505532412 06/19/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5579209

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BRIAN HANNA	04/08/2019

RECEIVING PARTY DATA

Name:	ARAMCO SERVICES COMPANY
Street Address:	1200 SMITH STREET
Internal Address:	TWO ALLEN BUILDING
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77002

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16156616

CORRESPONDENCE DATA

Fax Number: (937)449-6405

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: 937/449-6400

Email: daytonipdocket@dinsmore.com
Correspondent Name: DINSMORE & SHOHL LLP

Address Line 1: FIFTH THIRD CENTER, ONE S. MAIN STREET

Address Line 2: SUITE 1300

Address Line 4: DAYTON, OHIO 45402

ATTORNEY DOCKET NUMBER:	SA6178/SA 6178 PA	
NAME OF SUBMITTER:	THERESA OLDFIELD	
SIGNATURE:	/Theresa Oldfield/	
DATE SIGNED:	06/19/2019	

Total Attachments: 3

source=SA6178 - Assignment - Hanna to Aramco Services Co#page1.tif source=SA6178 - Assignment - Hanna to Aramco Services Co#page2.tif source=SA6178 - Assignment - Hanna to Aramco Services Co#page3.tif

PATENT 505532412 REEL: 049515 FRAME: 0112

ASSIGNMENT

WHEREAS, I, Brian Hanna of West Roxbury, MA hereinafter called the ASSIGNOR, invented certain new and useful CATALYSTS SYSTEMS THAT INCLUDE METAL CO-CATALYSTS FOR THE PRODUCTION OF PROPYLENE, for which the ASSIGNOR executed a United States Non-Provisional Patent Application, filed on October 10, 2018, under

Patent Application Seri	ial No.:	16/156,616	
Attorney Docket No.:			,

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, **Aramco Services Company**, a Company in the State of Texas, with a place of business at 1200 Smith Street, Two Allen Building, Houston, Texas 77002, 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 ASSIGNOR 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, *ASSIGNOR* does 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;

ASSIGNOR does 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 which said Letters Patents may be granted, as fully and entirely as the same would have been

Assignment: Page 1 of 3 [SA6178/SA 6178 PA]

PATENT REEL: 049515 FRAME: 0113 held by ASSIGNOR had this assignment and sale not been made; and

ASSIGNOR does 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

ASSIGNOR does hereby agree that, upon request, ASSIGNOR 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.

ASSIGNOR:

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

Inventor 1: Br	ian Hanna .	
Signed:		
Date:	04/08/19	
Witness:		
Signed:	Much hatial	
Printed Name:	Michele L. Ostraat	
Title:	Rosearch Center Leader-Dome	han

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ACCEPTANCE OF ASSIGNMENT

WHEREAS, from time to time, ASSIGNORS named as inventors in particular United States Patent Applications including those inventors named in the ASSIGNMENT attached hereto, will assign particular rights in the patent application, and related patent applications, to the ASSIGNEE, where the ASSIGNEE is Aramco Services Company, a Company in the State of Texas, with a place of business as 1200 Smith Street, Two Allen Building, Houston, Texas 77002;

WHEREAS, the ASSIGNEE hereby authorizes and requests the attorneys and/or agents of the law firm of Dinsmore & Shohl LLP recording the aforementioned ASSIGNMENT, to insert the particular application number, filing date, and attorney docket number of the particular patent application that is the subject of the aforementioned ASSIGNMENT below;

Application Data:	
Application Number:	16/156,616
Filing Date:	October 18, 2018
Attorney Docket No.	SA6178/ASC0381-US01-NP/SA6178PA

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

Assignee: Aramco Services Company	
Signed:	5/flator
Printed Name:	Bobby J. HORTON
Title:	General Coursel & Congrest Secretary
Date:	May 16, 2019
Witness:	0
Signed:	Shy faw
Printed Name:	Sheny Baner
Title:	Secretary
Date:	5/10/2019

PATENT REEL: 049515 FRAME: 0115

RECORDED: 06/19/2019