is required by 37 CFR 1.36. 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.**

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REQUEST FOR WITHDRAWAL AS ATTORNEY OR AGENT AND CHANGE OF CORRESPONDENCE ADDRESS

Complete the following section only when the correspondence address will change. Changes of address will only be accepted to an applicant.

Change the correspondence address and direct all future correspondence to:

A. ☒ The address of the applicant associated with Customer Number: 143960

OR

B. ☐ Applicant

Address

City

State

Zip

Country

Telephone

Email

I am authorized to sign on behalf of myself and all withdrawing practitioners.

Signature /Constance Rhebergen/

Name Constance Rhebergen

Registration No. 41267

Address Bracewell LLP, P.O. Box 61389

City Houston

State Tx

Zip 77208-1389

Country US

Date 10/12/2016

Telephone No. 713.223.2300

NOTE: Withdrawal is effective when approved rather than when received.

[Page 2 of 2]

This collection of information is required by 37 CFR 1.36. 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.

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.

Electronic Acknowledgement Receipt

EFS ID:	27187821
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	Jared OEHRING
Customer Number:	35979
Filer:	Constance Gall Rhebergen/Margie Putman
Filer Authorized By:	Constance Gall Rhebergen
Attorney Docket Number:	085055.000020
Receipt Date:	12-OCT-2016
Filing Date:	22-JUL-2016
Time Stamp:	11:16:59
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Change of Address	Request_for_Withdrawal_and_Change_of_Address_Application_15217040.pdf	301449 471b46c816a6b81ee390e98258593a351d6e116b	no	3

Warnings:

HALLIBURTON EXHIBIT 1003

Information:	
Total Files Size (in bytes):	301449
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. <u>New Applications Under 35 U.S.C. 111</u> 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. <u>National Stage of an International Application under 35 U.S.C. 371</u> 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. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.	

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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:

☐

Practitioners associated with Customer Number:

132858

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 assignments 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:

☐

The address associated with Customer Number:

132858

OR

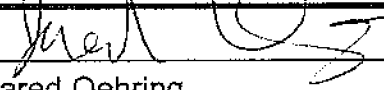
☐	Firm or Individual Name			
☐	Address			
	City	State	Zip	
	Country			
	Telephone	Email		

Assignee Name and Address: U.S. Well Services LLC
770 Post Oak Ln. #405
Houston, TX 77056

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		Date	10/12/2016
Name	Jared Oehring	Telephone	281-685-7529
Title	Vice President of Technology		

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 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.

HALLIBURTON EXHIBIT 1003

Halliburton Energy Services, Inc. v. U.S. Well Services, LLC, IPR2023-00557, Page 68

Electronic Acknowledgement Receipt

EFS ID:	27340437
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	Jared OEHRING
Customer Number:	35979
Filer:	Taylor P. Evans/Monica Williams
Filer Authorized By:	Taylor P. Evans
Attorney Docket Number:	085055.000020
Receipt Date:	27-OCT-2016
Filing Date:	22-JUL-2016
Time Stamp:	13:39:00
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	Power of Attorney	USW_POA.PDF	29097	no	1
			1a124a15c68aa6cae44c103aa8d3c3821e1c2ded		

Warnings:

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Information:	
Total Files Size (in bytes):	29097
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. <u>New Applications Under 35 U.S.C. 111</u> 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. <u>National Stage of an International Application under 35 U.S.C. 371</u> 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. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.	

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**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN
APPLICATION DATA SHEET (37 CFR 1.76)**

**Title of
Invention**

SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS

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 15/217,040
filed on July 22, 2016

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.

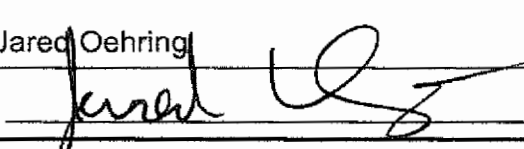
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001
by fine or imprisonment of not more than five (5) years, or both.

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: Jared Oehring Date (Optional): 10/31/16

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.**

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Privacy Act Statement

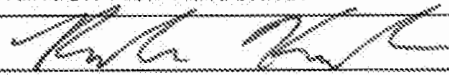
The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection 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.

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
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 <u>15/217,040</u> filed on <u>July 22, 2016</u> 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: <u>Brandon Neil Hinderliter</u> Date (Optional): <u>10/26/16</u> 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.

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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.

Electronic Acknowledgement Receipt

EFS ID:	27375767
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	Jared OEHRING
Customer Number:	35979
Filer:	Taylor P. Evans/Monica Williams
Filer Authorized By:	Taylor P. Evans
Attorney Docket Number:	085055.000020
Receipt Date:	31-OCT-2016
Filing Date:	22-JUL-2016
Time Stamp:	17:55:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Oath or Declaration filed	15217040-Declarations.pdf	486291	no	4
			2959c9f5636afdfb0eeffa0f86d3d87dfa6479d33		

Warnings:

HALLIBURTON EXHIBIT 1003

Information:	
Total Files Size (in bytes):	486291
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Electronic Patent Application Fee Transmittal				
Application Number:		15217040		
Filing Date:		22-Jul-2016		
Title of Invention:		SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS		
First Named Inventor/Applicant Name:		Jared OEHRING		
Filer:		Taylor P. Evans/Monica Williams		
Attorney Docket Number:		085055.000020		
Filed as Large 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:				
LATE FILING FEE FOR OATH OR DECLARATION	1051	1	140	140
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Extension - 1 month with \$0 paid	1251	1	200	200
Miscellaneous:				
Total in USD (\$)				340

Electronic Acknowledgement Receipt

EFS ID:	27388223
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	Jared OEHRING
Customer Number:	35979
Filer:	Taylor P. Evans/Monica Williams
Filer Authorized By:	Taylor P. Evans
Attorney Docket Number:	085055.000020
Receipt Date:	01-NOV-2016
Filing Date:	22-JUL-2016
Time Stamp:	16:48:45
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 340
RAM confirmation Number	110216INTEFSW00003433506763
Deposit Account	506763
Authorized User	Monica Williams

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

37 CFR 1.16 (National application filing, search, and examination fees)

37 CFR 1.17 (Patent application and reexamination processing fees)

HALLIBURTON EXHIBIT 1003

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)	fee-info.pdf	32357	no	2
			6d28b95f9f7b863c9c5b9c26399a6f4fda7f2480		

Warnings:

Information:

Total Files Size (in bytes):	32357
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New Applications Under 35 U.S.C. 111

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

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New International Application Filed with the USPTO as a Receiving Office

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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
15/217,040	07/22/2016	Jared OEHRING	085055.000020

CONFIRMATION NO. 6810

POA ACCEPTANCE LETTER



132858
Hogan Lovells US LLP
Bank of America Center
700 Louisiana Street
Suite 4300
Houston, TX 77002

Date Mailed: 11/04/2016

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/27/2016.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

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.

/tpetros/



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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Alexandria, Virginia 22313-1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/217,040	07/22/2016	Jared OEHRING	085055.000020	6810

132858 7590 11/29/2016
Hogan Lovells US LLP
Bank of America Center
700 Louisiana Street
Suite 4300
Houston, TX 77002

EXAMINER

THOMPSON, KENNETH L

ART UNIT	PAPER NUMBER
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3676

NOTIFICATION DATE	DELIVERY MODE
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11/29/2016

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):

hlusdocketing@hoganlovells.com

DETAILED ACTION

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Claim Objections

Claims 16 and 19 are objected to because of the following informalities:

The recitation “the discharge pump” in line 2, claim 16 lacks antecedent basis.

The recitations “the pump controller” and “the auxiliary equipment” in line 3, claim 16 lack antecedent basis.

The recitation “the discharge pump” in claim 19 lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

Claims 15, 16 and 19 is/are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Paterson et al., U.S. 5,865,247.

Paterson et al. discloses pressurizing fracturing fluid (col. 4, lines 43-47; wherein water is injected into the formation with a pump (45; col. 7, lines 4-78); driving the pump (45) with a motor (78) that is powered by electricity (col. 7, lines 4-11); monitoring an operational state of a hydraulic fracturing/injection system (col. 8, lines 60-65) that comprises the pump (45) and motor (78) and emitting a visual signal (col. 7, lines 62-65) regarding the operational state.

Paterson et al. disclose the operational state comprises the system being isolated from electricity (col.10, lines 27-50; the logic diagram controls the stopping and starting of the pumps based on interlock flags), a fluid pressure of the discharge of the pump having a value at least as great as a designated value (col. 11, lines 22-28; fluid in the injection tubing is from an injection pump), the pump controller (88, 92; col. 11, lines 55-59) being energized, and the auxiliary equipment (valve 48; col. 11, lines 65-67) being energized but without a one of the pump motors being energized (col. 12, lines 2-5).

Claim Rejections - 35 USC § 103

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

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17 and 18 are rejected under 35 U.S.C. 103 as being unpatentable over Paterson et al., U.S. 5,865,247 in view of Jensen et al., U.S. 2008/0137266.

