505050083 08/14/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5096837

SUBMISSION TYPE:		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY DA	٩TA				
Name				Execution Date	
STEPHEN J MCCARTHY				07/10/2018	
PAUL PODSIADLO				07/16/2018	
GARY P SCHLEICHER				08/08/2018	
TIMOTHY L HILBERT			07/16/2018		
TECK-MUI HOO				07/09/2018	
ERIC D JOSECK				07/09/2018	
RECEIVING PARTY DA	 TA				
Name:	EXXO	NMOBIL RESEARCH AND ENG	NEERING	i COMPANY	
Street Address:	1545 ROUTE 22 EAST				
City:	ANNANDALE				
State/Country:	NEW JERSEY				
Postal Code:	08801				
PROPERTY NUMBERS	Total: 1				
Property Type		Number			
Application Number: 160		16038851			
CORRESPONDENCE D	ΔΤΔ				
Fax Number:		(908)335-1065			
		o the e-mail address first; if tha			
using a fax number, if p Phone:	provided	d; if that is unsuccessful, it will	be sent v	ria US Mail.	
Email:	346-259-7078 ipg@exxonmobil.com				
Correspondent Name:		EXXONMOBIL RESEARCH AN		ERING COMPANY	
Address Line 1:	1545 ROUTE 22 EAST				
Address Line 4:	ANNANDALE, NEW JERSEY 08801				
ATTORNEY DOCKET NU	JMBER:	2017EM253-US2			
NAME OF SUBMITTER:		PRIYA G. PRASAD			
SIGNATURE:		/PRIYA G. PRASAD/			
DATE SIGNED:		08/14/2018			

Total Attachments: 6

Application Serial No. 16/038,851

EMRE Docket No. 2017EM253-US2

Timothy L. Hilbert

ASSIGNMENT INVENTOR or INVENTORS:

Gary P. Schleicher

Stephen J. McCarthy Teck-Mui Hoo

PATENT TRADEMARK OFFICE

Paul Podsiadlo Eric D. Joseck

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to <u>ExxonMobil Research and Engineering Company</u> (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

ACTIVATION OF NOBLE METAL CATALYSTS ON SILICEOUS SUPPORTS

9th, 10th, &16th July

said application having been executed on the 8th day(s) of August , 2018, and being forther identified as EMRE Docket No. 2017EM253-US2; all rights of priority created by said application under provisions of international convention or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date_7/10/18	Inventor	(LS)	Winess Onistopher O. Milato
Date	Inventor Paul Podsiadlo	(LS)	Witness
Date	Inventor Gary P. Schleicher	(LS)	Witness
Date	Inventor Timothy L. Hilbert	(LS)	Witness

27810 27810 PATENT TRADEMARK OFFICE

Application Serial No.

16/038,851

EMRE Docket No. 2017EM253-US2

Timothy L. Hilbert

ASSIGNMENT INVENTOR or INVENTORS:

Gary P. Schleicher

Stephen J. McCarthy Teck-Mui Hoo

Eric D. Joseck

Paul Podsiadlo

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Research and Engineering Company (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

ACTIVATION OF NOBLE METAL CATALYSTS ON SILICEOUS SUPPORTS

9th, 10th, &16th July

said application having been executed on the 8th day(s) of August , 2018, and being further identified as EMRE Docket No. 2017EM253-US2; all rights of priority created by said application under provisions of international convention or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date	Inventor	(LS)	Witness
Date 711612018	Stephen J. McCarthy Inventor Paul Podsiadlo	<u>)</u> (LS)	wiiness <u>K.M. Kasi</u> le
Date	Inventor Gary P. Schleicher	<i>(LS</i>)	Witness
Date	Inventor Timothy L. Hilbert	(LS)	Witness

Page 1 of 2

PATENT REEL: 046633 FRAME: 0044

Application Serial No.

