# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6708815

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
XIAOBIN SONG	12/09/2017
BRONWYN MICHELLE DJEFEL	05/19/2017
MICHAEL JOSEPH DAVILA	04/11/2017
ZHIQIN WU	04/21/2017

### **RECEIVING PARTY DATA**

Name:	HALLIBURTON ENERGY SERVICES, INC.	
Street Address:	3000 N. SAM HOUSTON PARKWAY E.	
City:	HOUSTON	
State/Country:	TEXAS	
Postal Code:	77032	

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16338525

## **CORRESPONDENCE DATA**

**Fax Number:** (713)374-1601

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.

**Phone:** 7133741600

Email: MDiaz@polsinelli.com

Correspondent Name: POLSINELLI PC

Address Line 1: 1000 LOUISIANA ST.

Address Line 2: SUITE 64

Address Line 4: HOUSTON, TEXAS 77002

ATTORNEY DOCKET NUMBER:	C-085126-616264
NAME OF SUBMITTER:	MICHELLE DIAZ
SIGNATURE:	/Michelle Diaz/
DATE SIGNED:	05/13/2021

## **Total Attachments: 6**

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PATENT 506662001 REEL: 056234 FRAME: 0648

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PATENT REEL: 056234 FRAME: 0649

## WORLDWIDE ASSIGNMENT

WHEREAS, WE, (hereinafter referred to as the "ASSIGNOR(S)"):

Xiaobin SONG, 10/F West Tower, WFC, No.1 East 3rd Ring Middle Road Chaoyang District, Beijing CHINA

Bronwyn Michelle DJEFEL, 83 W Lakemist Cir., Spring TX. 77381 UNITED STATES OF AMERICA

Michael Joseph DAVILA, 11223 Timbercreek Falls Dr., Houston, TX. 77095 UNITED STATES OF AMERICA

Zhiqin WU,11563 - 13 Avenue NW, Edmonton, AB, T6J 7B3 CANADA

has/have invented a AVOIDING GEOLOGICAL FORMATION BOUNDARIES DURING DRILLING OPERATIONS ("Invention") for which one or more applications for patent, design registration, utility model registration, or other form of protection, rights, or title have been or will be made in certain countries ("Applications"), as further described below:

PCT Application No. PCT/US16/57699, filed October 19, 2016.

AND WHEREAS, HALLIBURTON ENERGY SERVICES, INC., (hereinafter referred to as the "ASSIGNEE"), a company organized under the laws of Texas, having a place of business at 3000 N. Sam Houston Parkway E., Houston, TX. 77032, is desirous of acquiring the full and exclusive right, title and interest in and to said Invention, said Applications inclusive of all ancillary rights relating thereto, any and all priority rights derived from said Applications, and all patents, design registrations, utility model registrations and other forms of protection, rights and titles relating to said Invention, in any country or countries and in respect of the whole or any part or parts of or improvements to the Invention;

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR(S) does/do hereby confirm that ASSIGNOR(S) has/have transferred, conveyed and assigned, and by way of further assurance does/do hereby transfer, convey and assign, any and all of ASSIGNOR(S)'s respective rights, title and interest in and to: the Invention; the Applications; any further applications for patent, design registration, utility model registration or other forms of protection, rights or titles for the whole or any part or parts of or improvements to the Invention in any country or countries ("Further Applications") together with the right to file divisional applications, substitute applications and continuation applications of any one or more of the Applications and Further Applications ("Divisionals"); the right to obtain patents, design registrations, utility model registrations and all other forms of protection, rights and titles relating to the Invention; the right in and to any patent or reissue patent relating to the Applications, Further Applications and Divisionals ("Grants"); and the right to obtain any extensions / supplementary protection certificates ("Extensions"); together with the right to bring proceedings to recover damages

and/or to obtain other remedies for acts committed in respect of one or more of the aforesaid Invention, Applications, Grants, Further Applications, Divisionals and Extensions, whether such acts are committed before or after the date of this Worldwide Assignment; with the intent that the Invention, Applications, Grants, Further Applications, Divisionals and Extensions are owned and enjoyed by ASSIGNEE absolutely to the full end of the term or terms for same.

ASSIGNOR(S) does/do hereby agree, upon request, to provide assistance and to execute any and all further documents, at the expense of ASSIGNEE and/or its successors and assigns (as applicable), which may be necessary or desirable to enable ASSIGNEE, and/or its successors and assigns (as applicable), to file, prosecute, bring proceedings and take other actions with respect to any and all of the Invention, Applications, Further Applications, Divisionals, Grants and Extensions, and any and all patents and registrations granted thereon and other forms of protection, rights and titles relating thereto, and ASSIGNOR(S) further agrees/agree to execute, upon request and at the expense of ASSIGNEE and/or its successors and assigns (as applicable), any and all further documents which may be necessary or desirable to vest or perfect the title of ASSIGNEE therein.

ASSIGNOR(S) does/do hereby authorize ASSIGNEE or its patent agents or attorneys to insert, above, the jurisdictions, application numbers, filing dates and any other indicia identifying the Applications when such information is available for the purpose of recording this assignment.

ASSIGNOR(S) does/do hereby authorize and request The Commissioner of Patents or any equivalent authority to issue to ASSIGNEE each and every patent, registration and other form of protection, right, and title granted upon the Applications, Further Applications, Divisionals and Extensions.

THIS WORLDWIDE ASSIGNMENT shall inure to the benefit of ASSIGNEE and its successors and assigns, and shall be binding upon ASSIGNOR(S) and their successors and permitted assigns.

DELIVERY of this Worldwide Assignment by copy, however transmitted, constitutes valid and effective delivery. This Worldwide Assignment may be executed in one or more counterparts, each of which when so executed and delivered shall be an original, and such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, this Worldwide Assignment has been executed below by the undersigned:

Date: <u>Dec. 9, 2017</u>

Xiaubin Song Xiaubin SONG

10/F West Tower, WFC, No.1 East 3rd Ring Middle Road Chaoyang District, Beijing China

Date: 5/19/8017

Bronwyn Michelle DJEFEL
83 W Lakemist Cir.
Spring TX. 77381
UNITED STATES OF AMERICA

COUNTY OF Horico

BEFORE ME the undersigned authority, on this day personally appeared known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same for the purposes and considerations therein expressed.

ONGIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 1944 day of

TINA SNIDER
Notary Public, State of Texas
Ny Commission Expires
April 20, 2018
Onlimission Expires:

2018 Notary Signature

Page 6 of 6

Date: 4/1//17

Michael Joseph DAVILA 11223 Timbercreek Falls Dr. Houston, TX. 77095

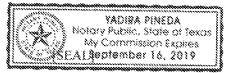
UNITED STATES OF AMERICA

STATE OF TEXAS

COUNTY OF HARRIS

BEFORE ME, the undersigned authority, on this day personally appeared Michael J. Doole. known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 11 th day of 12017



My Commission Expires:

Sep. 16 2019

na 22/2-14.7

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COUNTY LOCAL

GIVEN UNIVER MY HAND AND STAL OF OPPICE, this the <u>52</u>4 day of

(54.34.)

Me Commercial Conce

AL EXPLY

Notary Supracure

Michael S. Ross Student-at-Law Province of Alberta