Paterson et al. does not disclose selectively emitting a visual signal that is indicative of the monitored operational state includes a stack of different light assemblies.

Jensen et al. teaches use of an electrical motor control system (MCC 60; [0001] and [0034], lines 10-20) having a units (66) that selectively emits a visual signal including light assemblies (indicator lights 90 [0037]) that is indicative of the monitored operational state ([0020], lines 1-4).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the control and monitoring system disclosed by Paterson et al. to include a visual signaling device as taught by Jensen et al. to alert an operator of an operational state of an electrical motor to achieve predictable results.

Paterson et al. discloses a monitoring system and a variable speed motor but does not discloses monitoring electricity to a variable frequency drive that controls the electricity to the motor.

Jensen et al. teaches use of a monitoring electricity to a variable frequency drive that controls the electricity to the motor ([0035]; the motor control center 66 includes a motor controller providing power to the variable frequency drive 72 to power an electrical motor).

Art Unit: 3676

It would have been obvious to one having ordinary skill in the art to include a variable frequency drive to power an electrical motor as taught by Jensen et al. to achieve predictable results and more accurately control an electrical motor speed.

Allowable Subject Matter

Claims 1-14 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose all the claimed subject matter including the variable frequency drive performing electrical motor diagnostics.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH L. THOMPSON whose telephone number is (571)272-7037. The examiner can normally be reached on 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Waseem Moorad can be reached on 571-270-3436. 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 <http://pair-direct.uspto.gov>. 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.

23 November 2016

/KENNETH L THOMPSON/
Primary Examiner, Art Unit 3676

Notice of References Cited	Application/Control No. 15/217,040		Applicant(s)/Patent Under Reexamination OEHRING ET AL.	
	Examiner KENNETH L. THOMPSON		Art Unit 3676	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-5,865,247 A	02-1999	Paterson; Alexander J.	E21B33/138	166/252.1
*	B	US-2008/0137266 A1	06-2008	Jensen; David L.	H02B1/21	361/602
*	C	US-2009/0260826 A1	10-2009	Sherwood; Joe	E21B41/0057	166/305.1
*	D	US-2012/0255734 A1	10-2012	Coli; Todd	E21B43/26	166/305.1
*	E	US-2013/0306322 A1	11-2013	Sanborn; Stephen Duane	E21B43/26	166/308.1
*	F	US-2014/0010671 A1	01-2014	Cryer; Robert Douglas	B60W10/30	417/53
*	G	US-2014/0096974 A1	04-2014	Coli; Todd	E21B43/26	166/358
*	H	US-8,789,601 B2	07-2014	Broussard; Joel N.	E21B43/26	166/177.5
*	I	US-8,807,960 B2	08-2014	Stephenson; Stanley V.	F04B23/06	166/105
*	J	US-2015/0114652 A1	04-2015	Lestz; Robert S.	E21B43/26	166/308.1
*	K	US-2015/0211524 A1	07-2015	Broussard; Joel N.	F04D29/044	417/423.1
*	L	US-2016/0032703 A1	02-2016	Broussard; Joel N.	E21B43/267	166/250.01
*	M	US-9,410,410 B2	08-2016	Broussard; Joel N.	E21B43/26	1/1

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.



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BIB DATA SHEET

CONFIRMATION NO. 6810

SERIAL NUMBER 15/217,040	FILING or 371(c) DATE 07/22/2016 RULE	CLASS 166	GROUP ART UNIT 3676	ATTORNEY DOCKET NO. 085055.000020	
APPLICANTS US Well Services LLC, Houston, TX INVENTORS Jared OEHRING, Houston, TX; Brandon Neil HINDERLITER, Buckhannon, WV; ** CONTINUING DATA ***** This appln claims benefit of 62/196,350 07/24/2015 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 08/04/2016					
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☒ No Verified and /KENNETH L THOMPSON/ Acknowledged Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY TX	SHEETS DRAWINGS 3	TOTAL CLAIMS 19	INDEPENDENT CLAIMS 3
ADDRESS Hogan Lovells US LLP Bank of America Center 700 Louisiana Street Suite 4300 Houston, TX 77002 UNITED STATES					
TITLE SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS					
FILING FEE RECEIVED 1880	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit		

Search Notes 	Application/Control No. 15217040	Applicant(s)/Patent Under Reexamination OEHRING ET AL.
	Examiner KENNETH L THOMPSON	Art Unit 3676

CPC- SEARCHED		
Symbol	Date	Examiner
E21B 43/26	11/23/2016	KT

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
417/\$ and variable near frequency and (frack frac fracturing)	11/23/2016	KT
References cited 9,410,410	11/23/2016	KT

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

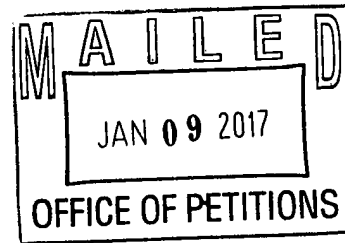
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Hogan Lovells US LLP
Bank of America Center
700 Louisiana Street
Suite 4300
Houston TX 77002



In re Application of
Oehring, Jared et al.
Application No. 15/217,040
Filed: July 22, 2016
Attorney Docket No. 085055.000020

DECISION ON PETITION
TO WITHDRAW
FROM RECORD

This is a decision on the Request to Withdraw as Attorney or Agent of Record under 37 C.F.R. § 1.36(b), filed October 12, 2016.

The request is **DISMISSED** as involving a moot issue.

A review of the file record indicates that the power of attorney to BRACEWELL & GIULIANI LLP was revoked by the applicant of the patent application on October 27, 2016. Accordingly, the request to withdraw under 37 C.F.R. § 1.36(b) is moot.

As the correspondence address of record has already been changed due to the new Power of Attorney, all future communications from the Office will be directed to the above-listed address. A courtesy copy of this decision will be mailed to the petitioner at the below address.

Telephone inquiries concerning this decision should be directed to the undersigned at 571-272- 2783. All other inquiries concerning either the examination or status of the application should be directed to the Technology Center.

/Tredelle Jackson/
Tredelle Jackson
Paralegal Specialist
Office of Petitions

cc: BRACEWELL & GIULIANI LLP
P.O. BOX 61389
HOUSTON, TX 77208-1389

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15217040
	Filing Date	2016-07-22
	First Named Inventor	Jared Oehring
	Art Unit	3676
	Examiner Name	THOMPSON, KENNETH L
	Attorney Docket Number	047158.100018

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	3764233		1973-10-09	Strickland	
	2	5879137		1999-03-09	Yie	
	3	7563076		2009-07-21	Brunet	
	4	7683499		2010-03-23	Saucier	
	5	8083504		2011-12-27	Williams	
	6	3334495		1967-08-08	Jensen	
	7	1671436		1928-05-29	Melott	
	8	2004077		1935-06-04	McCartney	

**INFORMATION DISCLOSURE
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Art Unit	3676	
Examiner Name	THOMPSON, KENNETH L	
Attorney Docket Number	047158.100018	

9	2220622		1940-11-05	Aitken	
10	3066503		1962-12-04	Fleming	
11	3837179		1974-09-24	Barth	
12	4037431		1977-07-26	Sugimoto	
13	5907970		1999-06-01	Havlovick et al.	
14	6142878		2000-11-07	Barin	
15	8789601		2014-07-29	Broussard	
16	6271637		2001-08-07	Kushion	
17	6529135		2003-03-04	Bowers et al.	
18	6931310		2005-08-16	Shimizu et al.	
19	7755310		2010-07-13	West et al.	

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Attorney Docket Number		047158.100018

20	8054084		2011-11-08	Schulz et al.	
21	8310272		2012-11-13	Quarto	
22	8354817		2013-01-15	Yeh et al.	
23	8838341		2014-09-16	Kumano	
24	9018881		2015-04-28	Mao et al.	
25	2248051		1941-07-08	Armstrong	
26	3722595		1973-03-27	Kiel	
27	7312593		2007-12-25	Streicher et al.	
28	4226299		1980-10-07	Hansen	
29	4456092		1984-06-26	Kubozuka	
30	5655361		1997-08-12	Kishi	

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31	6254462		2001-07-03	Kelton	
32	3061039		1962-10-30	Peters	
33	3773140		1973-11-20	Mahajan	
34	5548093		1996-08-20	Sato	
35	6202702		2001-03-20	Ohira	
36	6802690		2004-10-12	Han	
37	8534235		2013-09-17	Chandler	
38	8727068		2014-05-20	Bruin	
39	9103193		2015-08-11	Coli	
40	6164910		2000-12-26	Mayleben	
41	7500642		2009-03-10	Cunningham	

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42	8899940		2014-12-02	Laugemors	
43	8905056		2004-12-09	Kendrick	
44	4151575		1979-04-24	Hogue	
45	5130628		1992-07-14	Owen	
46	6315523		2001-11-13	Mills	
47	7336514		2008-02-26	Amarillas	
48	7525264		1999-04-28	Dodge	
49	8096891		2012-01-17	Lochtefeld	
50	9160168		2015-10-13	Chapel	
51	8146665		2012-04-03	Neal	
52	8474521		2013-07-02	Kajaria	

