## 504986563 07/02/2018

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5033309

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
JONATHAN HAIR	06/20/2018
DAVID CRIST GABRIEL	06/23/2018
ELIZABETH ROSE BIFANO	06/20/2018
TRAVIS SMITH	06/20/2018
ARUN GANESAN	06/20/2018
BRIAN KHOI-DUY NGUYEN	06/20/2018

## **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:	16021947

## CORRESPONDENCE DATA

**Fax Number:** (248)358-3351

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: BROOKS KUSHMAN P.C.

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Address Line 4: SOUTHFIELD, MICHIGAN 48075

ATTORNEY DOCKET NUMBER: 84026033

NAME OF SUBMITTER: ROBERT D. BURNS

SIGNATURE: /Robert D. Burns/
DATE SIGNED: 06/28/2018

PATENT 504986563 REEL: 046252 FRAME: 0575

# Total Attachments: 6 source=FMC8932PUS\_Assignment#page1.tif source=FMC8932PUS\_Assignment#page2.tif source=FMC8932PUS\_Assignment#page3.tif source=FMC8932PUS\_Assignment#page4.tif source=FMC8932PUS\_Assignment#page5.tif

source=FMC8932PUS\_Assignment#page6.tif

Attorney Docket Number	84026033

Title of Invention	SYSTEM AND METHOD FOR IN-VEHICLE RESOLVER ALIGNMENT			
This declaration is directed	ed to:			
United	States application or PCT international application number filed on (I hereby authorize the insertion of the application filing date and ten they become known.)			
The above-identified app	lication was made or authorized to be made by me.			
I hereby state that I hav including the claims.	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 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 ral or PCT international filing date of the continuation-in-part application.			
FORD GLOBAL TECHI of the State of Delaware hereinafter referred to as interest, domestic and for of the ASSIGNEE, its su for the inventions and dis name or names, or in my insert the serial/applicat 16/021,947  ASSIGNEE, its success applications, in and to the including all application reexaminations and reissu	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 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 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 accessors, assigns or other legal representatives to make applications, in its or their own name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to ion number and filing date of the application to receive Letters Patent herein: Serial No.  ———————————————————————————————————			
including applications for organizations, and to per-	r Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental form any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives ecure thereto the rights herein sold, assigned and set over.			
And I hereby represent an	d warrant that I have not granted any rights inconsistent with the rights granted herein.			
or imprisonment of not m	at any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine ore than five (5) years or both.			
LEGAL NAME OF INVI				
Signature: Jul	c face			
Note: An Application Data	Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.			

