

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4420194

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
GUANCHENG JIANG	04/17/2017
YINBO HE	04/17/2017
DELI GAO	04/17/2017
XIANMIN ZHANG	04/17/2017
XIANZHU WU	04/17/2017
LILI YANG	04/17/2017
GUANGCHANG MA	04/17/2017
FAN LIU	04/17/2017
GANG QU	04/17/2017
LI ZHAO	04/17/2017
HAIFANG SUN	04/17/2017
LIEXIANG HAN	04/17/2017

**RECEIVING PARTY DATA**

<b>Name:</b>	CHINA UNIVERSITY OF PETROLEUM (BEIJING)
<b>Street Address:</b>	NO.18 FUXUE ROAD
<b>City:</b>	CHANGPING DISTRICT, BEIJING
<b>State/Country:</b>	CHINA

**PROPERTY NUMBERS Total: 1**

Property Type	Number
<b>Application Number:</b>	15489457

**CORRESPONDENCE DATA****Fax Number:** (216)241-0816*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:** 216-622-8200**Email:** ipdocket@calfee.com, tballou@calfee.com**Correspondent Name:** CALFEE HALTER & GRISWOLD LLP**Address Line 1:** THE CALFEE BUILDING, 1405 EAST SIXTH STREET**Address Line 4:** CLEVELAND, OHIO 44114-1607

<b>ATTORNEY DOCKET NUMBER:</b>	35742/04050
<b>NAME OF SUBMITTER:</b>	YIZHOU LIU
<b>SIGNATURE:</b>	/Tiffany L. Ballou, for/
<b>DATE SIGNED:</b>	05/18/2017
<b>Total Attachments: 4</b> source=04328999#page1.tif source=04328999#page2.tif source=04328999#page3.tif source=04328999#page4.tif	

ASSIGNMENT

This Assignment is made and entered into by and between Guancheng JIANG, Yinbo HE, Deli GAO, Xianmin ZHANG, Xianzhu WU, Lili YANG, Guangchang MA, Fan LIU, Gang QU, Li ZHAO, Haifang SUN, and Liexiang HAN (collectively hereinafter "INVENTORS"), and China University of Petroleum (Beijing), No.18 Fuxue Road, Changping District, Beijing and (hereinafter referred to as "ASSIGNEE").

Whereas INVENTORS have invented certain inventions described in a United States patent application titled DRILLING FLUID ADDITIVE COMPOSITION AND WATER-BASED DRILLING FLUID SUITABLE FOR HORIZONTAL SHALE GAS WELLS, US Patent Application No. 15/489,457, filed April 17, 2017, and have executed the patent application therefor;

Whereas, ASSIGNEE desires to acquire the entire right, title and interest in said applications and inventions, and to any United States and foreign patents to be obtained therefor; and

Now, Therefore, for good and valuable consideration, receipt of which is hereby acknowledged:

1. INVENTORS hereby sell, assign, and transfer to ASSIGNEE, its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions set forth in said applications including the application for United States Letters Patent executed by the INVENTORS, said applications including said application for United States Letters Patent, any and all other applications for Letters Patent on said inventions in the United States and in countries foreign to the United States, including all divisional, renewal, extension reexamination, substitute, continuation, continuation-in-part, reissue, and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extension of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent.

2. ASSIGNEE is hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the INVENTORS or in the name of

ASSIGNEE or otherwise as ASSIGNEE may deem advisable, under the International Convention or otherwise.

3. The Commissioner of Patents of the United States of America and the empowered officials of all other governments are hereby authorized to issue or transfer all said Letters Patent to ASSIGNEE in accordance herewith.

4. This Assignment is being made under covenant, not only that full power to make the same is had by the INVENTORS, but also that, at the time of execution of this Assignment, such assigned right is not encumbered by any grant, license, governmental restriction, or other right heretofore given.

5. The INVENTORS agree that they will do all acts reasonably serving to assure that said inventions, patent applications and Letters Patent shall be held and enjoyed by ASSIGNEE as fully and entirely as the same could have been held and enjoyed by the INVENTORS if this Assignment had not been made, and particularly to execute and deliver to ASSIGNEE all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, lawful affidavits, and declarations in form and in substance which may be requested by ASSIGNEE, to furnish ASSIGNEE with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

6. INVENTORS agree that this Assignment shall be construed in accordance with the laws and courts of Ohio. INVENTORS hereby also agree to submit to the jurisdiction of any Ohio court.

7. INVENTORS acknowledge and understand that the law firm of Calfee, Halter & Griswold LLP and its attorneys represent ASSIGNEE and INVENTORS acknowledge and understand that they are not the client of Calfee, Halter & Griswold, LLP.

8. INVENTORS acknowledge and understand that they have the opportunity to consult with independent legal counsel prior to executing this Assignment.

9. INVENTORS hereby request that ASSIGNEE or its counsel enter or correct the date(s) of execution of the afore-referenced Patent Application(s), and enter or correct the Application Serial Numbers if available, prior to recording this assignment, to have the same effect as if entered prior to execution of this Assignment.

Signature:

Guancheng JIANG.  
Guancheng JIANG

April 17, 2017  
Date

Yinbo HE  
Yinbo HE

April 17, 2017  
Date

Deli GAO  
Deli GAO

April 17, 2017  
Date

Xianmin ZHANG  
Xianmin ZHANG

April 17, 2017  
Date

Xianzhu WU  
Xianzhu WU

April 17, 2017  
Date

Lili YANG  
Lili YANG

April 17, 2017  
Date

Guangchang MA  
Guangchang MA

April 17, 2017  
Date

Fan LIU  
Fan LIU

April 17, 2017  
Date

Gang QU  
Gang QU

April 17, 2017  
Date

Li ZHAO  
Li ZHAO

April 17, 2017  
Date

Haifang SUN  
Haifang SUN

April 17, 2017  
Date

Liexiang HAN  
Liexiang HAN

April 17, 2017  
Date