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53	9067182		2015-06-30	Nichols	
54	8807960		2014-08-19	Stephenson	
55	5025861		1991-06-25	Huber et al.	
56	7170262		2007-01-30	Pettigrew	
57	8997904		2015-04-07	Cryer	
58	9051822		2015-06-09	Ayan	
59	9366114		2016-06-14	Coli et al.	
60	9140110		2015-09-22	Coli et al.	
61	5422550		1995-06-06	McClanahan	
62	7845413		2010-12-07	Shampine et al.	
63	8596056		2013-12-03	Woodmansee	

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64	8774972		2014-07-08	Rusnak et al.	
65	8905138		2014-12-09	Lundstedt et al.	
66	3881551		1975-05-06	Terry	
67	4512387		1985-04-23	Rodriguez	
68	4845981		1989-07-11	Pearson	
69	6776227		2004-08-17	Beida	
70	8037936		2011-10-18	Neuroth	
71	8760657		2014-06-24	Pope	
72	8857506		2014-10-14	Stone, Jr.	
73	5131472		1992-07-21	Dees et al.	
74	5894888		1999-04-20	Wiemers	

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75	6491098		2002-12-10	Dallas	
76	7173399		2007-02-06	Sihler	
77	7445041		2008-11-04	O'Brien	
78	7807048		2010-10-05	Collette	
79	8272439		2012-09-25	Strickland	
80	8573303		2013-11-05	Kerfoot	
81	9322239		2016-04-26	Angeles Boza et al.	

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Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20100303655		2010-12-02	Scekic	
	2	20110085924		2011-04-14	Shampine	

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3	20120085541		2012-04-12	Love et al.	
4	20120205301		2012-08-16	McGuire et al.	
5	20070201305		2007-08-30	Heilman et al.	
6	20100132949		2010-06-03	DeFosse et al.	
7	20110272158		2011-11-10	Neal	
8	20140251623		2014-09-11	Lestz et al.	
9	20070187163		2007-08-16	Cone	
10	20080112802		2008-05-15	Orlando	
11	20090065299		2009-03-12	Vito	
12	20090188181		2009-07-30	Forbis	
13	20100000508		2010-01-07	Chandler	

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14	20140000899		2014-01-02	Nevison	
15	20150083426		2015-03-26	Lesko	
16	20150225113		2015-08-13	Lungu	
17	20160177678		2016-06-23	Morris	
18	20130233542		2013-09-12	Shampine	
19	20120127635		2012-05-24	Grindeland	
20	20080264649		2008-10-30	Crawford	
21	20120018016		2012-01-26	Gibson	
22	20150252661		2015-09-10	Glass	
23	20150175013		2015-06-25	Cryer et al.	
24	20160105022		2016-04-14	Oehring	

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Attorney Docket Number	047158.100018	

25	20160208592		2016-04-14	Oehring	
26	20160273328		2016-09-22	Oehring	
27	20160319650		2016-11-03	Oehring	
28	20160290114		2016-10-06	Oehring	
29	20160349728		2016-12-01	Oehring	
30	20160348479		2016-12-01	Oehring	
31	20160326854		2016-11-10	Broussard	
32	20100322802		2010-12-23	Kugelev	
33	20140124162		2014-05-08	Leavitt	
34	20160258267		2016-09-08	Payne et al.	
35	20110005757		2011-01-13	Hebert	

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Attorney Docket Number	047158.100018

36	20150159911	2015-06-11	Holt
37	20080217024	2008-09-11	Moore
38	20110017468	2011-01-27	Birch et al.
39	20130341029	2013-12-26	Roberts et al.
40	20150176386	2015-06-25	Castillo et al.

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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1	2004264589	JP		2004-09-24	Toshiba KK [TOKE]		×

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	UK Power Networks - Transformers to Supply Heat to Tate Modern - from Press Releases May 16, 2013.	

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First Named Inventor	Jared Oehring
Art Unit	3676
Examiner Name	THOMPSON, KENNETH L
Attorney Docket Number	047158.100018

EXAMINER SIGNATURE

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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First Named Inventor	Jared Oehring
Art Unit	3676
Examiner Name	THOMPSON, KENNETH L
Attorney Docket Number	047158.100018

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

- ☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- ☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Taylor P. Evans/	Date (YYYY-MM-DD)	2017-01-25
Name/Print	Taylor P. Evans	Registration Number	60506

This collection of information is required by 37 CFR 1.97 and 1.98. 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 1 hour 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.**

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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 inspections 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.

DERWENT- 2004-659178
ACC-NO:
DERWENT- 200554
WEEK:

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TITLE: Noise reducing wall member for e.g. engine or electrical machinery enclosure, has each of sound absorption and sound insulation walls comprising of alternating thin and thick part

INVENTOR: MORIKAWA Y

PATENT-ASSIGNEE: TOSHIBA KK[TOKE]

PRIORITY-DATA: 2003JP-054684 (February 28, 2003)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
JP 2004264589 A	September 24, 2004	JA
JP 3680061 B2	August 10, 2005	JA

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP2004264589A	N/A	2003JP-054684	February 28, 2003
JP 3680061B2	Previous Publ	2003JP-054684	February 28, 2003

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	E01 F 8/00	20060101
CIPS	E04 B 1/86	20060101
CIPS	G10 K 11/16	20060101
CIPS	G10 K 11/172	20060101

ABSTRACTED-PUB-NO: JP 2004264589 A

BASIC-ABSTRACT:

NOVELTY - Each of sound absorption and sound insulation walls (20,30) comprises of alternating thin parts (21,31) and thick parts (22,32). Particle velocity of the sound passing the thick part of the sound absorption wall (20) is greater than a reference velocity. The pressure level of the sound passing the thick part of the sound insulation wall (30) is greater than a sound pressure reference value.

USE - For e.g. engine or electrical machinery enclosure.

ADVANTAGE - Optimizes thickness of structural member according to mode of sound to be reduced. Achieves weight reduction.

DESCRIPTION OF DRAWING(S) - Figure is a perspective view of a noise reducing wall member.

Sound absorption wall (20)

Thin parts (21,31)

Thick parts (22,32)

Sound insulation wall (30).

CHOSEN- Dwg. 1/4
DRAWING:

TITLE-TERMS: NOISE REDUCE WALL MEMBER ENGINE ELECTRIC MACHINE ENCLOSE
SOUND ABSORB INSULATE COMPRISE ALTERNATE THIN THICK PART

DERWENT-CLASS: P86 Q41 Q43

^{*}
SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: 2004-522009

(10) 日本国特許庁 (JP)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開2004-264589

(P2004-264589A)

(43) 公開日 平成16年9月24日 (2004.9.24)

(5) Int. Cl. ⁷	F 1	テーマコード (参照)
G10K 11/172	G10K 11/16	2D001
E01F 8/00	E01F 8/00	2E001
E04B 1/86	E04B 1/86	5D061

審査請求: 有 請求項の数 1 O L (全 6 頁)

(21) 出願番号 特願2003-54684 (P2003-54684)
 (22) 出願日 平成15年2月28日 (2003.2.28)

(71) 出願人 000003078
 株式会社東芝
 東京都港区芝浦一丁目1番1号
 (74) 代理人 100058476
 弁理士 鈴木 武彦
 (74) 代理人 100091351
 弁理士 河野 哲
 (74) 代理人 100088683
 弁理士 中村 誠
 (74) 代理人 100108855
 弁理士 蔵田 昌俊
 (74) 代理人 100084618
 弁理士 村松 貞男
 (74) 代理人 100092196
 弁理士 橋本 良郎

最終頁に続く

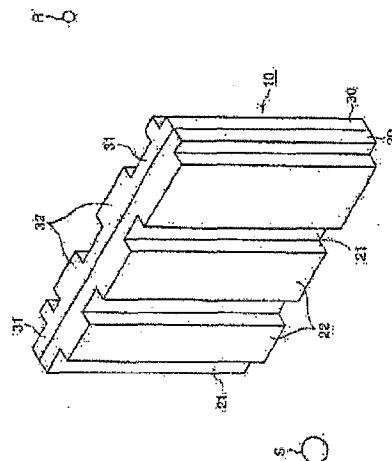
(54) 【発明の名称】 壁部材

(57) 【要約】

【課題】 構造部材の厚さを低減対象音の音響モードにしたがって最適化することで、容積を最小とし軽量化することが可能な壁部材を提供すること。

【解決手段】 積層して配置された吸音壁20と遮音壁30とを備え、吸音壁20は、薄肉部21と厚肉部22とを備え、遮音壁30は、薄肉部31と厚肉部32とを備え、低減対象音の音響モードに基づいて、粒子速度が速度基準値よりも大きい部分に対応して厚肉部22を配置するとともに、音圧レベルが音圧基準値よりも大きい部分に対応して厚肉部32を配置する。

