504380131 05/23/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4426826

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DANA W. NOURI	02/28/2017
HANS G. KORSTEN	05/18/2017
BENJAMIN S. UMANSKY	05/11/2017

RECEIVING PARTY DATA

Name:	EXXONMOBIL RESEARCH AND ENGINEERING COMPANY
Street Address:	1545 ROUTE 22 EAST
Internal Address:	P.O. BOX 900
City:	ANNANDALE
State/Country:	NEW JERSEY
Postal Code:	08801-0900

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15434408

CORRESPONDENCE DATA

Fax Number: (908)335-3649

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: 908-335-3202

Email: jocelyn.k.justice@exxonmobil.com

Correspondent Name: EXXONMOBIL RESEARCH AND ENGINEERING COMPANY

Address Line 1: 1545 ROUTE 22 EAST

Address Line 2: P.O. BOX 900

Address Line 4: ANNANDALE, NEW JERSEY 08801-0900

ATTORNEY DOCKET NUMBER: 2016EM035 US2 2010-000051	
NAME OF SUBMITTER:	ANDREW T. WARD
SIGNATURE:	/Andrew T. Ward/
DATE SIGNED:	05/23/2017

Total Attachments: 3

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PATENT 504380131 REEL: 042478 FRAME: 0213

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PATENT REEL: 042478 FRAME: 0214

27810 27810 PATENT TRADEMARK OFFICE

Application Serial No. 15/434,408

EMRE Docket No. 2016EM035-US2

ASSIGNMENT INVENTOR or INVENTORS:

DANA W. NOURI

HANS G. KORSTEN

BENJAMIN S. UMANSKY

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

ABNORMAL TEMPERATURE DETECTION FOR FIXED BED REACTORS

28th

February

11th and

said application having been executed on the 18th day(s) of May , 2017, and being further identified as EMRE Docket No. 2016EM035-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 2/23/2017	Inventor DANA W HORTH	(LS)	Witness AAAA
Date	InventorHANS G. KORSTEN	(LS)	Witness
Date	InventorBENJAMIN S. UMANSK	(<i>LS</i>)	Witness

PATENT REEL: 042478 FRAME: 0215 *27810* 27810 PATENT TRADEMARK OFFICE

		Application Serial No.	15/434,408
		EMRE Docket No.	2016EM035-US2
	ASSIGNMENT INVENTOR or INVENTORS:	•	
DANA W. NOURI	hans G. Korsten	BENJAMIN S. UMANS	KY
For good and valuable consideration, the undeagree(s) as follows:	ersigned person(s) named above, here	in referred to as UNDERSIC	INED, hereby
 UNDERSIGNED hereby assign(s) t Engineering Company), a corporation of Dela as ASSIGNEE, the entire right, title and intercinvention or improvement and to all patent ap- entitled 	tware, its successors, legal representates, for the United States and all foreign	tives and assigns, herein refe gn countries, in and to UND	med to collectively ERSIGNED's
ABNORMAL TEMP	ERATURE DETECTION FOR FIXE	ED BED REACTORS	
said application having been executed on the EMRE Docket No. 2016EM035-US2; all righ convention or treaties.	28th February 11th and 18th day(s) of May its of priority created by said applicati	, 2017, and being further ion under provisions of inter	identified as
2) UNDERSIGNED agree(s) upon the ing to obtaining patents and the prosecution the or substitutes therefor or registrations thereof, the United States Patent and Trademark Office. 3) UNDERSIGNED agree(s) that in the patent issued thereon, or any reissue or applied UNDERSIGNED will cooperate with ASSIGNED executing all documents and giving and produce.	nereof for said invention or improvem, and any specific separate assignment and any foreign patent office that A the event of any application based on sation for the reissue thereof, becomin NEE to the best of the ability of UND	ent, and any continuations of any of the above require SSIGNEE may deem necess aid assigned invention or im g involved in priority of inversions.	f such applications ed for recording in ary or expedient. provement, or ention proceedings,
UNDERSIGNED agree(s) to perform and foreign patents covering said invention or and as entirely as the same would have been him.	m upon ASSIGNEE's request any an improvement and to vest all rights the	erein hereby conveyed to A	SSIGNEE, as fully
5) UNDERSIGNED hereby authorized executed the Declaration for the above-referer	(s) ASSIGNEE to insert in this instru		
IN WITNESS WHEREOF, this assignment he NAME.		on the date opposite UNDF	ERSIGNED's
Date Inventor	(L3)	Witness	
DA Date 18-1/14-2017 Inventor K	Les Constant (1.5)	witnes 440c	Shull

Date Inventor (LS)
BENJAMIN S. UMANSKY

PATENT REEL: 042478 FRAME: 0216

Witness____

27810 27810 PATENT TRADEMARK OFFICE

Application Serial No. 15/434,408

EMRE Docket No. 2016EM035-US2

ASSIGNMENT INVENTOR or INVENTORS:

DANA W. NOURI

HANS G. KORSTEN

BENJAMIN S. UMANSKY

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.

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- 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.
- UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED
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IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date	Inventor(DANA W. NOURI	(LS)	Witness
Date	Inventor(HANS G. KORSTEN	(LS)	Witness
Date_5/11/17	Inventor Day Oku (BENJAMIN S. UMANSKY	(LS)	Witness <u>CROUS</u>

PATENT REEL: 042478 FRAME: 0217

RECORDED: 05/23/2017