		ber				

## 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)

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Ä	United S	hed application, or tates application or Pe filed on	. (I hereby a		tion of the	application	filing date and
number into this	form wher	they become known	,)				
The above-ident	ified applic	ation was made or au	thorized to be made	e by me.			
I hereby state the including the cla	nat I have ims.	eviewed and unders	tand the contents (	of the specification	on in the a	bove-identif	ied application,
I believe that I ar	m the origin	al inventor or an orig	ginal joint inventor	of a claimed inve	ention in the	application	•
continuation-in-p	art applica	sclose information wations, material info or PCT international	rmation which be	came available	between th	ne filing da	66, including for te of the priot
FORD GLOBAL of the State of D	TECHNO	t agreement heretofe LOGIES, LLC, a For	rd Motor Company	′ subsidiary, orga	nized and	existing by v	rirtue of the laws
nterest, domestic of the ASSIGNEI or the inventions ame or names, on the serial/a 16/021,947 SSIGNEE, its applications, in an	ed to as the and foreige, its successors, and discover in my na application successors, id to the in lications of the successors.	e ASSIGNEE, its sun, in and to the inversors, assigns or othe veries in any and all me, at its or their elements and filing, Filing Date Junter sessigns or other ventions and discoveralisming benefit of	nccessors, assigns on the second representation countries, entities ection (and I hereby date of the appine 28, 2018 legal representationies in any and al	or other legal re- ries in the above tives to make ap- and intergovernry authorize the A- plication to rece ), and I ves, all rights of I countries, entiti	presentative identified plications nental organisms is a SSIGNEE ive Letter hereby se of priority ies and into	es, the entire invention in and to receivant and to receivant and a receivant and a receivant heart heart assign an an including ergovernment.	e right, title and coluding the right ve Letters Patern its or their ow IEE's attorney to rein: Serial Nod set over to the any provision at all organization
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nterest, domestic of the ASSIGNEI or the inventions ame or names, on sert the serial/s 16/021,947 SSIGNEE, its subplications, in an eluding all applications and I hereby agreeluding applications, and ity deem necessar	ed to as the and foreige, its successors, its to the in lications of reissue application of reissue applications of the interior of the interior of reissue applications for Le to perform the security to secure.	e ASSIGNEE, its sun, in and to the inversors, assigns or other elements in any and all me, at its or their elements and filing Filing Date Jules assigns or other ventions and discoverations.  If, my heirs, success their Patent of any and all acts with the inverse assigns or the inverse assigns and all acts with the inverse assigns as a supplementation and the inverse assigns as a supplementation and the inverse assigns as a supplementation and the inverse as a supplementation	ntions and discoventions and discovent legal representation (and I hereby date of the appne 28, 2018  legal representation in any and althe filing date hereby dat	or other legal re- ries in the above- tives to make ap- and intergovernry authorize the A- blication to rece	presentative identified plications nental organisms. SSIGNEE ive Letter hereby see of priority les and interest in continuous, continuous, continuous, estatives to ountries, es, assigns	es, the entire invention in and to receive inizations, in or ASSIGN is Patent he ll, assign and, including ergovernment in execute arountities and it or other leg	e right, title and cluding the right ve Letters Pater its or their own IEE's attorney to the any provision and all paper intergovernmental representatives.
nterest, domestic f the ASSIGNEI or the inventions ame or names, on the serial/s 16/021,947 SSIGNEE, its subjlications, in an eluding all applexaminations and I hereby agreeluding applications, and y deem necessary deem necessary deem necessary acknowled mprisonment of	ed to as the and foreige, its successors and to the in lications of reissue a for myselons for Leto perform the sent and winge that an not more it.	e ASSIGNEE, its sun, in and to the inversers, assigns or other elements in any and all me, at its or their elements and filing pate Jules assigns or other ventions and discoverations.  If, my heirs, success the Patent of any and all acts we thereto the rights hearrant that I have now willful false state than five (5) years or	ntions and discovered legal representations and I hereby date of the appine 28, 2018 legal representations in any and althe filing date hereby date hereby date hereby date hereby date hereby date hereby assigns or or and all kinds and hich the ASSIGNI erein sold, assigned the granted any right ment made in this	or other legal re- ries in the above- tives to make ap- and intergovernry authorize the A- plication to rece	presentative-identified plications nental organisms. SSIGNEE ive Letter hereby see of priority ies and interest in continuous, continuous, continuous, exassigns ith the right	es, the entire invention in and to receive inizations, in or ASSIGN in Patent he li, assign and including ergovernment of execute aroutities and it or other legular granted here.	e right, title and cluding the right ve Letters Pater its or their ow IEE's attorney to the any provision and all paper intergovernment all representatives.
nterest, domestic of the ASSIGNEI or the inventions ame or names, on a sert the serial/s 16/021,947 SSIGNEE, its subjections, in an eluding all applexaminations and I hereby agreeluding applications, and by deem necessary deem nece	ed to as the and foreige, its successors and to the in lications of reissue a for myselons for Leto perform the sent and winge that an not more it.	e ASSIGNEE, its sun, in and to the inversors, assigns or other elements of their ele	ntions and discovered legal representations and I hereby date of the appine 28, 2018 legal representations in any and althe filing date hereby date hereby date hereby date hereby date hereby date hereby assigns or or and all kinds and hich the ASSIGNI erein sold, assigned the granted any right ment made in this	or other legal re- ries in the above- tives to make ap- and intergovernry authorize the A- plication to rece	presentative-identified plications nental organisms. SSIGNEE ive Letter hereby see of priority less and introduced in the countries, ears, assigns ith the right munishable	es, the entire invention in and to receive inizations, in or ASSIGN in Patent he li, assign and including ergovernment of execute aroutities and it or other legular granted here.	e right, title and coluding the right ve Letters Pater its or their own provision and part, divisional and all paper intergovernment and representative perein.  S.C. 1001 by for their own their ow

Attorney Docket Number	84026033

Title of Invention	SYSTEM AND METHOD FOR IN-VEHICLE RESOLVER ALIGNMENT
This declaration is directe	d to:
X The att	ached application, or States application or PCT international application number filed on (I hereby authorize the insertion of the application filing date and
The above-identified appl	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.
continuation-in-part appl	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 hal or PCT international filing date of the continuation-in-part application.
FORD GLOBAL TECHT of the State of Delaware hereinafter referred to as interest, domestic and for of the ASSIGNEE, its su for the inventions and di name or names, or in my insert the serial/applicat 16/021,947 ASSIGNEE, its success applications, in and to th including all application reexaminations and reiss	
including applications for	myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, or Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental form any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives ecure thereto the rights herein sold, assigned and set over.
And I hereby represent a	nd warrant that I have not granted any rights inconsistent with the rights granted herein.
I hereby acknowledge the	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 10/12
Inventor: Elizabeth	Rose Bifano Date:
Signature:	
Note: An Application Dat	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, on form for each additional inventor.
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Attorney Docket Nur	pher 84026033	
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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 16/021,947  ASSIGNEE, its success applications, in and to the including all application reexaminations and reiss.  And I hereby agree for including applications for the state of the serial s	ment 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, is 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 successors, 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 value, 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	secure thereto the rights herein sold, assigned and set over.  and warrant that I have not granted any rights inconsistent with the rights granted herein.
I hereby acknowledge the or imprisonment of not it	nat 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	VENTOR 6/20/18
Inventor: Travis Si	
Signature:	
Note: An Application Da Use an additional declarati	ta Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. on form for each additional inventor.

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	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: Arun Ga	nnesan Date: 6/30/30 IX
Signature:	
Note: An Application Da	ta Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.
Use an additional declarati	on form for each additional inventor.

**RECORDED: 07/02/2018** 

Attorney Docket Number	84026033

# 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 IN-VEHICLE RESOLVER ALIGNMENT	
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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	iginal 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. 16/021,947 , Filing Date June 28, 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, and intergovernmental i		
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.		
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LEGAL NAME OF IN		
	4-76)	
Signature:		
Note: An Application Da	ta Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, for form for each additional inventor.	