【選択図】 図1



Electronic Patent Application Fee Transmittal

Application Number:	15217040			
Filing Date:	22-Jul-2016			
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS			
First Named Inventor/Applicant Name:	Jared OEHRING			
Filer:	Taylor P. Evans/Monica Williams			
Attorney Docket Number:	085055.000020			
Filed as Large 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(\$)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
Total in USD (\$)				180

Electronic Acknowledgement Receipt

EFS ID:	28169422
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	Jared OEHRING
Customer Number:	132858
Filer:	Taylor P. Evans/Monica Williams
Filer Authorized By:	Taylor P. Evans
Attorney Docket Number:	085055.000020
Receipt Date:	25-JAN-2017
Filing Date:	22-JUL-2016
Time Stamp:	18:27:00
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 180
RAM confirmation Number	012617INTEFSW00005390506763
Deposit Account	506763
Authorized User	Monica Williams

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

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

HALLIBURTON EXHIBIT 1003

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	2017-01-25-047158-100018-IDS.pdf	1038560	no	15
			7c9f51b68339e9a1e5eb460815ae957cc61e6adc		
Warnings:					
Information:					
2	Foreign Reference	047158-JP-Ref.PDF	138005	no	3
			0f437120d7d0b30e52be4abaf66fd1f8e815817c		
Warnings:					
Information:					
3	Non Patent Literature	NPL_Ref.pdf	263280	no	2
			a9a46eb8063e4782a62e0920ea2f9fdf51b64d21		
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	30529	no	2
			225620f1866e1cadd06ddd622005e0b6124ad8ed		
Warnings:					
Information:					
Total Files Size (in bytes):			1470374		

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New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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



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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
15/217,040	07/22/2016	Jared OEHRING	085055.000020

CONFIRMATION NO. 6810

PUBLICATION NOTICE



OC000000088753365

132858
Hogan Lovells US LLP
Bank of America Center
700 Louisiana Street
Suite 4300
Houston, TX 77002

Title:SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS

Publication No.US-2017-0022788-A1

Publication Date:01/26/2017

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 Office of Public Records. The Office of Public Records 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, Office of Public Records, 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 <http://pair.uspto.gov/>. 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 Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

CERTIFICATE OF ELECTRONIC TRANSMISSION

I hereby certify that this document is being filed electronically with the Office of the Commissioner for Patents and Trademarks, Alexandria, Virginia, on the date indicated below.

Date: February 28, 2017

By: /Monica E. Williams/

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Oehring et al.	§	Attorney Docket No: 047158.100018
	§	
Serial No.: 15/217,040	§	Examiner: Thompson, Kenneth L.
	§	
Filed: July 22, 2016	§	Art Unit: 3676
	§	
For: SAFETY INDICATOR	§	Confirmation No.: 6810
LIGHTS FOR HYDRAULIC	§	
FRACTURING PUMPS	§	

RESPONSE TO NON-FINAL OFFICE ACTION
DATED NOVEMBER 29, 2016

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

Dear Sir/Madam:

In response to the Non-Final Office Action mailed November 29, 2016, Applicant respectfully requests reconsideration of the objections and rejections in view of the following arguments and amendments. If any additional fees are necessary for continued prosecution of this application, the Commissioner is authorized to charge those fees to Hogan Lovells US LLP's Deposit Account Number 50-6763.

Amendments to the Claims begin on page 2.

Remarks begin on page 7.

Electronic Acknowledgement Receipt

EFS ID:	28487700
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	Jared OEHRING
Customer Number:	132858
Filer:	Taylor P. Evans/Monica Williams
Filer Authorized By:	Taylor P. Evans
Attorney Docket Number:	047158.100018
Receipt Date:	28-FEB-2017
Filing Date:	22-JUL-2016
Time Stamp:	15:27:06
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2017-02-28_047158_100018_Response_to_Non-Final_Office_Action.pdf	30842 b71aace1365d8fe4a5027ecbb0b3e48a2db84f8f	yes	8

	Multipart Description/PDF files in .zip description		
	Document Description	Start	End
	Applicant Arguments/Remarks Made in an Amendment	7	8
	Claims	2	6
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
Warnings:			
Information:			
Total Files Size (in bytes):		30842	
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. <u>New Applications Under 35 U.S.C. 111</u> 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. <u>National Stage of an International Application under 35 U.S.C. 371</u> 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. <u>New International Application Filed with the USPTO as a Receiving Office</u> 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.			

REMARKS

Applicant and the undersigned thank the Examiner for providing a thorough review of the pending application. Claims 1-19 are pending in the application. Claims 1-14 have been allowed and Claims 15-19 have been rejected. Claims 15, 16, and 19 have been amended. No new matter has been introduced in the amendments. Applicant respectfully requests that the rejected claims be allowed, at least for the following reasons.

Claim Objections

The Examiner rejected claims 16 and 19 due to certain informalities. Applicant has amended claims 16 and 19 to address the Examiner's concerns and respectfully requests these objections be reconsidered and withdrawn.

Rejections Under § 102 and § 103

The Office Action rejected claims 15, 16 and 19 under 35 USC § 102 as allegedly anticipated by Paterson et al. (US 5,865,247, "Paterson"). In addition, the Office Action rejected claims 17 and 18 under 35 USC § 103 as allegedly being obvious over Paterson in view of Jensen et al. (US 2008/0137266, "Jensen"). Applicant respectfully disagrees. To advance prosecution, however, Applicant has amended independent claim 15. As the Examiner noted, the prior art of record fails to disclose "the variable frequency drive performing electrical motor diagnostics." Applicant has incorporated this subject matter into independent claim 15 and respectfully requests that the rejection of this claim be reconsidered and withdrawn. Applicant further requests that the rejections of claims 16-19, all of which depend from independent claim 15, be reconsidered and withdrawn, at least for depending from an allowable independent claim.

Allowable Subject Matter

In the Office Action, the Examiner has allowed Claims 1-14. Applicant thanks the Examiner for this allowance.

CONCLUSION

The foregoing remarks are intended to assist the Examiner in re-examining the application and in the course of explanation may employ shortened or more specific or variant descriptions of some of the claim language. Such descriptions are not intended to limit the scope of the claims; the actual claim language should be considered in each case. Furthermore, the remarks are not to be considered to be exhaustive of the facets of the invention, which render it patentable, being only examples of certain advantageous features and differences that Applicants' attorney chooses to mention at this time. It is respectfully submitted that the claims are now in condition for allowance and favorable action is respectfully requested.

Respectfully submitted,

Date: February 28, 2017

/Amir M. Jamshidi/
Amir M. Jamshidi
Registration No. 72,847
Hogan Lovells US LLP
700 Louisiana St., Suite 4300
Houston, Texas 77002
Telephone: (713) 632-1412
Email: ira.jamshidi@hoganlovells.com

AMENDMENTS TO THE CLAIMS

Applicants provide the following complete listing of all the claims in the application that shows the status of all pending claims and markings to show current changes:

THAT CLAIMED IS:

1. (Original) A hydraulic fracturing system for fracturing a subterranean formation comprising:

a plurality of electric pumps fluidly connected to the formation, and powered by at least one electric motor, and configured to pump fluid at high pressure into a wellbore that intersects the formation, so that the fluid passes from the wellbore into the formation, and fractures the formation;

a variable frequency drive connected to the electric motor to control the speed of the motor, wherein the variable frequency drive frequently performs electric motor diagnostics to prevent damage to the at least one electric motor; and

a signal assembly that selectively emits a visual signal that is indicative of an operational state of the hydraulic fracturing system.

2. (Original) The hydraulic fracturing system of Claim 1, wherein the signal assembly comprises a plurality of light assemblies arranged in a stack.

3. (Original) The hydraulic fracturing system of Claim 2, wherein each of the light assemblies selectively emit visual light of a color different from visual light emitted by other light assemblies.

4. (Original) The hydraulic fracturing system of Claim 2, wherein a distinctive operational state of the system is indicated by illumination of a combination of the light assemblies.
5. (Original) The hydraulic fracturing system of Claim 1, wherein the operational states of the hydraulic fracturing system comprise, no electricity to the system, a supply of electricity to all electrically powered devices in the system, a supply of electricity to some of the electrically powered devices in the system, and a pressure in a discharge line of the pump having a magnitude that is at least that of a designated pressure.
6. (Original) The hydraulic fracturing system of Claim 1, further comprising a controller in communication with the variable frequency drive, a pressure indicator that senses pressure in a discharge line of a one of the pumps, and the signal assembly.
7. (Original) The hydraulic fracturing system of Claim 6, wherein the controller selectively activates the signal assembly in response to a communication signal from one of the variable frequency drive or the pressure indicator.
8. (Original) The hydraulic fracturing system of Claim 1, wherein the visual signal comprises light in the visible spectrum, and that is optically detectable by operations personnel disposed in a zone that is potentially hazardous due to fluid in piping that is pressurized by at least one of the pumps.
9. (Original) A hydraulic fracturing system for fracturing a subterranean formation comprising:

a pump having a discharge in communication with a wellbore that intersects the formation;

an electric motor coupled to and that drives the pump;

a variable frequency drive connected to the electric motor that controls a speed of the motor and performs electric motor diagnostics;

a signal assembly that selectively emits different visual signals that are distinctive of an operational state of the system; and

a controller in communication with the signal assembly, and that selectively transmits a command signal to the signal assembly in response to a monitoring signal received by the controller and transmitted from a device in the system.

