10/25/2018 505160345

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5207112

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RANI KIWAN	10/10/2018
CHRISTOPHER PAUL GLUGLA	10/19/2018
MOHANNAD HAKEEM	10/10/2018
AMEY KARNIK	10/25/2018
JAMES MATTHEW KINDREE	09/24/2018

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:	16171247	

CORRESPONDENCE DATA

Fax Number: (971)271-8021

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: 971-271-8020 Tapia@mccrus.com Email: MCCOY RUSSELL LLP **Correspondent Name:**

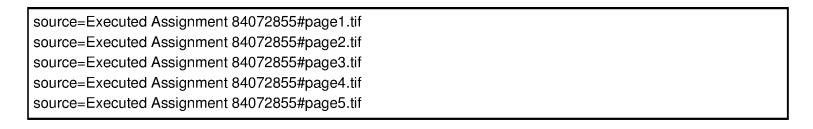
Address Line 1: 806 S.W. BROADWAY, SUITE 600 Address Line 4: PORTLAND, OREGON 97205

ATTORNEY DOCKET NUMBER:	84072855
NAME OF SUBMITTER:	ASHLEY R. TAPIA
SIGNATURE:	/Ashley R. Tapia/
DATE SIGNED:	10/25/2018

Total Attachments: 5

PATENT REEL: 047316 FRAME: 0634

505160345



84072855	
	84072855

Title of Invention	METHOD AND SYSTEM FOR ENGINE KNOCK DETECTION		
This declaration is directed	ed to:		
	ached application, or		
United	States application or PCT international application number		
number into this form wh	filed on (I hereby authorize the insertion of the application filing date and en they become known.)		
The above-identified app	lication was made or authorized to be made by me.		
I hereby state that I have including the claims.	e reviewed and understand the contents of the specification in the above-identified application,		
I believe that I am the ori	ginal inventor or an original joint inventor of a claimed invention in the application.		
continuation-in-part app	disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for lications, material information which became available between the filing date of the prior all 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. 16/171,247 , Filing Date October 25, 2018), 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 INV			
Inventor: Rani Kiw	an Date: 10/10/20(6		
Signature:	Amy		
Notes An Application Det	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.		
	on form for each additional inventor.		

1 112	D 1 11 1	A . A
Attorney	Docket Number	(X4 (1/7) X 55
recorney	DOORCE I WILLOUT	1 0 10 12 0 2 3

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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.			
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LEGAL NAME OF INVI			
Inventor: Christophe	er Paul Glugla Date: 15 // 20/8		
Signature:	And worm 1 2 Million Marine Commence of the Co		
	Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.		

Attorney Docket Number	84072855	

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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.				
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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	1 = 11.71.9 = 12			
	ad Hakeem Date: 10/10/2010			
Signature:	1 to the second			
	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.			

Attorney Docket Number 84072855			
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LEGAL NAME OF INV	13/05/2015	
Inventor: Amey K	arnik Date: $10/25/2018$	
Signature: Starut		
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.		

RECORDED: 10/25/2018

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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	METHOD AND SYSTEM FOR ENGINE KNOCK DETECTION	
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LEGAL NAME OF INV Inventor: <u>James Ma</u>	ENTOR atthew Kindree Date: 9/24/2018	
Signature: games M. Yindree		
<i>U</i>	a 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.		