

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT6900390

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|---|-------------------------------------|
| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                      |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                          |
| <b>CONVEYING PARTY DATA</b>   |                                     |
| <b>Name</b>   | <b>Execution Date</b>               |
| ROBERT BENJAMIN DONNALLY  | 04/19/2020                          |
| XI LIN LIU  | 12/01/2010                          |
| <b>RECEIVING PARTY DATA</b>   |                                     |
| <b>Name:</b>  | NATIONAL OILWELL VARCO, L.P.        |
| <b>Street Address:</b>  | 7909 PARKWOOD CIRCLE DRIVE          |
| <b>City:</b>  | HOUSTON                             |
| <b>State/Country:</b>   | TEXAS                               |
| <b>Postal Code:</b>   | 77036                               |
| <b>PROPERTY NUMBERS Total: 1</b>  |                                     |
| <b>Property Type</b>  | <b>Number</b>                       |
| <b>Application Number:</b>  | 17310188                            |
| <b>CORRESPONDENCE DATA</b>  |                                     |
| <b>Fax Number:</b>  |                                     |
| <i>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.</i> |                                     |
| <b>Email:</b>   | request@slwip.com                   |
| <b>Correspondent Name:</b>  | SCHWEGMAN LUNDBERG & WOESSNER, P.A. |
| <b>Address Line 1:</b>  | P.O. BOX 2938                       |
| <b>Address Line 4:</b>  | MINNEAPOLIS, MINNESOTA 55402        |
| <b>ATTORNEY DOCKET NUMBER:</b>  | 5233.135US1                         |
| <b>NAME OF SUBMITTER:</b>   | JANINE HEITLAND                     |
| <b>SIGNATURE:</b>   | / Janine Heitland /                 |
| <b>DATE SIGNED:</b>   | 09/03/2021                          |
| <b>Total Attachments: 20</b>  |                                     |
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RECORDATION FORM COVER SHEET  
PATENTS ONLY

Atty Ref/Docket No.: 5233.135US1

Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Robert Benjamin Donnally, Xi Lin Liu

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment ☐ Merger

☐ Security Agreement ☐ Change of Name

☐ Other

2. Name and address of receiving party(ies):

Name: NATIONAL OILWELL VARCO, L.P.

Street Address: 7909 Parkwood Circle Drive

City: Houston State: Texas Zip: 77036

Country: United States of America

Additional name(s) & address(es) attached? ☐ Yes  
☒ No

Execution Date: August 19, 2020, December 1, 2010

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:

A. Patent Application No.(s)

B. Patent No.(s)

Serial No. 17/310,188

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Brett A. Klein

Address:

Schwegman Lundberg & Woessner, P.A.  
P.O. Box 2938  
Minneapolis, Minnesota 55402

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 0.00

☐ Enclosed

☐ Authorized to be charged to deposit account  
19-0743

8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743

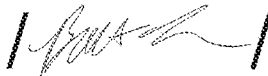
DO NOT USE THIS SPACE

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.

Brett A. Klein/Reg. No. 64,448

Name of Person Signing



Signature

September 3, 2021

Date

Total number of pages including cover sheet: 20

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

PATENT  
REEL: 057382 FRAME: 0454

### ASSIGNMENT

WHEREAS, Robert Benjamin Donnally and Xi Lin Liu (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 December 11, 2019, assigned PCT application serial number PCT/CN2019/124443, and titled PIPE HANDLING ARM as described in a patent application filed on August 2, 2019 assigned PCT application serial number PCT/US2019/044979, and titled ACCELERATED TRIPPING SYSTEM AND METHOD; as described in a patent application filed on June 4, 2019 assigned United States application serial number 16/431,533, and titled DEVICES, SYSTEMS, AND METHODS FOR ROBOTIC PIPE HANDLING; and 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.

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 filed 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;

**Assignment**

Assignors: Robert Benjamin Donnelly et al.

Title: PIPE HANDLING ARM

Page 2 of 4

Docket No: 5233.135WO1  
Client Ref. No. RS-LD-0061-PCT

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, reissue, 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:

Assignment

Assignors: Robert Benjamin Donnally et al.


Title: PIPE HANDLING ARM

Page 3 of 4

Docket No: 5233.135W01  
Client Ref. No. RS-LD-0061-PCT

Assignor:

(Signature):



Name: Robert Benjamin Donnally

City/State or Country: Plano, TX

Date:

8/19/2020

**Assignment**

Assignors: Robert Benjamin Donnally et al.