10. (Original) The hydraulic fracturing system of Claim 9, wherein the device in the system that transmits the monitoring signal to the controller comprises one of the variable frequency drive, and a pressure monitor in fluid communication with the discharge of the pump.

11. (Original) The hydraulic fracturing system of Claim 9, wherein the signal assembly comprises a stack of light assemblies.

12. (Original) The hydraulic fracturing system of Claim 11, wherein the light assemblies each comprise an electrically powered light source, and that each emit light of a color that is different from a color of a light emitted by the other light assemblies.

13. (Original) The hydraulic fracturing system of Claim 9 further comprising a pump controller and auxiliary equipment, and wherein the operational state of the system comprises, the system being isolated from electricity, a fluid pressure of the discharge having a value at least as great as a designated value, the pump drive being energized, and the auxiliary equipment being energized but without a one of the motors being energized.

14. (Original) The hydraulic fracturing system of Claim 9, wherein the visual signals selectively indicate when the system is safe for operations personnel, when the system is potentially unsafe for operations personnel, and when the system is currently unsafe for operations personnel.

15. (Currently amended) A method of fracturing a subterranean formation comprising:

pressurizing fracturing fluid with a pump;

driving the pump with a motor that is powered by electricity;

controlling the speed of the motor with a variable frequency drive, the variable frequency drive further performing electric motor diagnostics;

monitoring an operational state of a hydraulic fracturing system that comprises the pump and motor; and

selectively emitting a visual signal that is indicative of the monitored operational state.

16. (Currently amended) The method of Claim 15, wherein the operational state comprises the system being isolated from electricity, a fluid pressure of [[the]] discharge of the pump having a value at least as great as a designated value, [[the]] a pump controller being energized, and [[the]] auxiliary equipment being energized but without a one of the pump motors being energized.

17. (Original) The method of Claim 15, wherein the step of selectively emitting a visual signal comprises emitting a light from one or more of a stack of light assemblies, where light from one of the stack of light assemblies is different from lights emitted from other light assemblies.

18. (Original) The method of Claim 15, further comprising monitoring electricity to a variable frequency drive, wherein the variable frequency drive controls electricity to the motor.

19. (Currently amended) The method of Claim 15, further comprising monitoring a fluid pressure of [[the]] discharge of the pump.

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 Substitute for Form PTO-875	Application or Docket Number 15/217,040	Filing Date 07/22/2016	☐ To be Mailed
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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 \$ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =	
☐ 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	02/28/2017	CLAIMS REMAINING AFTER AMENDMENT	Minus	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 19	Minus	** 20	= 0	x \$80 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	x \$420 =	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	Minus	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =
	☐ 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.

** 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 number found in the appropriate box in column 1.

LIE
KIM DOWNING

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.**

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HALLIBURTON EXHIBIT 1003



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www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

132858 7590 03/28/2017
Hogan Lovells US LLP
Bank of America Center
700 Louisiana Street
Suite 4300
Houston, TX 77002

EXAMINER

THOMPSON, KENNETH L

ART UNIT

PAPER NUMBER

3676

DATE MAILED: 03/28/2017

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

15/217,040

07/22/2016

Jared OEHRING

047158.100018

6810

TITLE OF INVENTION: SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	06/28/2017

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: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or **Fax** (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)

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.

132858 7590 03/28/2017
Hogan Lovells US LLP
Bank of America Center
700 Louisiana Street
Suite 4300
Houston, TX 77002

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 facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/217,040	07/22/2016	Jared OEHRING	047158.100018	6810

TITLE OF INVENTION: SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	06/28/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
THOMPSON, KENNETH L	3676	166-083100

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 03-02 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 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.

(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. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

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. _____



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UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/217,040	07/22/2016	Jared OEHRING	047158.100018	6810

132858 7590 03/28/2017
Hogan Lovells US LLP
Bank of America Center
700 Louisiana Street
Suite 4300
Houston, TX 77002

EXAMINER

THOMPSON, KENNETH L

ART UNIT	PAPER NUMBER
----------	--------------

3676

DATE MAILED: 03/28/2017

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.

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 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, 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.

HALLIBURTON EXHIBIT 1003

Notice of Allowability	Application No. 15/217,040	Applicant(s) OEHRING ET AL.	
	Examiner KENNETH L. THOMPSON	Art Unit 3676	AIA (First Inventor to File) Status Yes

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

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

1. ☒ This communication is responsive to the Amendment filed 28 February 2017.
☐ 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 1-19. 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) | 5. ☐ Examiner's Amendment/Comment |
| 2. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 6. ☐ Examiner's Statement of Reasons for Allowance |
| 3. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 7. ☐ Other _____. |
| 4. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____. | |

/KENNETH L THOMPSON/
Primary Examiner, Art Unit 3676

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15217040
	Filing Date	2016-07-22
	First Named Inventor	Jared Oehring
	Art Unit	3676
	Examiner Name	THOMPSON, KENNETH L
	Attorney Docket Number	047158.100018

U.S. PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	3764233		1973-10-09	Strickland	
	2	5879137		1999-03-09	Yie	
	3	7563076		2009-07-21	Brunet	
	4	7683499		2010-03-23	Saucier	
	5	8083504		2011-12-27	Williams	
	6	3334495		1967-08-08	Jensen	
	7	1671436		1928-05-29	Melott	
	8	2004077		1935-06-04	McCartney	

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Examiner Name	THOMPSON, KENNETH L	
Attorney Docket Number	047158.100018	

9	2220622		1940-11-05	Aitken	
10	3066503		1962-12-04	Fleming	
11	3837179		1974-09-24	Barth	
12	4037431		1977-07-26	Sugimoto	
13	5907970		1999-06-01	Havlovick et al.	
14	6142878		2000-11-07	Barin	
15	8789601		2014-07-29	Broussard	
16	6271637		2001-08-07	Kushion	
17	6529135		2003-03-04	Bowers et al.	
18	6931310		2005-08-16	Shimizu et al.	
19	7755310		2010-07-13	West et al.	

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20	8054084		2011-11-08	Schulz et al.	
21	8310272		2012-11-13	Quarto	
22	8354817		2013-01-15	Yeh et al.	
23	8838341		2014-09-16	Kumano	
24	9018881		2015-04-28	Mao et al.	
25	2248051		1941-07-08	Armstrong	
26	3722595		1973-03-27	Kiel	
27	7312593		2007-12-25	Streicher et al.	
28	4226299		1980-10-07	Hansen	
29	4456092		1984-06-26	Kubozuka	
30	5655361		1997-08-12	Kishi	

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31	6254462		2001-07-03	Kelton	
32	3061039		1962-10-30	Peters	
33	3773140		1973-11-20	Mahajan	
34	5548093		1996-08-20	Sato	
35	6202702		2001-03-20	Ohira	
36	6802690		2004-10-12	Han	
37	8534235		2013-09-17	Chandler	
38	8727068		2014-05-20	Bruin	
39	9103193		2015-08-11	Coli	
40	6164910		2000-12-26	Mayleben	
41	7500642		2009-03-10	Cunningham	

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42	8899940		2014-12-02	Laugemors	
43	8905056		2004-12-09	Kendrick	
44	4151575		1979-04-24	Hogue	
45	5130628		1992-07-14	Owen	
46	6315523		2001-11-13	Mills	
47	7336514		2008-02-26	Amarillas	
48	7525264		1999-04-28	Dodge	
49	8096891		2012-01-17	Lochtefeld	
50	9160168		2015-10-13	Chapel	
51	8146665		2012-04-03	Neal	
52	8474521		2013-07-02	Kajaria	

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53	9067182		2015-06-30	Nichols	
54	8807960		2014-08-19	Stephenson	
55	5025861		1991-06-25	Huber et al.	
56	7170262		2007-01-30	Pettigrew	
57	8997904		2015-04-07	Cryer	
58	9051822		2015-06-09	Ayan	
59	9366114		2016-06-14	Coli et al.	
60	9140110		2015-09-22	Coli et al.	
61	5422550		1995-06-06	McClanahan	
62	7845413		2010-12-07	Shampine et al.	
63	8596056		2013-12-03	Woodmansee	

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64	8774972		2014-07-08	Rusnak et al.	
65	8905138		2014-12-09	Lundstedt et al.	
66	3881551		1975-05-06	Terry	
67	4512387		1985-04-23	Rodriguez	
68	4845981		1989-07-11	Pearson	
69	6776227		2004-08-17	Beida	
70	8037936		2011-10-18	Neuroth	
71	8760657		2014-06-24	Pope	
72	8857506		2014-10-14	Stone, Jr.	
73	5131472		1992-07-21	Dees et al.	
74	5894888		1999-04-20	Wiemers	

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75	6491098	2002-12-10	Dallas
76	7173399	2007-02-06	Sihler
77	7445041	2008-11-04	O'Brien
78	7807048	2010-10-05	Collette
79	8272439	2012-09-25	Strickland
80	8573303	2013-11-05	Kerfoot
81	9322239	2016-04-26	Angeles Boza et al.

