503847267 05/27/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3893915

05/19/2016

SUBMISSION TYPE:	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:	ASSIGNMENT			
CONVEYING PARTY DATA				
	Name	Execution Date		
KWAKU O. PRAKAH-ASANTE		05/19/2016		
FLING TSENG	05/19/2016			
STEVEN JOSEPH SZWABOWSK	05/20/2016			
JIANBO LU	05/26/2016			
PERRY ROBINSON MACNEILLE	05/19/2016			

XIAOMING WANG

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:	15167447

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 **BROOKS KUSHMAN P.C./FGTL** Correspondent Name: Address Line 1: **1000 TOWN CENTER** Address Line 2: 22ND FLOOR Address Line 4: SOUTHFIELD, MICHIGAN 48075-1238 ATTORNEY DOCKET NUMBER: 83650691 NAME OF SUBMITTER: **ISAAC T. SLUTSKY**

 NAME OF SUBMITTER:
 ISAAC T. SLUTSKY

 SIGNATURE:
 /Isaac T. Slutsky/

 DATE SIGNED:
 05/27/2016

 PATENT

503847267

REEL: 038740 FRAME: 0019

Total Attachments: 6

source=Assignment_and_Declaration#page1.tif source=Assignment_and_Declaration#page2.tif source=Assignment_and_Declaration#page3.tif source=Assignment_and_Declaration#page4.tif source=Assignment_and_Declaration#page5.tif source=Assignment_and_Declaration#page6.tif

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 ADAPTIVE DRIVE CONTROL LOW-TRACTION DETECTION AND MODE SELECTION

This declaration is directed to:

Х

Π

The attached application, or

Use an additional declaration form for each additional inventor.

United States application or PCT international application number

filed on ______, (I hereby authorize the insertion of the application filing date and number into this form when 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. 15/167,447), and I hereby sell, assign and set over to the , Filing Date May 27, 2016 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 N/	AME OF INVENTOR		sligtonia
Inventor:	Kwaku O. Prakah-Asante	Date:	<u></u>
Signature'	ROLED		
	t for the second se		
Note: An A	pplication Data Sheet (PTO/SB/14 or e	quivalent), including naming the entire inven	tive entity, must accompany this form.

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 ADAPTIVE DRIVE CONTROL LOW-TRACTION DETECTION AND MODE SELECTION

This declaration is directed to:

The attached application, or

United States application or PCT international application number

X □ _____ filed on ______. (I hereby authorize the insertion of the application filing date and number into this form when 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. 15/167,447, Filing Date May 27, 2016, and I hereby sell, assign and set over to the , Filing Date), 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.

EGAL NA	ME OF INVENTOR				\$11912016
nventor:	Fling Tseng		<u></u>	Date:	
ienature:		-2		nan ili ili na na sul initiation.	
				~~~~~	

# 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	ADAPTIVE DRIVE CONTROL LOW-TRACTION DETECTION AND MODE SELECTION
This declaration is dire	eted to:
🗍 Unit	attached application, or ed States application or PCT international application number filed on (I hereby authorize the insertion of the application filing date and
number into this form v	when they become known.)
The above-identified a	pplication was made or authorized to be made by me.
I hereby state that I h including the claims.	ave reviewed and understand the contents of the specification in the above-identified application
I believe that I am the	original inventor or an original joint inventor of a claimed invention in the application.
continuation-in-part a	to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for pplications, material information which became available between the filing date of the prictional or PCT international filing date of the continuation-in-part application.
FORD GLOBAL TEC of the State of Delaw hereinafter referred to interest, domestic and of the ASSIGNEE, its for the inventions and name or names, or in insert the serial/appli 15/167,447	wyment agreement heretofore made or by contractual obligation, I do sell, assign and set over unt HNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virue of the law are, having its principal place of business at Dearborn, County of Wayne, and State of Michigar as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and foreign, 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 Pater discoveries in any and all countries, entities and intergovernmental organizations, in its or their ow my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to ication number and filing date of the application to receive Letters Patert herein: Serial Ne Filing Date May 27, 2016, and I hereby sell, assign and set over to the
ASSIGNEE, its succ	essors, assigns or other legal representatives, all rights of priority, including any provision the inventions and discoveries in any and all countries, entities and intergovernmental organization tions claiming benefit of the filing date hereof, continuations, continuations-in-part, divisional
including applications organizations, and to	or myself, my heirs, successors, assigns or other legal representatives to execute any and all paper for Letters Patent of any and all kinds and in any and all countries, entities and intergovernment perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representative o secure thereto the rights herein sold, assigned and set over.
And I hereby represen	t 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 fin to more than five (5) years or both.
LEGAL NAME OF I	
Inventor: <u>Stever</u>	n Joseph Szwabowski Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:Date:AADE
Signature: <u>4</u> 7	ion & Austoust
Note: An Application	Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this for ation form for each additional inventor.

