

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4916982

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
FENG LIANG	07/25/2017
B RAGHAVA REDDY	07/25/2017
LEIMING LI	07/25/2017
GHAITHAN A. AL-MUNTASHERI	07/25/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ARAMCO SERVICES COMPANY
<b>Street Address:</b>	16300 PARK ROW
<b>City:</b>	HOUSTON
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77084
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15922489
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(937)449-6405
<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>	937/449-6400
<b>Email:</b>	theresa.oldfield@dinsmore.com
<b>Correspondent Name:</b>	DINSMORE & SHOHL LLP
<b>Address Line 1:</b>	FIFTH THIRD CENTER, ONE S. MAIN STREET
<b>Address Line 2:</b>	SUITE 1300
<b>Address Line 4:</b>	DAYTON, OHIO 45402
<b>ATTORNEY DOCKET NUMBER:</b>	SA6192/ASC0093/SA6062V2
<b>NAME OF SUBMITTER:</b>	THERESA OLDFIELD
<b>SIGNATURE:</b>	/Theresa Oldfield/
<b>DATE SIGNED:</b>	04/16/2018
<b>Total Attachments: 8</b>	
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**CONFIDENTIAL**

**ASSIGNMENT OF INTELLECTUAL PROPERTY**

In consideration of my continued employment with Aramco Services Company ("ASC" or the "Company"), I have executed this Assignment of Intellectual Property ("Assignment") relating to the Intellectual Property more fully described in the document identified by ASC Tracking No. ASC0093 ("Invention Disclosure"), and agree to the following:

1. I do hereby assign to the Company all of my right, title and interest in the Invention Disclosure, including, but not limited to, proprietary information and Intellectual Property (the "Assigned Interests").
2. If requested by the Company, and at no expense to me, I agree to execute and deliver all papers and make all rightful oaths deemed useful or necessary by the Company in connection with the preparation, assignment, filing, and prosecution of applications for patents covering all such Assigned Interests and to lend such other assistance in obtaining, perfecting or enforcing such patents as the Company may request.
3. I agree to cooperate, both during my employment with the Company and for a reasonable time thereafter, in the prosecution or defense of any patent claims, litigation, and any other proceeding involving the Assigned Interests.
4. I understand that all Works I have created for the Company, or in pursuit of my duties to the Company, that relate to the Assigned Interests are Works made for hire and are owned by the Company.
5. For purposes of this Assignment, I agree that the following definitions apply:

"Intellectual Property" or "IP" includes patents, patent applications, utility models, industrial designs, inventions, trademarks, service marks, logos, trade dress, brand names, goodwill, domain names or other sources of origin, copyrights and moral rights, trade secrets, proprietary know-how and know-how, including, but not limited to Inventions, conceptions, developments, books, articles, workbooks, manuals, lab manuals, bibliographies, video or audio recordings, films, slides, website content, transparencies, charts, graphic materials, photographic or similar visual materials, film strips, multi-media materials, three-dimensional materials, presentations, exhibits, computer programs, software, and databases.

"Works" includes works of authorship fixed in a tangible medium of expression from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device, and include the product and results of services rendered to the Company, invention disclosures, drawings, plans, documents, flow charts, original photographs, graphics, graphic design, computer

files, work-up files, simulations, simulation files, formulations, source codes, software and/or programming.

6. I understand and agree that the foregoing covenants shall inure to the benefit of the Company, its successors, assigns or designees, meaning that ASC, its successors, assigns and designees shall have the right to make, sell, use, assign, license and take any and all other actions as the owner of all rights associated with the Assigned Interests.
7. I understand and agree that this Assignment shall be binding upon me during and after my assignment by the Company and upon my heirs, executors, administrators and assigns.

Signature: Feng Liang  
Name (printed): Feng Liang  
Dated this 25 day of July, 2017

Witnessed by me on this 25 day of July, 2017  
Signature: [Signature]  
Name (printed): Yanhui Han

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Signature: B. Raghava Reddy  
Name (printed): B. RAGHAVA REDDY  
Dated this 25 day of July, 20 17

Witnessed by me on this 25 day of July, 20 17  
Signature: [Signature]  
Name (printed): Yanhui Han

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7. I understand and agree that this Assignment shall be binding upon me during and after my assignment by the Company and upon my heirs, executors, administrators and assigns.

Signature: Leiming Li  
Name (printed): Leiming Li  
Dated this 25<sup>th</sup> day of July, 2017

Witnessed by me on this 25 day of July, 2017  
Signature: [Signature]  
Name (printed): Yankui Han

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Signature: G. Muntashir  
Name (printed): Ghaithan AlMuntashir  
Dated this 25 day of July, 2017

Witnessed by me on this 25 day of July, 2017  
Signature: [Signature]  
Name (printed): Tupkie Algharabi