505700026 10/01/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5746836

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ROBERT BENJAMIN DONNALLY	08/09/2019
XI LIN LIU	07/15/2019
JAY JOHN THIESSEN	07/31/2019

RECEIVING PARTY DATA

Name:	NATIONAL OILWELL VARCO, L.P.
Street Address:	7909 PARKWOOD CIRCLE DRIVE
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77036

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16431540

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: Request@slwip.com

Correspondent Name: SCHWEGMAN LUNDBERG & WOESSNER, P.A.

Address Line 1: P.O. BOX 2938

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ATTORNEY DOCKET NUMBER:	5233.134US1
NAME OF SUBMITTER:	KASIE A. BOSMA
SIGNATURE:	/Kasie A. Bosma/
DATE SIGNED:	10/01/2019

Total Attachments: 10

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PATENT 505700026 REEL: 050572 FRAME: 0241

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RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 5233.134US1 Patent and Trademark Office To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: NATIONAL OILWELL VARCO, L.P. Robert Benjamin Donnally, Xi Lin Liu, Jay John Thiessen Street Address: 7909 Parkwood Circle Drive Additional name(s) of conveying party(ies) attached? City: <u>Houston</u> State: <u>Texas</u> Zip: <u>77036</u> Country: United States of America []Yes [X]No 3. Nature of conveyance: Additional name(s) & address(es) attached? []Yes [X]No [X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other Execution Date: August 9, 2019, July 15, 2019, July 31, 2019 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: B. Patent No.(s) A. Patent Application No.(s) Serial No. 16/431,540 Additional numbers attached? []Yes [X]No 6. Total number of applications and patents involved: 1 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41):\$ 0.00 Name: Brett A. Klein []Enclosed []Authorized to be charged to deposit account 19-Address: 0743 Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 Please charge any additional fees or credit any over Minneapolis, Minnesota 55402 payments to our Deposit Account No.: 19-0743 DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. 9/26/2019 Brett A. Klein/Reg. No. 64,448 Name of Person Signing Total number of pages including cover sheet: 10 Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Mail Stop Assignment Recordation Services P.O. Box 1450

Alexandria, VA 22313-1450

Attorney Docket No. \$233,134US1 Client Ref. No. RS-LD-0037-3

ASSIGNMENT

WHEREAS, Robert Benjamin Donnally, XI Un Liu and Jay John Thiessen (hereinafter the "Undersigned") have made one or more inventions and other subject matter (hereinafter collectively referred to as the "invention"); as described in the patent application filed on June 4, 2019, assigned US application serial number 16/431,540, and titled DEVICES, SYSTEMS, AND METHODS FOR TOP DRIVE CLEARING as described in a provisional patent application filed on January 25, 2019 assigned United States application serial number 62/797,042, and titled Hoist System Capable of Parking a Top Drive and Including an Elevator and a Claw Independently Operated and Automated Robotic Arms for Handling Tubulars on a Drilling Rig; as described in a patent application filed on November 28, 2018 assigned Chinese application serial number 201811449262.0, and titled Hoist System Capable of Parking a Top Drive and Including an Elevator and a Claw Independently Operated for Handling Tubulars on a Drilling Rig; and as described in a patent application filed on August 3, 2018 assigned Chinese application serial number 201810880362.2, and titled Hoist System Capable of Parking a Top Drive and Including an Elevator and a Claw Independently Operated for Handling Tubulars on a Drilling Rig.

