

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5928066

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JUNSHENG HOU	03/07/2019
MICHAEL S. BITTAR	03/11/2019
YIJING FAN	03/06/2019
LI PAN	03/06/2019
JIN MA	03/07/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	HALLIBURTON ENERGY SERVICES, INC.
<b>Street Address:</b>	3000 N. SAM HOUSTON PARKWAY E.
<b>City:</b>	HOUSTON
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77032-3219
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16633830
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(512)670-8904
<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>Phone:</b>	(512)710-8326
<b>Email:</b>	uspto@gilliamip.com
<b>Correspondent Name:</b>	GILLIAM IP PLLC (HALLIBURTON)
<b>Address Line 1:</b>	7200 N. MOPAC EXPY.
<b>Address Line 2:</b>	SUITE 440
<b>Address Line 4:</b>	AUSTIN, TEXAS 78731
<b>ATTORNEY DOCKET NUMBER:</b>	164.2018-IPM-102813 U1 US
<b>NAME OF SUBMITTER:</b>	JUDITH HUERTA
<b>SIGNATURE:</b>	/Judith Huerta/
<b>DATE SIGNED:</b>	01/24/2020
This document serves as an Oath/Declaration (37 CFR 1.63).	

**Total Attachments: 7**

source=2018\_IPM\_102813\_U1\_US\_DeclarationAssignment\_Filed20200124#page1.tif

source=2018\_IPM\_102813\_U1\_US\_DeclarationAssignment\_Filed20200124#page2.tif

source=2018\_IPM\_102813\_U1\_US\_DeclarationAssignment\_Filed20200124#page3.tif

source=2018\_IPM\_102813\_U1\_US\_DeclarationAssignment\_Filed20200124#page4.tif

source=2018\_IPM\_102813\_U1\_US\_DeclarationAssignment\_Filed20200124#page5.tif

source=2018\_IPM\_102813\_U1\_US\_DeclarationAssignment\_Filed20200124#page6.tif

source=2018\_IPM\_102813\_U1\_US\_DeclarationAssignment\_Filed20200124#page7.tif

**DECLARATION AND ASSIGNMENT**

**DOCKET NUMBER: 2018-IPM-102813 U1 PCT**

**TITLE: DECOUPLING TENSOR COMPONENTS WITHOUT MATRIX INVERSION**

As an inventor, I declare that:

This declaration is directed to the patent application(s) accompanying this declaration and assignment. The patent application(s) accompanying this Declaration and Assignment is referred to as the "Application." The term "Invention" means any disclosure, invention, improvement, or discovery disclosed in the Application.

**I affirm the following:**

- 1) the Application was made or authorized to be made by me;
- 2) I believe that I am the original inventor or an original joint inventor of a claimed Invention;
- 3) I have reviewed and understand the content of the Application, including the claims; and
- 4) I am aware that I have a duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined by 35 U.S.C. §1.56(b).

FURTHERMORE, the undersigned hereby assigns or have assigned, and hereby transfers or have transferred to **Halliburton Energy Services, Inc.**, a Delaware corporation having a principal place of business at 3000 N. Sam Houston Parkway E., Houston, TX 77032-3219, and any of its successors, legal representatives, and assignees the entire worldwide right, title, and interest in and to the Invention, the Application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefrom in the United States and in all foreign countries and jurisdictions, including all continuing applications (i.e., divisionals, continuations, continuations-in-part), reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents.

In addition, the undersigned authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to **Halliburton Energy Services, Inc.**, its successors, legal representatives, and assignees, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by **Halliburton Energy Services, Inc.**, its successors, legal representatives, and assignees to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made.

The undersigned also agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, for **Halliburton Energy Services, Inc.**, its successors, legal representatives, and assignees, whenever requested by **Halliburton Energy Services, Inc.**, its successors, legal representatives, or assignees.

The undersigned further agrees to: (a) cooperate with **Halliburton Energy Services, Inc.**, in the protection of the Invention and prosecution of domestic and foreign patent applications claiming the Invention; (b) execute, verify, acknowledge and deliver further documents, including patent applications and instruments of transfer; and (c) perform such other acts as **Halliburton Energy Services, Inc.**, lawfully may request to obtain or maintain any patent arising from the Application and any and all applications and registrations for the Invention in any and all countries.

The undersigned acknowledges any prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to **Halliburton Energy Services, Inc.**, and possesses the full and unencumbered right to assign and transfer the rights hereby assigned, and transferred. The undersigned has not executed, and will not execute, any document or instrument in conflict with this Assignment. The undersigned also hereby grants **Halliburton Energy Services, Inc.**, its successors, legal representatives, and assignees, the right to insert in this Assignment any further identification (including, but not limited to, the Application) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of **Texas**, and any disputes will be resolved in a **Texas** state court or federal court sited in **Texas**.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Assignor: Junsheng Hou

(Signature): Junsheng Hou

Name: Junsheng Hou

City/State: Houston/TX

Date: 3/7/2019

STATE OF TEXAS )

)ss

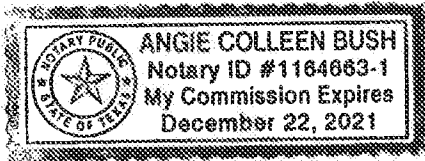
COUNTY OF HARRIS )

On this 7<sup>th</sup> day of March, 2019 before me personally appeared Junsheng Hou, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

[SEAL]

Angie Colleen Bush

Notary Public



Assignor: Michael S. Bittar

(Signature): Michael Bittar

Name: Michael Bittar

City/State: Houston, TX

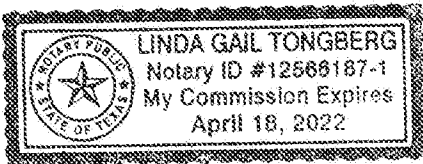
Date: March 11, 2019

STATE OF Texas )

)ss

COUNTY OF Harris )

On this 11<sup>th</sup> day of March, 2019 before me personally appeared Michael S. Bittar, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.



[SEAL]

Linda Gail Tongberg

Notary Public

**Assignor: Yijing Fan**

(Signature):     

Name:   Fan Yijing  

City/State:   Singapore  

Date:   06 Mar 2019  

On this   06   day of   Mar  , 20  19   before me personally appeared Yijing Fan, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

Witness

**Assignor: Li Pan**

(Signature): 潘立

Name: Li Pan

City/State: Singapore

Date: Mar 6, 2019

On this 06 day of Mar, 2019 before me personally appeared Li Pan, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

Yao Ge

Witness



