### 504536234 09/07/2017

## PATENT ASSIGNMENT COVER SHEET

EPAS ID: PAT4582941

Electronic Version v1.1
Stylesheet Version v1.2

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ADAM NATHAN BANKER	12/03/2014
BAITAO XIAO	12/02/2014
HAMID-REZA OSSAREH	12/01/2014

#### **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:	15697608	

#### **CORRESPONDENCE DATA**

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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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ATTORNEY DOCKET NUMBER:	83882816
NAME OF SUBMITTER:	LAURA ROBERTS
SIGNATURE:	/Laura Roberts/
DATE SIGNED:	09/07/2017

#### **Total Attachments: 3**

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PATENT 504536234 REEL: 043518 FRAME: 0394

Attorney Docket Number	83486194

# 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		OR DETECTING COMPRESSOR ON VALVE FAULTS	
This declaration is direct			
	tached application, or  I States application or PCT international applica filed on		
The above-identified app	olication 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 or	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.			
FORD GLOBAL TECH of the State of Delawar hereinafter referred to a interest, domestic and for of the ASSIGNEE, its significant of the inventions and diname or names, or in my insert the serial/applications the serial/applications, in and to the including all application reexaminations and reiss.  And I hereby agree for including applications for organizations, and to perform the state of the	NOLOGIES, LLC, a Ford Motor Company sube, having its principal place of business at Des the ASSIGNEE, its successors, assigns or or reign, in and to the inventions and discoveries accessors, assigns or other legal representatives scoveries in any and all countries, entities and an ame, at its or their election (and I hereby aut tion number and filing date of the applicate, Filing DateDecember 8, 2014 sors, assigns or other legal representatives, he inventions and discoveries in any and all countries and discoveries in any and all countries claiming benefit of the filing date hereof the applications.	etual obligation, I do sell, assign and set over unto sidiary, organized and existing by virtue of the laws earborn, County of Wayne, and State of Michigan, ther legal representatives, the entire right, title and in the above-identified invention including the right intergovernmental organizations, in its or their own thorize the ASSIGNEE or ASSIGNEE's attorney to it into to receive Letters Patent herein: Serial No. and I hereby sell, assign and set over to the all rights of priority, including any provisional antries, entities and intergovernmental organizations f, continuations, continuations-in-part, divisionals, the successors, assigns or other legal representatives d set over.	
And I hereby represent a	nd warrant that I have not granted any rights inc	consistent with the rights granted herein.	
or imprisonment of not r	nore than five (5) years or both.	aration is punishable under 18 U.S.C. 1001 by fine	
LEGAL NAME OF INV		Date: 12/3/2014	
		Date	
Signature: <u>Man</u>	Banbr		
	a Sheet (PTO/SB/14 or equivalent), including namin	ng the entire inventive entity, must accompany this form.	

Use an additional declaration form for each additional inventor.

Attorney Docket Number	92496104	
Lympine's pocket lymmost.	83486194	;

# 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 Inventi-	on	METHODS AND SYST	EMS FOR DETEC	TING CC	MPRESSOR
This declaration is	s direct	ed to:	ULATION VALVE	FAULIS	
	United	tached application, or I States application or PCT internationfiled on	al application number	······································	
The above-identif	ied app	lication was made or authorized to be	made by me.		
I hereby state that including the claim	t I hay ns.	e reviewed and understand the conto	ents of the specification i	in the above	e-identified application,
I believe that I am	the or	iginal inventor or an original joint inve	entor of a claimed invention	on in the app	olication.
communich-m-pa	иг арр	o disclose information which is materi lications, material information which hal or PCT international filing date of	h became available bety	ween the fi	F.R. 1.56, including for iling date of the prior
of the State of Dehereinafter referre interest, domestic of the ASSIGNEE for the inventions name or names, or insert the serial/a 14/563,842 ASSIGNEE, its sapplications, in an	elaware d to as and for its su and dir in my pplicat l success d to the lication	nent agreement heretofore made or by NOLOGIES, LLC, a Ford Motor Come, having its principal place of busing the ASSIGNEE, its successors, assigned, in and to the inventions and discuscessors, assigns or other legal repressorouries in any and all countries, entiname, at its or their election (and I have number and filing date of the filing Date December fors, assigns or other legal represent inventions and discoveries in any and as claiming benefit of the filing date applications.	pany subsidiary, organizeress at Dearborn, County of gris or other legal repress coveries in the above-idensentatives to make applications and intergovernmentatives and intergovernmentatives and intergovernmentatives, all rights of productions and all countries entities are	ed and existing of Wayne, a centatives, the entitied inventations and to all organizations of Attentions Paters Paters Paters Paters incrity, inches and interpretations.	ing by virtue of the laws and State of Michigan, the entire right, title and intion including the right or receive Letters Patent itons, in its or their own SSIGNEE's attorney to the therein: Serial No. The inding any provisional arms and set over to the inding any provisional arms and set over the latent and set over to the inding any provisional arms and set over to the set of the latent arms and set over to the latent arms and set over to the latent arms and set over the latent arms arms arms arms arms arms arms arms
organizations, and	to per	nyself, my heirs, successors, assigns or Letters Patent of any and all kinds a form any and all acts which the ASSI coure thereto the rights herein sold, ass	and in any and all countr	ine antitine	and interreggement in the
And I hereby repre	sent an	d warrant that I have not granted any t	rights inconsistent with the	e rights gran	ited herein.
or imprisonment of	i gounn	at any willful false statement made in ore than five (5) years or both.	this declaration is punish	able under 1	18 U.S.C. 1001 by fine
LEGAL NAME O				<i>I</i> \	5 /
Inventor: <u>Bai</u>	tao Xi	aó	Date:	Dec	2014
Signature:	<u> </u>				
Note: An Applicatio Use an additional dec	n Data laration	Sheet (PTO/SB/14 or equivalent), including form for each additional inventor.	ing naming the entire inventi	ive entity, m	ust accompany this form;

PATENT REEL: 043518 FRAME: 0396 Please direct all correspondence to customer number: 36865

Attorney Docket Number	83486194
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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)

Title of Invention METHODS AND SYSTEMS FOR DETECTING COMPRESSOR RECIRCULATION VALVE FAULTS
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, 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. 14/563,841 , Filing Date December 8,2014 ), 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: Hamid-Reza Ossareh Date: 12/01/2019
Signature:
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.

PATENT REEL: 043518 FRAME: 0397

**RECORDED: 09/07/2017**