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged by the Undersigned, the Undersigned do hereby irrevocably and unconditionally:

CONVEY, ASSIGN, AND TRANSFER to NATIONAL OILWELL VARCO, L.P. (the "Assignee"), having a place of business at 7909 Parkwood Circle Drive, Houston, Texas 77036, the Undersigned's entire right, title, and interest for the United States and all foreign countries and jurisdictions in and to:

the invention which is disclosed in the above-identified application or applications;

such application or applications, and all divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other applications for a patent or patents which have been or shall be filled in the United States (including all provisional and non-provisional applications), and in all foreign countries and jurisdictions based in whole or in part on any of such invention (including any application for a utility model or an innovation patent application);

all original and reissued patents which have been or shall be issued in the United States and all foreign countries and jurisdictions based in whole or in part on any of such invention;

including the right to claim priority to the above-identified patent application or applications in relation to subject matter based in whole or in part on the above-identified patent application or applications and any of the foregoing including the right to file foreign applications under the provisions of any convention or treaty;

and including the right to all causes of action, remedies, and other enforcement rights related to the above-identified application or applications, including without limitation the right to sue for past, present, or future infringement, misappropriation, or violation of any and all rights related to the above-identified patent application or applications and any of the foregoing, including the right to obtain and collect damages for past, present, or future infringement;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such invention to the Assignee;

AUTHORIZE AND REQUEST that any attorney associated with U.S. Patent and Trademark Office (USPTO) Customer No. 21186 may (directly or through his/her designee) delete, insert, or alter any information related to the above-identified patent application or applications or any of the foregoing, after execution of this Assignment;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or shall be made to others by the Undersigned, and that the full right to convey the same as herein expressed is possessed by the Undersigned;

COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the Undersigned shall (1) execute all provisional, non-provisional, divisional, continuing (including continuation-in-part), substitute, renewal, relissue, and all other patent applications for the Invention; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers for the Invention; (3) communicate to the Assignee all facts known to the Undersigned relating to the Invention and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for the Invention; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such Invention in the Assignee, or for securing, maintaining and enforcing proper patent protection for the Invention;

COVENANT, that should any provision of this agreement be held unenforceable by an authority of competent jurisdiction, such a ruling shall not affect the validity and enforceability of the remaining provisions.

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives, and successors of the Undersigned, and is to extend to the benefit of the successors, assigns, and nominees of the Assignee.

AGREED as of the date of my signature below:

Assignor: (Signature): Name: Robert Benjamin Donnally DEBRA C. WALKER City/State or Country: Plano, TX Notary Public, State of Texas Comm. Expires 08-03-2023 Notary iD 10745063 Date: Assignor: (Signature): Name: Xi Lin Liu City/State or Country: Shanghai, China Assignor: (Signature): Name: Jay John Thiessen City/State or Country: Edmonton, AB Date:

Assignment
Assignors: Robert Benjamin Donnally et al.
Title: DEVICES, SYSTEMS, AND METHODS FOR TOP DRIVE CLEARING

Page 3 of 3

Docket No. 5233:134USI. Client Ref. No. RS-LD-0037-3

Attorney Docket No. \$233,134US1 Client Ref. No. RS-LD-0037-3

ASSIGNMENT

WHEREAS, Robert Benjamin Donnally, XI Lin Liu and Jay John Thiessen (hereinafter the "Undersigned") have made one or more inventions and other subject matter (hereinafter collectively referred to as the "Invention"); as described in the patent application filed on June 4, 2019, assigned US application serial number 16/431,540, and titled DEVICES, SYSTEMS, AND METHODS FOR TOP DRIVE CLEARING as described in a provisional patent application filed on January 25, 2019 assigned United States application serial number 62/797,042, and titled Hoist System Capable of Parking a Top Drive and Including an Elevator and a Claw Independently Operated and Automated Robotic Arms for Handling Tubulars on a Drilling Rig; as described in a patent application filed on November 28, 2018 assigned Chinese application serial number 201811449262.0, and titled Hoist System Capable of Parking a Top Drive and Including an Elevator and a Claw Independently Operated for Handling Tubulars on a Drilling Rig; and as described in a patent application filed on August 3, 2018 assigned Chinese application serial number 201810880362.2, and titled Hoist System Capable of Parking a Top Drive and Including an Elevator and a Claw Independently Operated for Handling Tubulars on a Drilling Rig.

