505019145 07/25/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

tylesheet Version VI.2

EPAS ID: PAT5065893

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------|----------------|
| KI-HYOUK CHOI | 03/22/2018 |
| VINOD RAMASESHAN | 03/23/2018 |
| MOHNNAD H. ALABSI | 03/22/2018 |

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: | 15896718 |

CORRESPONDENCE DATA

Fax Number:

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: 713-223-2300

Email: docketing@bracewell.com

Correspondent Name: BRACEWELL LLP Address Line 1: P.O. BOX 61389

Address Line 4: HOUSTON, TEXAS 77208-1389

| ATTORNEY DOCKET NUMBER: | 0004159.005823 (SA5823) | | |
|-------------------------|-------------------------|--|--|
| NAME OF SUBMITTER: | ESMERALDA MENDOZA | | |
| SIGNATURE: | /Eleanor L. Tyson/ | | |
| DATE SIGNED: | 07/25/2018 | | |

Total Attachments: 4

source=SA5823_Assignment#page1.tif source=SA5823_Assignment#page2.tif source=SA5823_Assignment#page3.tif source=SA5823_Assignment#page4.tif

PATENT 505019145 REEL: 046454 FRAME: 0133

NON-PROVISIONAL ASSIGNMENT

WHEREAS, we, Ki-Hyouk CHOI, a citizen of Republic of Korea, Vinod RAMASESHAN, a citizen of United Kingdom, and Mohnnad H. ALABSI, a citizen of Saudi Arabia, are the sole inventors of PRODUCTION OF HIGH QUALITY DIESEL BY SUPERCRITICAL WATER PROCESS, for which application for United States Letters Patent No. 15/896,718 was filed on February 14, 2018; and

WHEREAS, SAUDI ARABIAN OIL COMPANY, a Company with Limited Liability of Saudi Arabia, with a business address of 1 Eastern Avenue, Dhahran 31311, Saudi Arabia, hereafter "SAUDI ARAMCO," is desirous of acquiring the entire right, title and interest in and to the aforesaid invention throughout the world, and all right, title and interest in, to and under any and all Letters Patent of the United States and all other countries throughout the world;

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to me in hand paid by SAUDI ARAMCO and for other good and valuable considerations, the receipt of which is hereby acknowledged, I hereby sell, assign, transfer and set over to SAUDI ARAMCO, all right, title and interest in and to the said invention throughout the world, and said application for U.S. Letters Patent, and any and all divisions, continuations, reexaminations and reissues thereof, and any and all Letters Patent of the United States and foreign countries which may be granted therefor, the same to be held and enjoyed by them for their own use and benefit, and for the use and benefit of their successors, assigns, or other legal representatives, to the end of the term or terms for which said Letters Patent of the United States or foreign countries are or may be granted, reexamined or reissued, as fully and entirely as the same would have been held and enjoyed by me if this assignment and sale had not been made.

And I hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States on said invention or resulting from said application and from any and all divisions, continuations, and reissues thereof, to SAUDI ARAMCO, as assignee of our entire interest, and hereby covenant that I have the full right to convey the entire interest herein assigned, and that I have not executed and will not execute any agreement in conflict herewith.

Saudi Aramco: Confidential

And I further hereby covenant and agree that I will, at any time, upon request, execute and deliver any and all papers that may be necessary or desirable to perfect the title of said invention and to such Letters Patent as may be granted therefor, to SAUDI ARAMCO, its successors, assigns, or other legal representatives and that if SAUDI ARAMCO shall desire to file any divisional or continuation applications or to secure a reexamination or reissue of such Letters Patent, or to file a disclaimer relating thereto, will upon request, sign all papers, make all rightful oaths and do all lawful acts requisite for the filing of such divisional or continuation application, or such application for reissue and the procuring thereof, and for the filing of such disclaimer, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

And I do further covenant and agree that I will, at any time upon request, communicate to SAUDI ARAMCO, its successors, assigns or other legal representatives, such facts relating to said invention and Letters Patent or the file history thereof as may be known to me, and testify as to the same in any interference or other litigation when requested so to do, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

| EXECUTED THIS | 22 day of | March | , 2018. |
|---------------|-----------|---------------|------------|
| | | | |
| | | | |
| | | (h.= | 片 木 |
| | | Ki-Hyouk CHOI | St. St. |

Saudi Aramco: Confidential

EXECUTED THIS 23 day of MARCH

2018

Vinou RAMASESHAN

PATENT REEL: 046454 FRAME: 0136

| Docket No. | 00041 | 59 | 005823 |
|------------|-------|----|--------|
| | COUTI | | 1313 |

EXECUTED THIS _22 __day of _____March______, 2018.

Mohnnad H. ALABSI

Saudi Aramco: Confidential

PATENT REEL: 046454 FRAME: 0137