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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

Total Attachments: 2

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EPAS ID: PAT2688252

SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT		
NATURE OF CONVEYA	NCE:	ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY DATA					
Name Execution Date					
PANKAJ KUMAR			01/09/2014		
IMAD HASSAN MAKKI			01/09/2014		
RECEIVING PARTY DA	TA				
Name:	FORD GLOBA	L TECHNOLOGIES, LLC			
Street Address:	FAIRLANE PL	AZA SOUTH, SUITE 800			
Internal Address:	330 TOWN CE	ENTER DRIVE			
City:	DEARBORN				
State/Country:	MICHIGAN				
Postal Code:	48126				
PROPERTY NUMBERS Total: 1					
	Total: 1				
Property Ty		Number			
		Number 14158443			
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Property Ty Application Number: CORRESPONDENCE D Fax Number:	PATA (503	14158443)459-4142			
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Attorney Docket Number	83413678

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

Title of Inventi	on	ONE DIMENSIONAL THREE WAY CATALYST MODEL	
	100	FOR CONTROL AND DIAGNOSTICS	
This declaration is	s direc		
iszi	ent	in the second of	
		ttached application, or	
لبينا	Unnec	d States application or PCT international application number	
	***********	filed on	
The above-identif	fied app	plication was made or authorized to be made by me.	
I hereby state that including the class	it I har ms.	ve reviewed and understand the contents of the specification in the above-identified application,	
I believe that I arr	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.		
continuation-in-pa	art app	to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for plications, material information which became available between the filing date of the prior and 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. 14/158, 443, Filing Date			
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 repr	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 C)F INV	/ENTOR	
Inventor: Pa	<u>nkaj K</u>	<u>Cumar</u> Date: <u>1/2/14</u>	
Signature:	Pani	Boy Kumar	
Note: An Applicat	ion Dat	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.	

PATENT REEL: 031999 FRAME: 0313

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

Title of Inventi	ion	ONE DIMENSIONAL THREE WAY CATALYST MODEL	
		FOR CONTROL AND DIAGNOSTICS	
This declaration i	is direc	ted to:	
\boxtimes		ttached application, or	
		d States application or PCT international application number	
		filed on	
The above-identif	fied ap	plication 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 an	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. $14/158,443$ Filing Date January 17, 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 repr	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 O	OF INV	/ENTOR	
Inventor: Im	ad Has	Ssan Makki Date: <u>V9/23(4</u>	
Signature:	<u> </u>	Malle	
Note: An Applicat Use an additional de	ion Dat eciaratio	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, on form for each additional inventor.	

PATENT REEL: 031999 FRAME: 0314

RECORDED: 01/17/2014