

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5090746

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KAREEMUDDIN SHAIK	07/18/2018
LIANHUI DING	07/18/2018
MAZIN TAMIMI	07/18/2018
IBRAHIM ABBA	08/08/2018
ABDENNOUR BOURANE	08/08/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SAUDI ARABIAN OIL COMPANY
<b>Street Address:</b>	P.O. BOX 5000
<b>City:</b>	DHAHRAN
<b>State/Country:</b>	SAUDI ARABIA
<b>Postal Code:</b>	31311
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16036260
<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>	daytonipdocket@dinsmore.com
<b>Correspondent Name:</b>	DINSMORE & SHOHL LLP
<b>Address Line 1:</b>	FIFTH THIRD CENTER, ONE SOUTH MAIN STREE
<b>Address Line 2:</b>	SUITE 1300
<b>Address Line 4:</b>	DAYTON, OHIO 45402-2023
<b>ATTORNEY DOCKET NUMBER:</b>	SA6159/SA 6159 PA1
<b>NAME OF SUBMITTER:</b>	THERESA OLDFIELD
<b>SIGNATURE:</b>	/Theresa Oldfield/
<b>DATE SIGNED:</b>	08/09/2018
<b>Total Attachments: 6</b>	

source=SA6159PA1 -SA6159 - Assignment#page1.tif  
source=SA6159PA1 -SA6159 - Assignment#page2.tif  
source=SA6159PA1 -SA6159 - Assignment#page3.tif  
source=SA6159PA1 -SA6159 - Assignment#page4.tif  
source=SA6159PA1 -SA6159 - Assignment#page5.tif  
source=SA6159PA1 -SA6159 - Assignment#page6.tif

# ASSIGNMENT

WHEREAS, we, **Kareemuddin Shaik**, of Dhahran, Saudi Arabia, **Lianhui Ding** of Dhahran, Saudi Arabia, **Mazin Tamimi** of Dhahran, Saudi Arabia, **Ibrahim Abba** of Dhahran, Saudi Arabia and **Abdenmour Bourane** of Dhahran, Saudi Arabia hereinafter called the *ASSIGNORS*, invented certain new and useful SYSTEMS AND METHODS FOR PROCESSING HEAVY OILS BY OIL UPGRADING FOLLOWED BY STEAM CRACKING, for which the *ASSIGNORS* executed a United States Non-Provisional Patent Application, filed on July 16, 2018, under

Patent Application Serial No.: 16/036,260 ;  
Attorney Docket No.: SA6159 / SA 6159 PA1 ;

WHEREAS, the *ASSIGNORS* hereby authorize and request the attorney(s) and/or agent(s) recording the present assignment, to insert above the filing date and application number of said application, when known;

WHEREAS, **Saudi Arabian Oil Company**, a corporation of Saudi Arabia, with a place of business at P.O. Box 5000, Dhahran 31311, Kingdom of Saudi Arabia, hereinafter called the *ASSIGNEE*, is desirous of acquiring the entire right, title and interest in and to said application and the inventions therein disclosed and any letters patent that may issue thereon;

AND, WHEREAS, it is the intent of the *ASSIGNORS* to assign all rights, including but not limited to all substantive rights as well as the (future) right to claim priority and the right to be granted a patent in any and all PCT Contracting States to the above referenced application to the Assignee;

NOW, THEREFORE, in consideration of the sum of One Dollar (US \$1.00) or other good and valuable consideration, the receipt of which is hereby acknowledged, *ASSIGNORS* hereby sell, assign and transfer unto said *ASSIGNEE*, its successors and assigns, the entire right, title and interest, including the right to sue for past infringement, if any, and the right to claim priority, in and to said application, the inventions therein disclosed, and any improvements thereon, and in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possession, in any and all foreign countries, including without limit all PCT Contracting States, all GCC Member States, and in and to any and all divisions, continuations, substitutions, renewals, re-examination, extension and reissues thereof, and any other applications claiming priority thereto;

*ASSIGNORS* hereby authorize and request the Patent Office Officials in the United States and its territorial possessions, and in any and all foreign countries, to issue, when granted, any and all Letters Patents thereon, and reissues thereof, to said *ASSIGNEE* as the assignee of the entire right, title and interest in and to the same, for the sole use and behalf of said *ASSIGNEE* and said *ASSIGNEE*'s successors and assigns, to the full end of the term for

[SA6159/SA 6159 PA1]

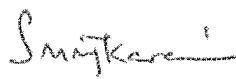
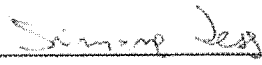
which said Letters Patents may be granted, as fully and entirely as the same would have been held by *ASSIGNORS* had this assignment and sale not been made; and

