#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5950926

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
FRANCIS OBIAGWU	01/29/2020
JOHN MOORE	01/29/2020
SOODEH DADRAS	01/30/2020
SAI SRIKAR PALUKURU	01/30/2020

#### **RECEIVING PARTY DATA**

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

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

Property Type	Number
Application Number:	16783978

#### **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.

**Phone:** (248)358-4400

**Email:** amungons@brookskushman.com **Correspondent Name:** BROOKS KUSHMAN P.C./FGTL

Address Line 1: 1000 TOWN CENTER

Address Line 2: 22ND FLOOR

Address Line 4: SOUTHFIELD, MICHIGAN 48075-1238

ATTORNEY DOCKET NUMBER:	84223232
NAME OF SUBMITTER:	ISAAC T. SLUTSKY
SIGNATURE:	/Isaac T. Slutsky/
DATE SIGNED:	02/06/2020
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**Total Attachments: 4** 

PATENT REEL: 051745 FRAME: 0450

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Attorney Docket Number	84223323
	0-1420402

Title of Invention	PROOF-OF-WORK VEHICLE MESSAGE AUTHENTICATION	
	TOTAL VEHICLE MESSAGE AUTHENTICATION	
This declaration is directed	to:	· · · · · ·
X The att	ched application, or	
☐ United	tates application or PCT international application number	
number into this form wh	filed on (I haraby outhorize the investigation of the state of the sta	and
number into una torm wit	n they become known.)	
The above-identified appl	cation was made or authorized to be made by me.	
I hereby state that I have including the claims.	reviewed and understand the contents of the specification in the above-identified applicati	on,
I believe that I am the orig	nal inventor or an original joint inventor of a claimed invention in the application.	
appi	lisclose information which is material to patentability as defined in 37 C.F.R. 1.56, including ations, material information which became available between the filing date of the property or PCT international filing date of the continuation-in-part application.	for ior
of the State of Delaware, hereinafter referred to as interest, domestic and force of the ASSIGNEE, its successfor the inventions and discussed in the serial application of the serial applications, in and to the including all applications reexaminations and reissue and I hereby agree for mincluding applications for including applications for	DLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the landaring its principal place of business at Dearborn, County of Wayne, and State of Michigan ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and gen, in and to the inventions and discoveries in the above-identified invention including the right essors, assigns or other legal representatives to make applications and to receive Letters Pates overies in any and all countries, entities and intergovernmental organizations, in its or their overies in any and all countries, entities and intergovernmental organizations, in its or their overies in any and filing date of the application to receive Letters Patent herein: Serial New properties and intergovernmental organization or other legal representatives, all rights of priority, including any provision claiming benefit of the filing date hereof, continuations, continuations-in-part, divisional applications.  The properties are all legal representatives to execute any and all paper effects and all acts which the ASSIGNEE, its successors, assigns or other legal representatives to execute any and all paper thereto the rights having and in any and all countries, entities and intergovernment of any and all kinds and in any and all countries, entities and intergovernment of any and all kinds and in any and all countries, entities and intergovernment of the rights having the hards and in any and all countries, entities and intergovernment of the rights having the hards and in any and all countries, entities and intergovernment of the rights having the hards and in any and all countries, entities and intergovernment of the rights having the hards and in any and all countries, entities and intergovernment of the rights having the hards and in any and all countries, entities and intergovernment of the rights having the hards and in any and all countries, entities and intergovernment of the rights having the hards and intergovernment of the rights havi	an, and ght ent wn to lo. he hal has lls,
ween necessary to see	re thereto the rights herein sold, assigned and set over.  warrant that I have not granted any rights inconsistent with the rights granted herein.	es
hereby acknowledge that	my willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fire	ne
LEGAL NAME OF INVE	uian rive (3) years or ooth.	
nventor: Francis Obi	~ ~ ~ ~ ~ ~ ~ ~ ~	
14	Date: 01-29-2020	_
Signature:	16-K	j
		$\dashv$
Note: An Application Data S	eet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form	n.
or an additional deciatation i	rm for each additional inventor.	Į

Attorney Docket Number	84223232

Title of Invention	PROOF-OF-WORK VEHICLE MESSAGE AUTHENTICATION
This declaration is direct	ed to:
	tached application, or  States application or PCT international application number  filed on (I hereby authorize the insertion of the application filing date and nen 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.	re 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	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 TECHI 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 16/783,978  ASSIGNEE, its success applications, in and to th	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, 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 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 mame, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to the filling date of the application to receive Letters Patent herein: Serial No.  ———————————————————————————————————
including applications fo organizations, and to per	myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, in 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	nd 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 nore than five (5) years or both.
LEGAL NAME OF INV. Inventor: John Moo	1/20/2/3/3/2
Signature:	1 Mae
Note: An Application Data	Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.
	n form for each additional inventor.

Attorney Docket Number	84223232

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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,
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	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 TECHI of the State of Delaware hereinafter referred to as interest, domestic and fo of the ASSIGNEE, its su for the inventions and di name or names, or in my insert the serial/applica 16/783,978  ASSIGNEE, its success applications, in and to th including all application reexaminations and reisse	
including applications for organizations, and to per	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 aform 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.
or imprisonment of not m	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	
Inventor: Soodeh D	Date: 1/30/2020
Signature:	
* *	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

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Title of Invention	PROOF-OF-WORK VEHICLE MESSAGE AUTHENTICATION
This declaration is directed to:	
United	tached application, or I 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 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. 16/783,978 , Filing Date February 6, 2020 ), 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 INVI	ENTOR
Inventor: Sai Srikar	Palukaru Date: 30.2020
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: 051745 FRAME: 0455

**RECORDED: 02/06/2020**