If you wish to add additional U.S. Patent citation information please click the Add button.

Add

U.S.PATENT APPLICATION PUBLICATIONS

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Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20100303655		2010-12-02	Scekic	
	2	20110085924		2011-04-14	Shampine	

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3	20120085541		2012-04-12	Love et al.	
4	20120205301		2012-08-16	McGuire et al.	
5	20070201305		2007-08-30	Heilman et al.	
6	20100132949		2010-06-03	DeFosse et al.	
7	20110272158		2011-11-10	Neal	
8	20140251623		2014-09-11	Lestz et al.	
9	20070187163		2007-08-16	Cone	
10	20080112802		2008-05-15	Orlando	
11	20090065299		2009-03-12	Vito	
12	20090188181		2009-07-30	Forbis	
13	20100000508		2010-01-07	Chandler	

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Attorney Docket Number		047158.100018

14	20140000899	2014-01-02	Nevison
15	20150083426	2015-03-26	Lesko
16	20150225113	2015-08-13	Lungu
17	20160177678	2016-06-23	Morris
18	20130233542	2013-09-12	Shampine
19	20120127635	2012-05-24	Grindeland
20	20080264649	2008-10-30	Crawford
21	20120018016	2012-01-26	Gibson
22	20150252661	2015-09-10	Glass
23	20150175013	2015-06-25	Cryer et al.
24	20160105022	2016-04-14	Oehring

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Attorney Docket Number	047158.100018	

25	20160208592		2016-04-14	Oehring	
26	20160273328		2016-09-22	Oehring	
27	20160319650		2016-11-03	Oehring	
28	20160290114		2016-10-06	Oehring	
29	20160349728		2016-12-01	Oehring	
30	20160348479		2016-12-01	Oehring	
31	20160326854		2016-11-10	Broussard	
32	20100322802		2010-12-23	Kugelev	
33	20140124162		2014-05-08	Leavitt	
34	20160258267		2016-09-08	Payne et al.	
35	20110005757		2011-01-13	Hebert	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15217040
Filing Date	2016-07-22
First Named Inventor	Jared Oehring
Art Unit	3676
Examiner Name	THOMPSON, KENNETH L
Attorney Docket Number	047158.100018

36	20150159911	2015-06-11	Holt
37	20080217024	2008-09-11	Moore
38	20110017468	2011-01-27	Birch et al.
39	20130341029	2013-12-26	Roberts et al.
40	20150176386	2015-06-25	Castillo et al.

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1	2004264589	JP		2004-09-24	Toshiba KK [TOKE]		×

If you wish to add additional Foreign Patent Document citation information please click the Add button.

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	UK Power Networks - Transformers to Supply Heat to Tate Modern - from Press Releases May 16, 2013.	

If you wish to add additional non-patent literature document citation information please click the Add button.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15217040
Filing Date	2016-07-22
First Named Inventor	Jared Oehring
Art Unit	3676
Examiner Name	THOMPSON, KENNETH L
Attorney Docket Number	047158.100018

EXAMINER SIGNATURE

Examiner Signature	/KENNETH L THOMPSON/	Date Considered	03/16/2017
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

EAST Search History

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L20	60	(variable frequency drive speed electric\$3 motor diagnostic).clm.	US-PGPUB; USPAT	AND	ON	2017/03/16 13:33

3/ 16/ 2017 1:42:36 PM
C:\ Users\ kthompson\ Documents\ EAST\ Workspaces\ March.wsp

Search Notes 	Application/Control No. 15217040	Applicant(s)/Patent Under Reexamination OEHRING ET AL.
	Examiner KENNETH L THOMPSON	Art Unit 3676

CPC- SEARCHED		
Symbol	Date	Examiner
E21B 43/26	11/23/2016	KT

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
417/\$ and variable near frequency and (frack frac fracturing)	11/23/2016	KT
References cited 9,410,410	11/23/2016	KT
See attached interference text search	3/16/2017	KT

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
Same as above		3/16/2017	KT

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Issue Classification 	Application/Control No. 15217040	Applicant(s)/Patent Under Reexamination OEHRING ET AL.
	Examiner KENNETH L THOMPSON	Art Unit 3676

CPC					
Symbol				Type	Version
E21B	41	/	0021	F	2013-01-01
E21B	43	/	26	I	2013-01-01
F04B	49	/	20	I	2013-01-01
F04B	49	/	103	I	2013-01-01
F04B	17	/	03	I	2013-01-01
F04B	19	/	22	I	2013-01-01
F04B	23	/	06	I	2013-01-01
F04B	47	/	00	I	2013-01-01
G08B	5	/	36	I	2013-01-01
F04B	47	/	02	I	2013-01-01
F04B	49	/	065	I	2013-01-01
F04B	49	/	08	I	2013-01-01
F04B	51	/	00	I	2013-01-01
F04B	2205	/	05	A	2013-01-01
		/			

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	19	
/KENNETH L THOMPSON/ Primary Examiner.Art Unit 3676	03/16/2017	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	15	2

Issue Classification 	Application/Control No. 15217040	Applicant(s)/Patent Under Reexamination OEHRING ET AL.
	Examiner KENNETH L THOMPSON	Art Unit 3676

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	17	17												
2	2	18	18												
3	3	19	19												
4	4														
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10	10														
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12	12														
13	13														
14	14														
15	15														
16	16														

NONE	Total Claims Allowed: 19	
(Assistant Examiner)	(Date)	
/KENNETH L THOMPSON/ Primary Examiner.Art Unit 3676	03/16/2017	O.G. Print Claim(s) 15
(Primary Examiner)	(Date)	O.G. Print Figure 2

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15217040
	Filing Date	2016-07-22
	First Named Inventor	Jared Oehring
	Art Unit	3676
	Examiner Name	THOMPSON, KENNETH L
	Attorney Docket Number	047158.100018

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	4506982		1985-03-26	Smithers et al.	
	2	4538916		1985-09-03	Zimmerman, Harold M.	
	3	4922463		1990-05-01	Del Zotto et al.	
	4	5590976		1997-01-07	Kilheffer et al.	
	5	6808303		2004-10-26	Fisher, Gene	
	6	9587649		2017-03-07	Oehring, Jared	
	7	4793386		1988-12-27	Sloan, Albert H.	
If you wish to add additional U.S. Patent citation information please click the Add button.						Add
U.S.PATENT APPLICATION PUBLICATIONS						Remove

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number		15217040
Filing Date		2016-07-22
First Named Inventor	Jared Oehring	
Art Unit		3676
Examiner Name	THOMPSON, KENNETH L	
Attorney Docket Number		047158.100018

Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20070278140		2007-12-06	Mallet et al.	
	2	20090308602		2009-12-17	Bruins et al.	
	3	20100250139		2010-09-30	Hobbs et al.	
	4	20090153354		2009-06-18	Daussin et al.	
	5	20070226089		2007-09-27	DeGaray et al.	
	6	20120205400		2012-08-16	DeGaray et al.	
	7	20130025706		2013-01-31	DeGaray et al.	
	8	20130199617		2013-08-08	DeGaray et al.	
	9	20160221220		2016-08-04	Paige, Daniel	
	10	20170022788		2017-01-26	Oehring et al.	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15217040
Filing Date	2016-07-22
First Named Inventor	Jared Oehring
Art Unit	3676
Examiner Name	THOMPSON, KENNETH L
Attorney Docket Number	047158.100018

11	20170030178	2017-02-02	Oehring et al.
12	20170028368	2017-02-02	Oehring et al.
13	20170030177	2017-02-02	Oehring et al.
14	20030138327	2003-07-24	Jones et al.

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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							

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NON-PATENT LITERATURE DOCUMENTS

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	Non-Final Office Action issued in corresponding Application No. 15/291,842 dated January 6, 2017.	
	2	Non-Final Office Action issued in corresponding Application No. 15/293,681 dated February 16, 2017.	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15217040
Filing Date	2016-07-22
First Named Inventor	Jared Oehring
Art Unit	3676
Examiner Name	THOMPSON, KENNETH L
Attorney Docket Number	047158.100018

3	Non-Final Office Action issued in corresponding Application No. 15/294,349 dated March 14, 2017.
4	Final Office Action issued in corresponding Application No. 15/145,491 dated January 20, 2017.
5	Non-Final Office Action issued in corresponding Application No. 15/145,443 dated February 7, 2017.
6	Notice of Allowance issued in corresponding Application No. 14/622,532 dated March 27, 2017.