Title: PIPE HANDLING ARM

Page 4 of 4

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Docket No: 5233.135WO1  
Client Ref. No. RS-LD-0061-PCT

**Assignor:**

(Signature):

\_\_\_\_\_

Name: Xi Lin Liu

City/State or Country: Shanghai, China

Date:

\_\_\_\_\_



# EMPLOYMENT CONTRACT

劳动合同

BETWEEN

National Oilwell Varco Petroleum Equipment(Shanghai) Co.Ltd.

国民油井华高石油设备（上海）有限公司

AND

与

Liu Xi Lin

刘喜林

Date: 01-December -2010

日期: 2010-12-01





EMPLOYMENT CONTRACT

劳动合同

THIS EMPLOYMENT CONTRACT (the "Contract") is made on December 01, 2010, in Shanghai, the People's Republic of China (the "PRC"), between National Oilwell Varco Petroleum Equipment (Shanghai) Co., Ltd (the "Company") Liu Xi Lin a Chinese citizen, and ID Card No. 610113197310041733 (the "Employee").

本劳动合同(下称“合同”)于 2010年12月01日 由国民油井华高石油设备(上海)有限公司(下称“公司”)与 中国公民刘喜林 身份证号为 610113197310041733 (下称“雇员”)在中华人民共和国(下称“中国”) 上海市 订立。

The Company and the Employee are referred to collectively as the "Parties" and individually as a "Party". 公司和雇员在此合称为“双方”，单独称为“一方”。

1

REDACTED

2

3

REDACTED



**NATIONAL OILWELL VARCO**

National Oilwell Varco Petroleum Equipment (Shanghai) Co. Ltd.

REDACTED

REDACTED

REDACTED

REDACTED

REDACTED

REDACTED



**REDACTED****ARTICLE 10. CONFIDENTIALITY AND IP RIGHTS****第 10 条 保密及知识产权****10.1 Confidentiality 保密**

The Employee shall keep strictly confidential, and shall use solely for the purposes of performing his/her employment related duties, any Intellectual Property (defined below) or Confidential Information disclosed to him/her either by the Company or its customers and suppliers, or developed by him/her, in the course of his/her employment. For the purposes of this Contract, "Confidential Information" shall include, without limitation: all business plans, strategies, trade secrets, intellectual property (including without limitation Intellectual Property as defined below), computer programs, financial engineering programs (including output, source or object code), other financial engineering data, models, methods, analysis, worksheets or output, corporate policies, financial information, operational and technical information, marketing information, customer lists and preferences, current or anticipated customer requirements, price lists, marketing studies, sales analysis, product plans, supplier information, Employee information, organizational structure, Employee lists, information regarding labor relations, Employee remuneration, and any other information concerning the business and affairs of the Company, its affiliates, or its or their customers and suppliers, including information disclosure of which without authorization of the Company may impair the business interests of the Company.

雇员应对在其受雇过程中公司或其客户或供应商向雇员披露的或雇员自行研发的任何知识产权或保密信息严格保密, 并仅为履行与其受雇有关的职责而使用上述知识产权(定义见下文)或保密信息。就本合同的目的而言, 保密信息应包括(但不限于): 所有业务计划、策略、商业秘密、知识产权(包括但不限于下文定义的知识产权)、计算机程序、财务工程程序(包括输出代码、源代码及目标代码)、其它财务工程数据、模型、方法、分析、工作表或结果、公司政策、财务信息、经营及技术信息、营销信息、客户名单及偏好、目前或预期的客户要求、价格清单、营销研究、销售分析、产品计划、供应商信息、雇员信息、组织架构、雇员名单、有关劳动关系的信息、雇员报酬及任何其它有关公司或其关联公司、客户及供应商的业务和事务的保密信息, 以及其他如未经公司授权披露将会妨害公司的业务利益的信息。

Both Confidential Information and Intellectual Property are proprietary rights that the Company is entitled to protect, and accordingly, the Employee shall not disclose such information to any third party either during or at any time subsequent to his/her employment (regardless of the reason for termination or end) without the prior written consent of the Company, or make use of such information for personal benefit, or for the benefit of any other person, firm, corporation or entity (whether or not the Employee receives any remuneration for such disclosure or use). In addition, if requested at any time, the Employee shall execute a separate Employee Confidentiality



Agreement in the form prescribed by the Company as a condition of his/her continued employment.