16/038,851

EMRE Docket No. 2017EM253-US2

ASSIGNMENT INVENTOR or INVENTORS:

Gary P. Schleicher

Stephen J. McCarthy Teck-Mui Hoo

Eric D. Joseck

Paul Podsiadlo

Timothy L. Hilbert

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to <u>ExxonMobil Research and Engineering Company</u> (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

ACTIVATION OF NOBLE METAL CATALYSTS ON SILICEOUS SUPPORTS

9th, 10th, &16th July

said application having been executed on the 8th day(s) of August , 2018, and being further identified as EMRE Docket No. 2017EM253-US2; all rights of priority created by said application under provisions of international convention or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date	Inventor	(LS)	Witness
	Stephen J. McCarthy		
Date	Inventor	(L.S)	Witness
- N. C. 2018	Paul Podsiadlo		- Hoods Villo
Date UANS D 10	Gary P. Schleicher	<u>~</u> (L))	Witness Contraction
Date	Inventor Timothy L. Hilbert	(<i>I</i> .S)	Witness

Page 1 of 2

PATENT REEL: 046633 FRAME: 0045

27810 PATENT TRADEMARK OFFICE

Application Serial No. 16/038,851

EMRE Docket No. 2017EM253-US2

Timothy L. Hilbert

ASSIGNMENT INVENTOR or INVENTORS:

Gary P. Schleicher

Stephen J. McCarthy Teck-Mui Hoo Paul Podsiadlo Eric D. Joseck

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Research and Engineering Company (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

ACTIVATION OF NOBLE METAL CATALYSTS ON SILICEOUS SUPPORTS

9th, 10th, &16th July

said application having been executed on the 8th day(s) of August , 2018, and being further identified as EMRE Docket No. 2017EM253-US2; all rights of priority created by said application under provisions of international convention or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date	Inventor (LS)	Witness
	Stephen J. McCarthy	
Date	Inventor(LS) Paul Podsiadlo	Witness
Date	Inventor (LS) Gary P. Schleicher	Witness
Date_Jerber 16, 2018	Inventor June 14 La June (LS) Timothy L. Hilbert	Wilness <u>2200</u>

Page 1 of 2

Application Serial No. 16/038,851

EMRE Docket No. 2017EM253-US2

ASSIGNMENT INVENTOR of INVENTORS:

 Stephen J. McCarthy
 Paul Podsiadlo
 Gary P. Schleicher
 Timothy L. Hilbert

 Teck-Mui Hoo
 Eric D. Joseck
 Timothy L. Hilbert

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to <u>ExxonMobil Research and Engineering Company</u> (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

ACTIVATION OF NOBLE METAL CATALYSTS ON SILICEOUS SUPPORTS

9th, 10th, &16th July

said application having been executed on the 8th day(s) of August , 2018, and being further identified as EMRE Docket No. 2017EM253-US2; all rights of priority created by said application under provisions of international convention or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

(LS)

Date 7/9/2018

PATENT TRADEMARK OFFICE

Inventor (LS) Teck-Mui Hoo

Witness Witness

Date

Inventor Eric D. Joseck

PATENT REEL: 046633 FRAME: 0047

Application Serial No. 16/038,851

EMRE Docket No. 2017EM253-US2

ASSIGNMENT **INVENTOR or INVENTORS:**

Stephen J. McCarthy **Paul Podsiadlo** Garv P. Schleicher Timoshy L. Hilbert Teck-Mui Hoo Eric D. Joseck

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Research and Engineering Company (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

ACTIVATION OF NOBLE METAL CATALYSTS ON SILICEOUS SUPPORTS

9th, 10th, &16th July

day(s) of August said application having been executed on the 8th . 2018, and being further identified as EMRE Docket No. 2017EM253-US2; all rights of priority created by said application under provisions of international convention or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date	Inventor	(LS)	Witness
Duro <u>7/1/2018</u>	Inventor	(LS)	Winness <u>Center</u>

Page 2 of 2

RECORDED: 08/14/2018

PATENT TRADEMARK OFFICE