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15217040
Filing Date	2016-07-22
First Named Inventor	Jared Oehring
Art Unit	3676
Examiner Name	THOMPSON, KENNETH L
Attorney Docket Number	047158.100018

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☒ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☒ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Taylor P. Evans/	Date (YYYY-MM-DD)	2017-03-30
Name/Print	Taylor P. Evans	Registration Number	60506

This collection of information is required by 37 CFR 1.97 and 1.98. 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 1 hour 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.**

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 the Freedom of Information Act requires disclosure of these records.
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.
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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 inspections 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.

Electronic Patent Application Fee Transmittal

Application Number:	15217040			
Filing Date:	22-Jul-2016			
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS			
First Named Inventor/Applicant Name:	Jared OEHRING			
Filer:	Taylor P. Evans/Monica Williams			
Attorney Docket Number:	047158.100018			
Filed as Large 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(\$)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
Total in USD (\$)				180

Electronic Acknowledgement Receipt

EFS ID:	28792692
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	Jared OEHRING
Customer Number:	132858
Filer:	Taylor P. Evans/Monica Williams
Filer Authorized By:	Taylor P. Evans
Attorney Docket Number:	047158.100018
Receipt Date:	30-MAR-2017
Filing Date:	22-JUL-2016
Time Stamp:	18:26:01
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 180
RAM confirmation Number	033117INTEFSW00005539506763
Deposit Account	506763
Authorized User	Monica Williams

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

37 CFR 1.16 (National application filing, search, and examination fees)

37 CFR 1.17 (Patent application and reexamination processing fees)

HALLIBURTON EXHIBIT 1003

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	Information Disclosure Statement (IDS) Form (SB08)	2017-03-30_047158_100018_IDS.pdf	1036094	no	6
			d1b992fa4624dd6980adfaa2e11de02468e9269b		
Warnings:					
Information:					
2	Other Reference-Patent/App/Search documents	REF-15291842.pdf	413527	no	15
			1788ab363bb7f17dc12a6c8bce6ad75f8febac7b		
Warnings:					
Information:					
3	Other Reference-Patent/App/Search documents	REF-15293681.pdf	374327	no	10
			5d26f519b98d2c74df46bdc5f6d49035eac32ea9		
Warnings:					
Information:					
4	Other Reference-Patent/App/Search documents	REF-15294349.pdf	557497	no	16
			8f8f11192891d35e5f6af9be4dc689942fa35775		
Warnings:					
Information:					
5	Other Reference-Patent/App/Search documents	REF-15145491.pdf	274742	no	8
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Warnings:					
Information:					
6	Other Reference-Patent/App/Search documents	REF-15145443.pdf	301449	no	9
			43f234765061bf636d05cb7a130a8a97956c72be		
Warnings:					
Information:					

7	Other Reference-Patent/App/Search documents	REF-14622532.pdf	645449 f538be84fc58f0ef16685c8b4f8bf4d2c734c367	no	13
Warnings:					
Information:					
8	Fee Worksheet (SB06)	fee-info.pdf	30529 b9b68e0bcd3cb6c9da13ba4f2765665972ac407a	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			3633614		
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. <u>New Applications Under 35 U.S.C. 111</u> 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. <u>National Stage of an International Application under 35 U.S.C. 371</u> 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. <u>New International Application Filed with the USPTO as a Receiving Office</u> 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.					

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

Issue Fee Transmittal Form

Application Number	Filing Date	First Named Inventor	Atty. Docket No.	Confirmation No.
15217040	22-Jul-2016	Jared OEHRING	047158.100018	6810

TITLE OF INVENTION :

SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS

Entity Status	Application Type	Art Unit	Class - Subclass	EXAMINER
Regular Undiscounted	Utility under 35 USC 111(a)	3676	083100	KENNETH THOMPSON
Issue Fee Due	Publication Due	Total Fee(s) Due	Date Due	Prev. Paid Fee
\$960	\$0	\$960	28-Jun-2017	\$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 :
132858 Hogan Lovells US LLP Bank of America Center 700 Louisiana Street Suite 4300 Houston TX 77002 UNITED STATES 713-632-1400 hlusdocketing@hoganlovells.com	
☐ Change of correspondence address requested, system generated AIA/122-EFS form attached	☐ Fee Address indication requested, system generated SB/47-EFS form attached

2.Entity Status**Change in Entity Status**

Applicant certifying micro entity status; system generated Micro Entity certification form attached. See 37 CFR 1.29.

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



Applicant asserting small entity status. See 37 CFR 1.27.

Note: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.



Applicant changing to regular undiscounted fee status.

Note: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.



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

3.The Following Fee(s) Are Submitted:

☒ Issue Fee

☐ I authorize USPTO to apply my previously paid issue fee to the current fees due

☐ Publication Fee

☐ The Director is hereby authorized to apply my previously paid issue fee to the current fee due and to charge deficient fees to Deposit Account Number _____

☐ Advance Order - # of copies _____

☒ If in **addition** to the payment of the issue fee amount submitted with this form, there are any discrepancies in any amount(s) due, the Director is authorized to charge any deficiency, or credit any overpayment, to Deposit Account Number 506763.
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. HOGAN LOVELLS US 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
US Well Services LLC	Houston	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	/Taylor P. Evans/	Date	04-10-2017
Name	Taylor P. Evans	Registration Number	60506

Electronic Patent Application Fee Transmittal

Application Number:	15217040			
Filing Date:	22-Jul-2016			
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS			
First Named Inventor/Applicant Name:	Jared OEHRING			
Filer:	Taylor P. Evans/Monica Williams			
Attorney Docket Number:	047158.100018			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
UTILITY APPL ISSUE FEE	1501	1	960	960
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 (\$)				960

Electronic Acknowledgement Receipt

EFS ID:	28883881
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	Jared OEHRING
Customer Number:	132858
Filer:	Taylor P. Evans/Monica Williams
Filer Authorized By:	Taylor P. Evans
Attorney Docket Number:	047158.100018
Receipt Date:	10-APR-2017
Filing Date:	22-JUL-2016
Time Stamp:	17:19:40
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$960
RAM confirmation Number	041117INTEFSW00004653506763
Deposit Account	506763
Authorized User	Monica Williams

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

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

HALLIBURTON EXHIBIT 1003

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	46182	no	2
			e2b224a49a7ce00b23a6ca4260bfdc9a752a3a0		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	32273	no	2
			7b30773396fefe4bd0692be4c4952fbcee8a0391		
Warnings:					
Information:					
Total Files Size (in bytes):			78455		
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. <u>New Applications Under 35 U.S.C. 111</u> 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. <u>National Stage of an International Application under 35 U.S.C. 371</u> 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. <u>New International Application Filed with the USPTO as a Receiving Office</u> 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.					

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)

Application Number	15217040
Filing Date	2016-07-22
First Named Inventor	Jared Oehring
Art Unit	3676
Examiner Name	THOMPSON, KENNETH L
Attorney Docket Number	047158.100018

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	4506982		1985-03-26	Smithers et al.	
	2	4538916		1985-09-03	Zimmerman, Harold M.	
	3	4922463		1990-05-01	Del Zotto et al.	
	4	5590976		1997-01-07	Kilheffer et al.	
	5	6808303		2004-10-26	Fisher, Gene	
	6	9587649		2017-03-07	Oehring, Jared	
	7	4793386		1988-12-27	Sloan, Albert H.	
If you wish to add additional U.S. Patent citation information please click the Add button.						Add
U.S.PATENT APPLICATION PUBLICATIONS						Remove

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number		15217040
Filing Date		2016-07-22
First Named Inventor	Jared Oehring	
Art Unit		3676
Examiner Name	THOMPSON, KENNETH L	
Attorney Docket Number		047158.100018

Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20070278140		2007-12-06	Mallet et al.	
	2	20090308602		2009-12-17	Bruins et al.	
	3	20100250139		2010-09-30	Hobbs et al.	
	4	20090153354		2009-06-18	Daussin et al.	
	5	20070226089		2007-09-27	DeGaray et al.	
	6	20120205400		2012-08-16	DeGaray et al.	
	7	20130025706		2013-01-31	DeGaray et al.	
	8	20130199617		2013-08-08	DeGaray et al.	
	9	20160221220		2016-08-04	Paige, Daniel	
	10	20170022788		2017-01-26	Oehring et al.	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15217040
Filing Date	2016-07-22
First Named Inventor	Jared Oehring
Art Unit	3676
Examiner Name	THOMPSON, KENNETH L
Attorney Docket Number	047158.100018

11	20170030178	2017-02-02	Oehring et al.
12	20170028368	2017-02-02	Oehring et al.
13	20170030177	2017-02-02	Oehring et al.
14	20030138327	2003-07-24	Jones et al.