保密信息和知识产权均属公司有权保护的专有权利,因此,雇员在未经公司事先书面同意的情况下,在受雇期间或之后(无论合同解除或终止的原因为何)均不得向任何第三方披露上述信息,或为个人利益、或为任何其他个人、公司、企业或实体的利益而使用上述信息(无论雇员是否就此披露或使用行为获得报酬)。此外,在任何时候如被要求,雇员应另外签订一份格式如公司所规定的雇员保密协议,作为其继续受雇的条件。

#### 10.2 Intellectual Property 知识产权

Any and all advances, computer programs or hardware, financial engineering programs (including output, source or object code), other financial engineering data, models, methods, analysis, worksheets or output, concepts, data, designs, devices, discoveries, drawings, formulae, ideas, improvements, inventions, know-how, practices, processes, research materials, software, systems, technology, trade secrets, work methods, patent, trade mark or copyrighted works (the "Intellectual Property") that are either provided to the Employee or that he/she otherwise obtains access to or develops, whether alone or jointly with others in the course of his/her employment (or otherwise during the period of his/her employment that relate to the business of the Company and/or its affiliates) are and shall remain the exclusive property of the Company.

任何及所有在雇员受雇于公司的过程中(或者在其与公司和/或关联公司的业务相关的雇佣过程中)向雇员提供的或雇员以其它方式取得的或单独或与其他人共同研发的改进、电脑程式或硬件、财务工程程序(包括输出代码、源代码及目标代码)、其它财务工程数据、模型、方法、分析、工作表或结果、概念、数据、设计、装置、发现、图纸、配方、意念、改良、发明、窍诀、惯例、程序、研究材料、软件、系统、技术、交易秘密、工作方法、专利、商标或具版权的成果("知识产权")应为并一直是公司的专有财产。

Any Intellectual Property (whether registrable or not) produced, made, composed, written, performed or designed by the Employee, either alone or jointly with others, in the course of his/her employment or in any way relating to the business of the Company, shall vest in and be the exclusive property of the Company. The Employee shall, both during his/her employment and subsequent to his/her termination, fully and promptly disclose to the Company, complete details of any Intellectual Property right arising in connection with his/her employment, with the intention that the Company shall have full knowledge and ownership of such Intellectual Property. At the expense of the Company, the Employee shall promptly upon request cooperate with the Company in executing all necessary deeds and documents, and shall cooperate in all other such acts and things, as the Company may reasonably require in order to vest such Intellectual Property rights exclusively in the name of the Company, or otherwise to better secure and demonstrate the Company's exclusive ownership of any such Intellectual Property from time to time.

雇员在受雇过程中单独或与其他人共同制作、制造、编制、编写、履行或设计的、或在任何一方面与公司的业务有关的任何(不论是否可注册登记的)知识产权应属于并为公司公司的专有财产。雇员应在其受雇期间及其终止受聘后,全完并及时地向公司披露就其受聘而产生的任何知识产权的完整资料,旨在使公司完全认识及拥有该知识产权。在公司合理要求时,雇员应及时按公司要求予以合作签订所有必需的契约及文件,并在所有其他行为和事项中配合公司,以便该等知识产权专有地归属公司名义或随时更好的保护和证明公司对该知识产权的专属所有权,有关费用由公司承担。

#### 10.3 Conflict of Interest 利益冲突

The Employee shall not directly or indirectly engage in any business activities, either by himself/herself, or through any person, partnership, corporation or other entity, which may place the Employee in an actual or perceived conflict of interest with his/her duty to act, at all times, exclusively in the best interests of the Company.

雇员不得直接或间接地、亲自或通过任何人、合伙、企业或其它实体从事任何可能与雇员在任何时候以公司的最佳利益行事的职责产生实际或预见利益冲突的商业活动。

#### 10.4 Non-Solicitation 不招揽

During the term of his/her employment, and for a period of twelve (12) months subsequent to the termination of such employment, the Employee shall not, without the prior written consent of the Company, directly or indirectly solicit, attempt to solicit, or communicate in any way, with

Employees of the Company or its affiliates, or with the Employee candidates of the Company or its affiliates who are negotiating with the Company on the establishment of labor relationship, or with the Company's or its affiliates' customers or suppliers, for the purposes of having such Employees, customers or suppliers retained or engaged by another person, firm, corporation, or other entity, 在雇员受聘于公司期间及其聘用终止后十二(12)个月内,如未经公司的事先书面同意,雇员不得直接或间接地,为第一人、机构、企业或其它实体聘用或聘请公司或其关联公司的雇员或正在与公司或其关联公司就建立劳动关系进行协商的雇员候选人,或招揽或企图招揽该等雇员、雇员候选人、客户或供应商,或以任何方式与其沟通。

#### 10.5 Return of Properties, Documents and Data 财产、文件和数据的归还

Upon termination or expiry of this Contract, the Employee shall promptly return to the Company all the Company's properties (including but not limited to cash, checks, receipts, uniform, keys, Company Guidelines, vehicles, tools and office equipment) and original and all copies of drawings, blueprints, client lists/database, computer programs, memoranda, notes, formulae, financial statements, marketing information, training materials, operating records, Confidential Information, Intellectual Property, and any other documents of the Company or any document provided by a third party to the Company (including data stored in audio, video or any other formats) which are in the possession, custody or control of the Employee.