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged by the Undersigned, the Undersigned do hereby irrevocably and unconditionally:

CONVEY, ASSIGN, AND TRANSFER to NATIONAL OILWELL VARCO, L.P. (the "Assignee"), having a place of business at 7909 Parkwood Circle Drive, Houston, Texas 77036, the Undersigned's entire right, title, and interest for the United States and all foreign countries and jurisdictions in and to:

the invention which is disclosed in the above-identified application or applications;

such application or applications, and all divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other applications for a patent or patents which have been or shall be filled in the United States (including all provisional and non-provisional applications), and in all foreign countries and jurisdictions based in whole or in part on any of such invention (including any application for a utility model or an innovation patent application);

all original and reissued patents which have been or shall be issued in the United States and all foreign countries and jurisdictions based in whole or in part on any of such invention;

including the right to claim priority to the above-identified patent application or applications in relation to subject matter based in whole or in part on the above-identified patent application or applications and any of the foregoing including the right to file foreign applications under the provisions of any convention or treaty;

and including the right to all causes of action, remedies, and other enforcement rights related to the above-identified application or applications, including without limitation the right to sue for past, present, or future infringement, misappropriation, or violation of any and all rights related to the above-identified patent application or applications and any of the foregoing, including the right to obtain and collect damages for past, present, or future infringement;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such invention to the Assignee;

AUTHORIZE AND REQUEST that any attorney associated with U.S. Patent and Trademark Office (USPTO) Customer No. 21186 may (directly or through his/her designee) delete, insert, or alter any information related to the above-identified patent application or applications or any of the foregoing, after execution of this Assignment;

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AGREED as of the date of my signature below:

ADDONE OF T	
Assignor:	
(Signature):	
	Name: Robert Benjamin Donnally
	City/State or Country: Plano, TX
Date:	
Assignor	
(Signature):	刘喜林 2019-).15
	Name: Xi Lin Liu
	City/State or Country: Shanghai, China
Assignor:	
(Signature):	
	Name: Jay John Thiessen
	City/State or Country: Edmonton, AB
Date:	

Assignment
Assignors: Report Benjamin Donnally et al,
Title: DEVICES, SYSTEMS, AND METHODS FOR TOP DRIVE CLEARING
Fage 3 of 3

PATENT REEL: 050572 FRAME: 0249

Docket No: \$233,134U81 Client Ref. No. RS-LD-0037-3

Attorney Docket No. \$233,134US1 Client Ref. No. RS-LD-0037-3

ASSIGNMENT

WHEREAS, Robert Benjamin Donnally, XI Un Liu and Jay John Thiessen (hereinafter the "Undersigned") have made one or more inventions and other subject matter (hereinafter collectively referred to as the "invention"); as described in the patent application filed on June 4, 2019, assigned US application serial number 16/431,540, and titled DEVICES, SYSTEMS, AND METHODS FOR TOP DRIVE CLEARING as described in a provisional patent application filed on January 25, 2019 assigned United States application serial number 62/797,042, and titled Hoist System Capable of Parking a Top Drive and Including an Elevator and a Claw Independently Operated and Automated Robotic Arms for Handling Tubulars on a Drilling Rig; as described in a patent application filed on November 28, 2018 assigned Chinese application serial number 201811449262.0, and titled Hoist System Capable of Parking a Top Drive and Including an Elevator and a Claw Independently Operated for Handling Tubulars on a Drilling Rig; and as described in a patent application filed on August 3, 2018 assigned Chinese application serial number 201810880362.2, and titled Hoist System Capable of Parking a Top Drive and Including an Elevator and a Claw Independently Operated for Handling Tubulars on a Drilling Rig.

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AGREED as of the date of my signature below:

JULY 31,2013.

Date:

RECORDED: 10/01/2019

PATENT REEL: 050572 FRAME: 0252

Docket No: 5233, 134US1 Client Ref. No. RS-LD-0037-3