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	Non-Final Office Action issued in corresponding Application No. 15/291,842 dated January 6, 2017.	
	2	Non-Final Office Action issued in corresponding Application No. 15/293,681 dated February 16, 2017.	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15217040
Filing Date	2016-07-22
First Named Inventor	Jared Oehring
Art Unit	3676
Examiner Name	THOMPSON, KENNETH L
Attorney Docket Number	047158.100018

3	Non-Final Office Action issued in corresponding Application No. 15/294,349 dated March 14, 2017.
4	Final Office Action issued in corresponding Application No. 15/145,491 dated January 20, 2017.
5	Non-Final Office Action issued in corresponding Application No. 15/145,443 dated February 7, 2017.
6	Notice of Allowance issued in corresponding Application No. 14/622,532 dated March 27, 2017.

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature	/KENNETH L THOMPSON/	Date Considered	04/10/2017
--------------------	----------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.



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.
15/217,040	07/22/2016	Jared OEHRING	047158.100018	6810

132858 7590 04/14/2017

Hogan Lovells US LLP
Bank of America Center
700 Louisiana Street
Suite 4300
Houston, TX 77002

EXAMINER

THOMPSON, KENNETH L

ART UNIT	PAPER NUMBER
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3676

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

04/14/2017

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):

hlusdocketing@hoganlovells.com



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U.S. Patent and Trademark Office**

Address : COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
15/217,040	22 July, 2016	OEHRING ET AL.	047158.100018

Hogan Lovells US LLP Bank of America Center 700 Louisiana Street Suite 4300 Houston, TX 77002		EXAMINER	
		KENNETH L. THOMPSON	
		ART UNIT	PAPER
		3676	20170410

DATE MAILED:

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

Commissioner for Patents

Please note considered Information Disclosure Statement filed 30 March 2017. Thanks

/KENNETH L THOMPSON/
Primary Examiner, Art Unit 3676

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number		15217040
Filing Date		2016-07-22
First Named Inventor	Jared Oehring	
Art Unit	3676	
Examiner Name	THOMPSON, KENNETH L	
Attorney Docket Number	047158.100018	

Change(s) applied to document, /RKC/ 4/12/2017	25	20160208592	~~2016-04-14~~	7/2016 Oehring	
	26	20160273328	2016-09-22	Oehring	
	27	20160319650	2016-11-03	Oehring	
	28	20160290114	2016-10-06	Oehring	
	29	20160349728	2016-12-01	Oehring	
	30	20160348479	2016-12-01	Oehring	
	31	20160326854	2016-11-10	Broussard	
	32	20100322802	2010-12-23	Kugelev	
	33	20140124162	2014-05-08	Leavitt	
	34	20160258267	2016-09-08	Payne et al.	
	35	20110005757	2011-01-13	Hebert	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number		15217040
Filing Date		2016-07-22
First Named Inventor	Jared Oehring	
Art Unit	3676	
Examiner Name	THOMPSON, KENNETH L	
Attorney Docket Number	047158.100018	

Change(s) applied
to document,
/R.K.C./
4/12/2017

	42	8899940		2014-12-02	Laugemors	
	43	8905056		~~2004-12-09~~ 12/2014	Kendrick	
	44	4151575		1979-04-24	Hogue	
	45	5130628		1992-07-14	Owen	
	46	6315523		2001-11-13	Mills	
	47	7336514		2008-02-26	Amarillas	
	48	7525264		~~1999-04-28~~ 4/2009	Dodge	
	49	8096891		2012-01-17	Lochtefeld	
	50	9160168		2015-10-13	Chapel	
	51	8146665		2012-04-03	Neal	
	52	8474521		2013-07-02	Kajaria	



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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.
15/217,040	05/16/2017	9650871	047158.100018	6810

132858 7590 04/26/2017
Hogan Lovells US LLP
Bank of America Center
700 Louisiana Street
Suite 4300
Houston, TX 77002

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

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

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

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

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

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

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

Jared OEHRING, Houston, TX;
US Well Services LLC, Houston, TX
Brandon Neil HINDERLITER, Buckhannon, WV;

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.

"FEE ADDRESS" INDICATION FORM

Address to:
 Mail Stop M Correspondence
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

Fax to:
 571-273-6500

- OR -

INSTRUCTIONS: The issue fee must have been paid for application(s) listed on this form. In addition, only an address represented by a Customer Number can be established as the fee address for maintenance fee purposes (hereafter, fee address). A fee address should be established when correspondence related to maintenance fees should be mailed to a different address than the correspondence address for the application. **When to check the first box below:** If you have a Customer Number to represent the fee address. **When to check the second box below:** If you have no Customer Number representing the desired fee address, in which case a completed Request for Customer Number (PTO/SB/125) must be attached to this form. For more information on Customer Numbers, see the Manual of Patent Examining Procedure (MPEP) § 403.

For the following listed application(s), please recognize as the "Fee Address" under the provisions of 37 CFR 1.363 the address associated with:



Customer Number:

197

OR



The attached Request for Customer Number (PTO/SB/125) form.

PATENT NUMBER (if known)	APPLICATION NUMBER
9,650,871	15/217,040

Completed by (check one):



Applicant/Inventor

/Taylor P. Evans/

Signature



Attorney or Agent of record 60506

(Reg. No.)

Taylor P. Evans

Typed or printed name



Assignee of record of the entire interest. See 37 CFR 3.71.
 Statement under 37 CFR 3.73(b) is enclosed.
 (Form PTO/SB/96)

713-632-1400

Requester's telephone number



Assignee recorded at Reel

Frame

May 22, 2018

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.



* Total of

forms are submitted.

This collection of information is required by 37 CFR 1.363. 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 5 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 COMPLETE D FORMS TO THIS ADDRESS.

SEND TO: Mail Stop M Correspondence, 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.

HALLIBURTON EXHIBIT 1003

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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.

Electronic Acknowledgement Receipt

EFS ID:	32688020
Application Number:	15217040
International Application Number:	
Confirmation Number:	6810
Title of Invention:	SAFETY INDICATOR LIGHTS FOR HYDRAULIC FRACTURING PUMPS
First Named Inventor/Applicant Name:	Jared OEHRING
Customer Number:	132858
Filer:	Taylor P. Evans/Jennifer Tilley
Filer Authorized By:	Taylor P. Evans
Attorney Docket Number:	047158.100018
Receipt Date:	22-MAY-2018
Filing Date:	22-JUL-2016
Time Stamp:	12:03:20
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	Maintenance Fee Address Change	871_Maintenance_Fee_Address_Change.pdf	110423	no	2
			ae6c0b53033b476e35572ad3c49966fbc0c cbc12		

Warnings:

HALLIBURTON EXHIBIT 1003

Information:	
Total Files Size (in bytes):	110423
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. <u>New Applications Under 35 U.S.C. 111</u> 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. <u>National Stage of an International Application under 35 U.S.C. 371</u> 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. <u>New International Application Filed with the USPTO as a Receiving Office</u> 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.	

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
---	---

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court for the Southern District of Texas on the following Trademarks or Patents.

Docket No. 3:19-cv-00237	Date Filed: 7/22/2019	U.S District Court SOUTHERN DISTRICT OF TEXAS
Plaintiff(s) U.S. Well Services, LLC		Defendant(s) TOPS Well Services, LLC, et al.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
A copy of the complaint is being mailed with this form.		
1. 8789601	9970278	
2. 9410410	10337308	
3. 9611728		
4. 9650871		
5. 9650879		
In the above-entitled case, the following patent(s)/trademark(s) have been included:		
DATE INCLUDED	INCLUDED BY Amendment Answer Cross Bill Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1.		
2.		
3.		
4.		
5.		
In the above-entitled case, the following decision has been rendered or judgment issued:		
DECISION/JUDGMENT		
Clerk: David J. Bradley, Clerk	By Deputy Clerk: Andrew Gould	Date: 7/23/2019

TRUE COPY I CERTIFY
ATTEST:
DAVID J. BRADLEY, Clerk of Court
 By Andrew Gould
Deputy Clerk

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
---	---

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court for the Southern District of Texas on the following Trademarks or Patents.

Docket No. 3:19-cv-00225	Date Filed: 7/3/2019	U.S District Court SOUTHERN DISTRICT OF TEXAS	
Plaintiff(s) U.S. Well Services, Inc.		Defendant(s) TOPS Well Services, LLC, et al.	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK	
A copy of the complaint is being mailed with this form.			
1. 8,789,601			
2. 9,410,410			
3. 9,611,728			
4. 9,650,871			
5. 9,650,879			
In the above-entitled case, the following patent(s)/trademark(s) have been included:			
DATE INCLUDED	INCLUDED BY	Amendment Answer Cross Bill Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK	
1. 9,970,278			
2. 10,337,308			
3.			
4.			
5.			
In the above-entitled case, the following decision has been rendered or judgment issued:			
DECISION/JUDGMENT			
Clerk: David J. Bradley, Clerk		By Deputy Clerk: Andy Gould	Date: 7/5/2019

TRUE COPY I CERTIFY
ATTEST:
DAVID J. BRADLEY, Clerk of Court
 By Andy Gould
Deputy Clerk