*ASSIGNORS* hereby authorize said *ASSIGNEE*, its successors and assigns, to file in its own name applications for patent in foreign countries in connection with the inventions hereby transferred, under the International Convention claiming the priority of said United States application or otherwise, and to secure in its own name the patent or patents issued thereon; and

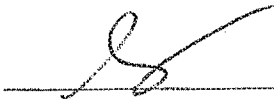
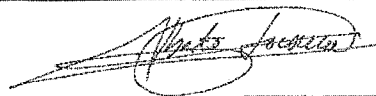
*ASSIGNORS* hereby does agree that, upon request, *ASSIGNORS* will sign all papers, and make all rightful oaths, and do all acts which said *ASSIGNEE*, its successors or assigns, may consider necessary in connection with said United States application, and in connection with any other United States or foreign applications that may be filed in connection with said inventions, and with any improvements thereon, and in connection with any patents issued or reissued thereon.

*ASSIGNORS*:

IN WITNESS WHEREOF, the *ASSIGNORS* have hereunto set his hand and seal.

<b><i>Inventor I: Kareemuddin Shaik</i></b>	
Signed:	
Printed Name:	KAREEMUDDIN SHAIK
Date:	07/18/18
<b><i>Witness:</i></b>	
Signed:	
Printed Name:	SIMONE LESS
Title:	SR. SCIENTIST



[SA6159/SA 6159 PA1]

<b>Inventor 2: Lianhui Ding</b>	
Signed:	
Printed Name:	Lianhui Ding
Date:	7/18/2018
<b>Witness:</b>	
Signed:	
Printed Name:	ALBERTO LOZANO
Title:	SR LAB SCIENTIST


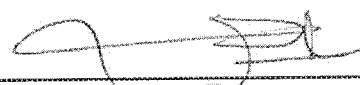
<b>Inventor 3: Mazin Tamimi</b>	
Signed:	
Printed Name:	
Date:	
<b>Witness:</b>	
Signed:	
Printed Name:	
Title:	

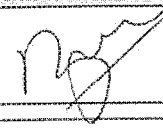

[SA6159/SA 6159 PA1]

<b>Inventor 2: Lianhui Ding</b>	
Signed:	
Printed Name:	
Date:	
<b>Witness:</b>	
Signed:	
Printed Name:	
Title:	

<b>Inventor 3: Mazin Tamimi</b>	
Signed:	
Printed Name:	MAZIN TAMIMI
Date:	7-18-2018
<b>Witness:</b>	
Signed:	
Printed Name:	Ibrahim Al-Nutqifi
Title:	Engineer III

[SA6159/SA 6159 PA1]

<b>Inventor 4: Ibrahim Abba</b>	
Signed:	
Printed Name:	Ibrahim Abba
Date:	8.8.18
<b>Witness:</b>	
Signed:	
Printed Name:	Abdullah Almalh:
Title:	Team leader

<b>Inventor 4: Abdenmour Bourane</b>	
Signed:	
Printed Name:	Abdenmour BOURANE
Date:	08/08/2018
<b>Witness:</b>	
Signed:	 AKHRAS
Printed Name:	Abdul Rahman AKHRAS
Title:	8/8/2018


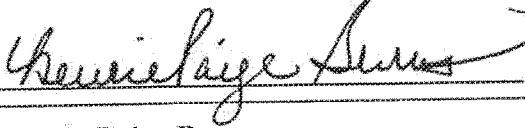
## Acceptance of Assignment

WHEREAS, from time to time, *ASSIGNORS* named as inventors in particular United States Patent Applications filed on behalf of the Saudi Arabian Oil Company, a corporation of Saudi Arabia, with a place of business at P.O. Box 5000, Dhahran 31311, Kingdom of Saudi Arabia, hereinafter called the *ASSIGNEE*, including those inventors named in the ASSIGNMENT attached hereto, will assign particular rights in the patent application, and related patent applications, to the *ASSIGNEE*;

WHEREAS, the *ASSIGNEE* hereby authorizes and requests the attorneys and/or agents recording the aforementioned ASSIGNMENT, to insert the application number, filing date, and attorney docket number of the patent application that is the subject of the aforementioned ASSIGNMENT, below:

<b>Application Data:</b>	
Application Number:	16/036,260
Filing Date:	07/16/2018
Attorney Docket No:	SA6159/SA 6159 PA1

AND, WHEREAS, ASSIGNEE hereby accepts and receives the aforementioned ASSIGNMENT upon execution by ASSIGNOR, which execution may precede or follow ASSIGNEE'S execution below:

<b>Assignee:</b>	
Signed:	
Printed Name:	Melton E. Knotts
Title:	Assistant Corporate Secretary
Date:	February 11, 2018
<b>Witness:</b>	
Signed:	
Printed Name:	Laurie Paige Burns
Title:	Paralegal
Date:	February 11, 2018