### 503812002 05/04/2016

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3858650

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
KENNETH JAMES MILLER	03/21/2016
CHARLES JAMES MILLER	03/17/2016
CYNTHIA M. NEUBECKER	03/21/2016
BRAD ALAN IGNACZAK	03/18/2016
ADIL NIZAM SIDDIQUI	03/21/2016
JONATHAN DIEDRICH	03/18/2016
SOMAK DATTA GUPTA	03/18/2016
HARON ABDEL-RAZIQ	03/18/2016

#### **RECEIVING PARTY DATA**

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

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15076210

#### **CORRESPONDENCE DATA**

**Fax Number:** (312)980-0728

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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Address Line 2: ATTN: PATENT ADMINISTRATOR

Address Line 4: CHICAGO, ILLINOIS 60602

ATTORNEY DOCKET NUMBER: 83633817 (26780-8184)

NAME OF SUBMITTER: JAMES P. MURAFF

SIGNATURE: /James P. Muraff/

DATE SIGNED:	05/04/2016	
Total Attachments: 8		
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Delieve that I am the or	ignal investor or an original joint	aventur of a claumed inven	tion in the application	w.
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11116 01 INVENTION   SYSTEM AND METHOD FOR VIRTUAL TRANSFORMATION OF   STANDARD OR NON-CONNECTED VEHICLES
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.
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: Somak Datta Gupta, Date: 03/18/20/4
Signature: \( \lambda
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.

C. C		
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Attorney Docket Number	83633817	
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Title of Invention	SYSTEM AND METHOD FOR VIRTUAL TRANSFORMATION OF STANDARD OR NON-CONNECTED VEHICLES
This declaration is direct	ed to:
United	tached application, or States application or PCT international application numberfiled on
	lication was made or authorized to be made by me.
I hereby state that I hav 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.
sommanner mehar appi	disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for ications, material information which became available between the filing date of the prior al or PCT international filing date of the continuation-in-part application.
of the State of Delaware, hereinafter referred to as interest, domestic and form of the ASSIGNEE, its successfor the inventions and distinant or names, or in my insert the serial/application.  ASSIGNEE, its successor applications, in and to the including all applications reexaminations and reissuccessor.	
reactions approcations for performance of the perfo	yself, my heirs, successors, assigns or other legal representatives to execute any and all papers, Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental orm any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives are 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.
a maperagramone of the tho-	any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine re than five (5) years or both.
EGAL NAME OF INVEIT INVENTOR: JOURNAL D	
lignature: Lfve2	
ote: An Application Data S se an additional declaration t	heet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. form for each additional inventor.

Attorney Docket Number	83633817

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The above-ider	ntified application was made or authorized to be made by me.
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continuation-in	the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for nepart applications, material information which became available between the filing date of the prior discussed in the prior discussed in the prior discussion of the prior discussion.
FORD GLOBA of the State of hereinafter refe interest, domes of the ASSIGN for the inventio name or names insert the seri- ASSIGNEE, if applications, in including all s	y employment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto AL TECHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws of Delaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan Terred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and stic and foreign, in and to the inventions and discoveries in the above-identified invention including the right NEE, its successors, assigns or other legal representatives to make applications and to receive Letters Patentons and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own s, or in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to ial/application number and filing date of the application to receive Letters Patent herein: Serial No, Filing Date
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 re	represent and warrant that I have not granted any rights inconsistent with the rights granted herein.
or imprisonmen	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by find on the fine of not more than five (5) years or both.
	E OF INVENTOR Adil Nizam Siddiqui Date: 3/2//2のほ
Signature: _	
Note: An Appli Use an additiona	ication Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form al declaration form for each additional inventor.

Please direct all correspondence to: 120903

Attorney Docket Number	83633817

### 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	SYSTEM AND METHOD FOR VIRTUAL TRANSFORMATION OF STANDARD OR NON-CONNECTED VEHICLES
This declaration is direct	ed to:
United	tached application, or States application or PCT international application number filed on
The above-identified app	lication was made or authorized to be made by me.
I hereby state that I have including the claims.	re reviewed and understand the contents of the specification in the above-identified application,
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continuation-in-part app	o 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 nal 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 fo of the ASSIGNEE, its stor the inventions and diname or names, or in my insert the serial/applica.  ASSIGNEE, its success applications, in and to the including all application reexaminations and reiss.  And I hereby agree for including applications for the serial applications for the serial applications and reiss.	nent agreement heretofore made or by contractual obligation, I do sell, assign and set over unto NOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws e, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, at the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and reign, in and to the inventions and discoveries in the above-identified invention including the right accessors, assigns or other legal representatives to make applications and to receive Letters Patent scoveries in any and all countries, entities and intergovernmental organizations, in its or their own name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to tion number and filing date of the application to receive Letters Patent herein: Serial No.  ———————————————————————————————————
may deem necessary to s	ecure thereto the rights herein sold, assigned and set over.
	nd warrant that I have not granted any rights inconsistent with the rights granted herein.
	at any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine nore than five (5) years or both.
LEGAL NAME OF INV	ENTOR ~ //
Inventor: Brad Ala	Date: 3/8//5
Signature	
Note: An Application Dat	Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.
	n form for each additional inventor.

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The above-identi	fied application was made or authorized to be made by me.
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FORD GLOBAL of the State of I hereinafter refer interest, domesti of the ASSIGNE for the invention name or names, insert the serial  ASSIGNEE, its applications, in a including all ap reexaminations a  And I hereby ag including applic oreanizations, as	employment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto TECHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws Delaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, red to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and countries, in and to the inventions and discoveries in the above-identified invention including the right is successors, assigns or other legal representatives to make applications and to receive Letters Patent is and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own or in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to Application number and filing date of the application to receive Letters Patent herein: Serial No.  ———————————————————————————————————
And I hereby rep	present and warrant that I have not granted any rights inconsistent with the rights granted herein.
I hereby acknow or imprisonment	riedge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine of not more than five (5) years or both.
LEGAL NAME	OF INVENTOR 7 / 7 / / /
	Anna M. Neubecker Date: 3/41/18
Signature:	
Note: An Applic	ation Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

Attorney Docket Number	83633817
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Title of Inventi	០រា	SYSTEM AND METHOD FOR VIRTUAL TRANSFORMATION OF STANDARD OR NON-CONNECTED VEHICLES
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of the State of De hereinafter referred interest, domestic is of the ASSIGNEE for the inventions aname or names, or insert the serial/apart th	elaware d to as and for , its sue and dis in my pplicati  uccesse I to the ications	sent agreement heretofore made or by contractual obligation, I do sell, assign and set over unto IOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and eign, in and to the inventions and discoveries in the above-identified invention including the right excessors, assigns or other legal representatives to make applications and to receive Letters Patent coveries in any and all countries, entities and intergovernmental organizations, in its or their own name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to on number and filing date of the application to receive Letters Patent herein: Serial No.  ———————————————————————————————————
organizations, and	to perfe	yself, my heirs, successors, assigns or other legal representatives to execute any and all papers, Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental orm any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives ture thereto the rights herein sold, assigned and set over.
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25 5315243011311CHC ()1	nor mo	any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine re than five (5) years or both.
LEGAL NAME OF nventor: <u>Haro</u>		NIOR el-Raziq Date: 3/6/29/6
Signature:	ne Date	
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PATENT REEL: 038456 FRAME: 0453

**RECORDED: 05/04/2016**