PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CATHERINE MARTIN SANTOS	07/24/2019
LI GUO	09/22/2014

RECEIVING PARTY DATA

Name:	HALLIBURTON ENERGY SERVICES, INC.
Street Address:	3000 N. SAM HOUSTON PARKWAY E.
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77032-3219

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	62703579
Application Number:	16480306

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	1560-059100,059101,059102
NAME OF SUBMITTER:	COREY TUMEY
SIGNATURE:	/Corey Tumey/
DATE SIGNED:	08/30/2019

Total Attachments: 7

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ASSIGNMENT

Whereas, We, Catherine Martin Santos of Houston, Texas and Li Guo of Humble, Texas, ("ASSIGNORS"), have invented EMULSIFIERS FOR DIRECT EMULSION DRILLING FLUIDS, and

Whereas, **Halliburton Energy Services, Inc.**, a Delaware Corporation having a place of business at 3000 N. Sam Houston Parkway E., Houston, Texas 77032-3219, United States of America (sometimes hereinafter called "ASSIGNEE"), is desirous of acquiring an interest therein,

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, We do hereby ASSIGN, SELL and CONVEY to said **Halliburton Energy Services**, **Inc.**, its successors and assigns, the entire right, title and interest throughout the world in and to:

- 1. Said invention in EMULSIFIERS FOR DIRECT EMULSION DRILLING FLUIDS,
- 2. United States Provisional application on said invention, Application No. 62/703,579, filed July 26, 2018, entitled EMULSIFIERS FOR DIRECT EMULSION DRILLING FLUIDS, Halliburton Reference No. 2018-IPM-102432V1 US.
- 3. Patent Cooperation Treaty application on said invention, Application No.PCT/US2019/042853, filed July 22, 2019 , entitled EMULSIFIERS FOR DIRECT EMULSION DRILLING FLUIDS, Halliburton Reference No. 2018-IPM-102432U1 PCT, (The undersigned hereby grant(s) the firm of C. Tumey Law Group, PLLC. of 1150 Clear Lake City Blvd., Suite 201, Houston, Texas 77062 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document);
- 4. All applications for patent or like protection on said invention that have now been or may in the future be made by me or my legal representatives, including any continuation, continuation-in-part and any other utility applications that may be based on this invention, whether in the United States of America or in any other country or place anywhere in the world;
- 5. All patents and like protection that have now been or may in the future be granted on said invention to me or my legal representatives, whether in the United States of America or in any other country or place anywhere in the world;
- 6. All substitutions for and divisions, continuations, continuations-in-part, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitation, those obtained or permissible under past, present and future laws and statutes;
- 7. All rights of action on account of past, present and future unauthorized use of said invention and for infringement of said patents and like protection;

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- 8. The right in ASSIGNEE to file in its name applications for patents and like protection for said invention in any country or countries foreign to the United States; and
- 9. All international rights of priority associated with said invention, applications, patents and like protection and we covenant that we, and our heirs, legal representatives, assigns, administrators, and executors, will, at the expense of ASSIGNEE, its successors and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors and assigns, the full benefit of this Assignment.

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Executed this 24 th	day of JW	, 2019
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		Catherine Martin Santos
STATE OF)	
) ss	
COUNTY OF)	
Before me personally app to be his free act and dee	peared said Cathe red this W day of	ine Martin Santos and acknowledged the foregoing instrumen
Seal	•	William Studenson (Notary)
INDIA M HENDI Notary ID #119 My Commission July 6, 20	55574 Expires	

INTELLECTUAL PROPERTY AND CONFIDENTIAL INFORMATION AGREEMENT OF HALLIBURTON ENERGY SERVICES, INC.

This Agreement is made by and between the Company (throughout the document "Company" means and includes Halliburton Energy Services, Inc., a Delaware corporation, and any and all subsidiaries or divisions of this corporation) and the undersigned (hereinafter referred to as "Employee"), and is effective as of the execution of this Agreement.

In consideration of Company's employment or continued employment of Employee (it being understood that such employment may be terminated at the will of the Company). Company's promise to provide (or providing) confidential information and/or specialized training to Employee during the course of his/her employment, the payment of a salary or other remuneration, and other consideration, the Parties agree as follows:

3. ASSIGNMENT OF INVENTIONS. Employee agrees that all Inventions that are authored, conceived, developed, or first reduced to practice or created by Employee during the term of Employee's employment and for a period of one (1) year after termination of employment, either (a) resulting from using equipment, supplies, facilities, or trade secrets of the Company or resulting from work performed by Employee for the Company or (b) relating to the Company's business or current or anticipated research and development, are the sole and exclusive property of the Company, and such Inventions are hereby irrevocably assigned by Employee to the Company. The Employee acknowledges that the assignment of Employee's entire right, title and interest in and to any and all such Inventions to the Company is deemed effective upon the conception, development, first reduction to practice, or creation of the Invention by Employee. The Employee agrees, withour further consideration and upon request by the Company, to assist and cooperate with the Company by executing any and all documents, and by performing any and all lawful acts, necessary to document the assignment to the Company of the Employee's right, title and interest in and to any and all such Inventions.

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- AND LITIGATION. The Employee hereby assigns to the Company, its successors and assigns, all of Employee's right, title, and interest in and to all U.S. and international applications for Letters Patent and copyright registrations that are filed by Company or the Employee to protect Inventions (including WORKS) that are assigned under this Agreement, whether such applications and registrations are filed during or subsequent to the term of Employee's employment. Employee agrees, without further consideration, to assist Company during and subsequent to the term of Employee's employment in every legal way in obtaining, at Company's expense, protection for such Inventions. Employee agrees to execute any and all papers, take all lawful onths, and do all lawful acts required in or concerning such applications, and/or divisions, continuations, extensions, or renewals thereof and any application for the reissuance or reexamination of any patents granted thereon or on such divisions, continuations or renewals of such applications. Employee will, at the expense of the Company, assist in all proper ways, as by giving testimony in the conduct of any interference proceeding or litigation which involves or concerns either (a) the priority or originality of such inventions or (b) the validity or the scope of patents granted on such inventions.
- 6. ASSIGNMENT OF APPLICATIONS / REGISTRATIONS FILED BY EMPLOYEE AFTER TERMINATION. Employee further expressly agrees that any application for Letters Patent or copyright registrations that are (a) made by the Employee within one year after the termination of Employee's period of employment with the Company and (b) cover or relate to any matters of Company business or the Company's current or anticipated research and development as of the termination date, will be presumed to cover inventions authored, conceived, developed, or first reduced to practice or created by Employee during the term of Employee's employment within the Company, and will be subject to this Agreement.

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Executed on this 22 day of Sept	ember 2014
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Signature of Employee	Employee #
LI Guo	
LI Guo Name Typed or Printed	
Name Typed or Printed	
Name Typed or Printed Halliburton Energy Services, Inc. (completed by)the Halliburton representative observations.	

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RECORDED: 09/03/2019