505729428 10/18/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5776239

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ARAMCO SERVICES COMPANY	09/01/2015

RECEIVING PARTY DATA

Name:	SAUDI ARABIAN OIL COMPANY
Street Address:	1 EASTERN AVENUE
City:	DHAHRAN
State/Country:	SAUDI ARABIA
Postal Code:	31311

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16654963

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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: +1 (713) 654-5398

Email: matteo@fr.com, apsi@fr.com

Correspondent Name: FLORON C. FARIES

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	38136-0119004
NAME OF SUBMITTER:	KIRSTIN MATTEO
SIGNATURE:	/kirstin matteo/
DATE SIGNED:	10/18/2019

Total Attachments: 4

source=38136-0119004; SA71121 - assignment (ASC to SAO) - FILED (from parent appl)#page1.tif source=38136-0119004; SA71121 - assignment (ASC to SAO) - FILED (from parent appl)#page2.tif source=38136-0119004; SA71121 - assignment (ASC to SAO) - FILED (from parent appl)#page3.tif source=38136-0119004; SA71121 - assignment (ASC to SAO) - FILED (from parent appl)#page4.tif

PATENT 505729428 REEL: 050757 FRAME: 0336

INTELLECTUAL PROPERTY ASSIGNMENT FROM ARAMCO SERVICES COMPANY TO SAUDI ARABIAN OIL COMPANY

This Intellectual Property Assignment ("Assignment"), dated as of September 1, 2015, is made by Aramco Services Company, a Delaware corporation, having offices at 9009 West Loop South, Houston, Texas 77096-1719 ("Assignor"), in favor of Saudi Arabian Oil Company, a company with limited liability, duly organized and existing under the laws of the Kingdom of Saudi Arabia and established by Royal Decree M/8 dated 4/4/1409 H. ("Assignee") together recognized as "Parties".

RECITALS

WHEREAS, the parties previously executed an Intellectual Property Assignment, dated as of April 13, 2015, in which the Parties agreed that Assignor shall continue to assign intellectual property to Assignee on a quarterly basis; and

WHEREAS Assignor is the present owner of the rights, title and interest in the invention disclosures, patents and patent applications set forth in the attached Schedule A (the "Intellectual Property") as of September 1, 2015;

NOW, for good and valuable consideration, the receipt and sufficiency of which is acknowledged, the Parties agree as follows:

- 1. <u>Assignment of Intellectual Property</u>. Assignor assigns to Assignee all of its rights, title and interest in and to the Intellectual Property, including, but not limited to:
- (a) the right to make, use and sell the inventions associated with the Intellectual Property;
- (b) the right to take all legal actions on account of past, present and future infringement of the Intellectual Property;
- (c) the right to conduct and control all protection activities associated with the Intellectual Property as fully and entirely as the same would have been held and enjoyed by Assignor if this assignment had not been made, including for example: the filing and prosecution of any and all patent applications, including divisions, continuations, and continuations-in-part of existing applications assigned by this Assignment; reexaminations, reissues or other administrative proceedings; and the payment of issuance and maintenance fees; and
 - (d) any and all rights and obligations held by the Assignor arising under the Assignment in relation to the Intellectual Property.
- 2. Further Assurances. Assignor hereby covenants and agrees that it will at any time, upon the request and at the expense of Assignee but without further compensation, cooperate with Assignee in the protection of the Intellectual Property, including: all lawful acts that may be necessary to perfect the title to the Intellectual Property, such as the execution and delivery of

PATENT REEL: 050757 FRAME: 0337 formal documents; cooperate with Assignee in the enforcement or licensing of the Intellectual Property, including in any interference, reexamination, or other litigation; communicate to Assignee, its successors and assigns, any facts known respecting the Intellectual Property and its history, and generally do everything possible which the Assignee shall consider desirable for vesting title to improvements in the Intellectual Property.

3. <u>Warranties</u>. Assignor hereby warrants that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the Assignor, and that the full right to convey the same as herein expressed is possessed by the Assignor, to the extent set forth in Schedule A.

IN WITNESS WHEREOF, the Parties have executed this Assignment on the first date of the Term.

ARAMCO SERVICES COMPANY

Bv:

Basíl A. Abul-Hamayel

President

SAUDI ARABIAN OIL COMPANY

By:

Ahmed Khowaiter

Chief Technology Officer

Intellectual Property Assignment from Aramco Services Company to Saudi Arabian Oil Company

Schedule A September 1, 2015

3000 1000 1000 1000	ASC Docket Number	Application Date	Application Kumber	Inventors
Liquid Level, Corrosion, Scale Hydrocarbon Precipitation, Pressure Survey and Scale Depth Determination Using TM01 and TE01 Modes	ASC0035			Sunder Ramachandran (ASC) Aydin Babakhani (Intelligent Reservoir LLC— working under agreement by which all IP is owned by ASC as work for hire)
Methods to Increase Hydraulic Fracturing Efficiencies in Source Rock Reservoirs	ASC0037	9/3/18	62/213744	Katie Hull (ASC) Chaithan Al-Muntasheri (ASC) David Jacobi (ASC) Younane N. Abousleiman (ASC)
Exhaust Blow-Down Period Reformate Generation and Re-Breath Between Paired Cylinders	ASC0041			Nayan Engineer (ASC)
Water-based Sealing Compositions Comprising Ethylene/Maleic Anhydride/Maleic Acid Terpolymer Gels	ASC0046			B. Raghava Reddy (ASC)
Non-aqueous Sealing Compositions Comprising Ethylene Copolymers Containing Eroxy Groups	ASC0048			B. Raghava Reddy (ASC)
Application of Nanomaterials in High Temperature Fracturing Fluid	ASC0057	8/4/15	62/200807	Leiming Li (ASC) Fong Liang (ASC) Ohaithan Al-Muntasheri (ASC)
A Method to Predict Changes in Capillary Pressure and Relative Permeabilities in Porous Medium Due to Mineral Precipitation and Dissolution	ASC0058			Shuo Zhang (ASC) HuiHai Liu (ASC)

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				s departed Commission (1 No. 1)
7. C. 7. 5. 5.				Matthew Hilliger (ASC)
Method for Measurement of Hydrocarbon	ASC0065			Jinhong Chen (ASC)
Content of Shale Gas Reservoir				Dan Georgi (ASC)
				Hui-Hai Liu (ASC)
				Stacy Althaus (ASC)
Method and Device of Measuring Fluid	ASC0070	8/7/15	62/202512	Miguel Gonzalez (ASC)
Pronerties Iking an Electromechanical				Max Deffenbaugh (ASC)
Regulator				Robert Adams (ASC)
NACONO CONTRACTOR OF THE CONTR		********		Ali Al Haddad (ASC)
Electromagnetic Logging (EM) Using EM	ASC0072			Teruhiko Hagiwara (ASC)
Impulses from Tilted Antennas				
ired Cylinders	ASC0074			Jong H. Lee (ASC)
•				Nayan Engineer (ASC)
High Performance Water Based Drilling Fluid	ASC0077			Pubudu Gammage (ASC)
for Higher Rate of Penetration				Shatha Amaji (SAO)
ensile Strength	ASC0080	9/3/15	62/213752	
of Kerogen in Shake by Micro-Beam				
Manufacturing and Testing				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

RECORDED: 10/18/2019

PATENT REEL: 050757 FRAME: 0340