PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

ic Version v1.1 EPAS ID: PAT3233347

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DANIEL A. MAKLED	12/08/2014
GOPICHANDRA SURNILLA	12/01/2014
RICHARD E. SOLTIS	12/05/2014
KENNETH JOHN BEHR	12/05/2014

RECEIVING PARTY DATA

Name:	FORD GLOBAL TECHNOLOGIES, LLC	
Street Address:	FAIRLANE PLAZA SOUTH, SUITE 800	
Internal Address:	330 TOWN CENTER DRIVE	
City:	DEARBORN	
State/Country:	MICHIGAN	
Postal Code:	48126	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14626542

CORRESPONDENCE DATA

Fax Number: (503)459-4142

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.

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Correspondent Name: ALLEMAN HALL MCCOY RUSSELL & TUTTLE, LLP

Address Line 1:806 S.W. BROADWAY, SUITE 600Address Line 4:PORTLAND, OREGON 97205

ATTORNEY DOCKET NUMBER:	83476972
NAME OF SUBMITTER:	JIBEK ENABNIT
SIGNATURE:	/Jibek Enabnit/
DATE SIGNED:	02/19/2015

Total Attachments: 4

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PATENT REEL: 034988 FRAME: 0222

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ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY, PROVISIONAL OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

WITH A VARIABLE VOLTAGE OXYGEN SENSOR		
This declaration is directed to:		
The attached application, or United States application or PCT international application number filed on		
The above-identified application was made or authorized to be made by me.		
I hereby state that I have reviewed and understand the contents of the specification in the above-identified application, including the claims.		
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.		
I am aware of the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.		
Pursuant to my employment agreement heretofore made or by contractual obligation, 1 do sell, assign and set over unto FORD GLOBAL TECHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws of the State of Delaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in the above-identified invention including the right of the ASSIGNEE, its successors, assigns or other legal representatives to make applications and to receive Letters Patent for the inventions and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own name or names, or in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to insert the serial/application number and filing date of the application to receive Letters Patent herein: Serial No. 14/626,542 , Filing Date February 19,2015), and I hereby sell, assign and set over to the ASSIGNEE, its successors, assigns or other legal representatives, all rights of priority, including any provisional applications, in and to the inventions and discoveries in any and all countries, entities and intergovernmental organizations including all applications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, reexaminations and reissue applications.		
And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental organizations, and to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein sold, assigned and set over.		
And I hereby represent and warrant that I have not granted any rights inconsistent with the rights granted herein.		
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years or both.		
LEGAL NAME OF INVENTOR		
Inventor: Daniel A. Makled Date: 19 3/2019		
Signature: [January Misself]		
Note: An Application Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional declaration form for each additional inventor.		

Please direct all correspondence to customer number: 36865

Attorney Docket Number	83476972

ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY, PROVISIONAL OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

Title of Invention	METHODS AND SYSTEMS FOR ESTIMATING AN AIR-FUEL RATIO	
·	WITH A VARIABLE VOLTAGE OXYGEN SENSOR	
This declaration is direct	ited to:	
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I hereby state that I had including the claims.	eve reviewed and understand the contents of the specification in the above-identified application,	
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Pursuant to my employment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto FORD GLOBAL TECHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws of the State of Delaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in the above-identified invention including the right of the ASSIGNEE, its successors, assigns or other legal representatives to make applications and to receive Letters Patent for the inventions and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own name or names, or in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to insert the serial/application number and filing date of the application to receive Letters Patent herein: Serial No. 14/626,542 , Filing Date February 19,2015), and I hereby sell, assign and set over to the ASSIGNEE, its successors, assigns or other legal representatives, all rights of priority, including any provisional applications, in and to the inventions and discoveries in any and all countries, entities and intergovernmental organizations including all applications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, reexaminations and reissue applications.		
And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental organizations, and to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein sold, assigned and set over.		
And I hereby represent and warrant that I have not granted any rights inconsistent with the rights granted herein.		
or imprisonment of not	that any willful false statement made in this declaration is punishable under 18 U.S.C. 1901 by fine more than five (5) years or both.	
LEGAL NAME OF IN	VENTOR	
Inventor: Gopicha	andra Sumilla Date:	
	ate Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. ion form for each additional inventor.	

Attorney Docket Number	83476972

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And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental organizations, and to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein sold, assigned and set over.		
And I hereby represent and warrant that I have not granted any rights inconsistent with the rights granted herein.		
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years or both.		
LEGAL NAME OF INV	ENTOR	
Inventor: Richard E	Soltis Date: <u>5 Dec 2014</u>	
Signature: <u>L</u>	chard & Sollie	
Note: An Application Data Use an additional declaratio	Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. In form for each additional inventor.	

Please direct all correspondence to customer number: 36865

Attorney Docket Number	83476077
	L. R&NCM&A&

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LEGAL NAME OF INVENTOR Inventor: Kenneth John Behr s Date: 5 Dec 2014		
Inventor: K	enneth	John Behr A Dec OUT
Signature: Kantholm Beland		
Note: An Amiliantian Date Chart (BTC/CD/Id or equivalent), including the median beauting in matter and the matter and the second of the second		
Note: An Application Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Lise an additional declaration form for each additional inventor.		

PATENT REEL: 034988 FRAME: 0227 **RECORDED: 02/19/2015**