在本合同终止或到期时,雇员应及时把由其持有、保管或控制的全部公司财产(包括但不限于现金、支票、收据、制服、钥匙、公司准则、车辆、工具、办公设备)以及图纸、蓝图、客户名录/数据库、电脑程式、备忘录、笔记、配方、财务报表、营销资料、培训资料、经营记录、保密信息、知识产权和公司的任何其它文件或第三方向公司提供的任何文件(包括以声音、录像或任何其它形式储存的数据)的原件及复印件归还给公司。

#### 10.6 Instant Dismissal 立即解雇

Breach of this Article 10 may lead to instant dismissal or other actions against the Employee.

违反本第 10 条规定可导致立即解雇雇员或对其采取其它行动。

REDACTED

REDACTED

12.7 Language 语言



This Contract is executed in both English and Chinese. Both language versions shall be equally authentic. The Parties acknowledge both language texts are intended by the parties to be substantially the same in all material respects. However, in the event of any conflict as between the English and Chinese versions, the Chinese text shall govern and prevail.

本合同以中、英两种文本签订。两种文本具有同等效力。双方确认两种文本在所有重要方面实质相同。然而，如中英文本之间存在歧义，应以中文文本为准。

**12.8 Counterparts 文本**

This Contract shall be executed in two (2) originals, of which the Company shall hold one (1) copies and the Employee shall hold one (1) copy.

本合同以正本签订，一式二(2)份，公司持有一(1)份，雇员持有一(1)份。

**12.9 Other 其它**

Items that are not covered in this Contract shall be handled in accordance with the applicable laws and regulations.

本合同之未事宜将按照适用的法律、法规处理。

**IN WITNESS WHEREOF**, the Company and the Employee have executed this Contract on December 01, 2010.

公司和雇员已于 2010 年 12 月 01 日签署本合同，以昭信守。

National Oilwell Varco Petroleum Equipment Co., Ltd.

国民油井华高石油设备(上海)有限公司

Address: #500 Yagang Rd. Malu, Jiading, Shanghai, P.R.C.

中国上海市嘉定区马陆镇亚钢路 500 号

Seal:

盖章:

By:

代表

Name: Lynn White

姓名:

Title: Vice President Operations - China

职务:

Employee

雇员

Signature of the Employee:

员工签名:

Printed Name: Liu Xi Lin

姓名: 刘喜林

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## THE AGREEMENT OF EMPLOYMENT CONTRACT EXTENSION 劳动合同续签协议

Party A: National Oilwell Varco Petroleum Equipment (Shanghai) Co., Ltd  
甲方：国民油井华高石油设备（上海）有限公司

Party B: Liu Xilin  
ID Number: 610113197310041733  
乙方：刘喜林  
身份证号：610113197310041733


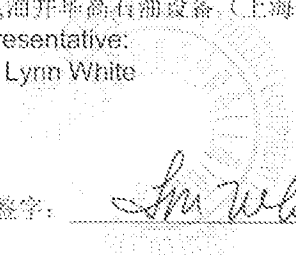
Whereas the circumstance of labor relations between the two parties has justified an open-ended labor contract from the date of 01 December 2011, both parties, through equal negotiation, agreed to renew the contract that was concluded on 01 December 2010 as an open-ended labor contract since 01 December 2011.

鉴于双方的劳动关系于2011年12月01日起已达到法定订立无固定期限劳动合同的情形，经平等协商，双方同意将2010年12月01日签订的劳动合同期限自2011年12月01日起变更为无固定期限。

The renewal shall not alter or affect the performance of all other terms and conditions stated in the said labor contract unless any otherwise agreed by both parties in writing.  
此变更并不会改变或影响劳动合同中其他条款或条件的执行，但双方书面同意的情况除外。

Party A: National Oilwell Varco Petroleum  
Equipment Co., Ltd.  
甲方：国民油井华高石油设备（上海）有限公司  
Legal Representative:  
法人代表：Lynn White

Party B: Employee  
乙方：员工  
Name 姓名：Liu Xilin  
刘喜林

Signature 签字:   
Seal 盖章: 

Date: 日期: 2011-10-28

Signature 签字: 

Date: 日期: 2011.11.1