### 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	ADAPTIVE DRIVE C MODE SELECTION	ONTROL	LOW-TRACTIC	ON DETECTION	AND		
This declaration is direc							
	ttached application, or d States application or PCT inter filed on ( hen they become known.)			the application filing d	late and		
The above-identified ap	olication was made or authorized	to be made by	me.				
and Second and the second second Second second	ve reviewed and understand the	10 1.0 <b>7</b> 0 	an a a a a	ne above-identified app	lication,		
I believe that I am the or	iginal inventor or an original joir	nt inventor of a	claimed invention in	the application.			
continuation-in-part app	o disclose information which is a plications, material information nal or PCT international filing da	which becam	e available betweer	n the filing date of th			
FORD GLOBAL TECH of the State of Delawar hereinafter referred to a interest, domestic and fo of the ASSIGNEE, its s for the inventions and di name or names, or in my insert the serial/applica 15/167,447 ASSIGNEE, its succes	ment agreement heretofore made NOLOGIES, LLC, a Ford Moto e, having its principal place of s the ASSIGNEE, its successors reign, in and to the inventions as uccessors, assigns or other legal scoveries in any and all countrie name, at its or their election (a tion number and filing date of Filing Date May sors, assigns or other legal re- ie inventions and discoveries in	r Company sub business at De s, assigns or of nd discoveries i representatives es, entities and nd I hereby aut of the applicat 27, 2016 presentatives.	sidiary, organized ar arborn, County of V her legal representa n the above-identific to make application intergovernmental or horize the ASSIGNI ion to receive Lett ), and I hereby a all rights of priori	id existing by virtue of t Wayne, and State of Mi tives, the entire right, t ed invention including th is and to receive Letters rganizations, in its or the E or ASSIGNEE's atto ers Patent herein: Ser sell, assign and set over ty, including any prov	he laws ichigan, itle and he right s Patent eir own orney to ial No. r to the visional		
including all application reexaminations and reiss	ns claiming benefit of the fili	ng date hereof	; continuations, cor	ttinuations-in-part, divi	sionals,		
including applications for organizations, and to per	myself, my heirs, successors, as or Letters Patent of any and all l form any and all acts which the ecure thereto the rights herein so	kinds and in an ASSIGNEE, i	y and all countries, ts successors, assign	entities and intergovern	imental		
And I hereby represent a	nd warrant that I have not granted	d any rights inc	onsistent with the rig	ghts 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	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Ś	-1~zh 1.1			
Inventor: <u>Jianbo 1</u>			Date: 🖄	120/16			
Signature:	mibroh						

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.

### 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	ADAPTIVE DRIVE CONTROL LOW-TRACTION DETECTION AND
This declaration is direct	
This declaration is direct	
X The at	tached application, or
	States application or PCT international application number
	filed on (I hereby authorize the insertion of the application filing date and
number into this form wh	nen 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.	re reviewed and understand the contents of the specification in the above-identified application,
I believe that I am the or	iginal 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.
Pursuant to my employn	nent 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. May 27, 2016 ), and I hereby sell, assign and set over to the 15/167,447 , Filing Date 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 INVENTOR	- 14 10 7011
Inventor: Perry Robinson MacNeille	Date: $M_{4} / 9 / 0 / 6$
Signature: Perch Robinson News hill	- · · · )
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.	

### 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	ADAPTIVE	DRIVE C	ONTROL	LOW-TRACTION	DETECTION	AND
	MODE SEL	ECTION				

This declaration is directed to:

 $\square$ 

The attached application, or

United States application or PCT international application number

filed on ______. (I hereby authorize the insertion of the application filing date and number into this form when 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. 15/167,447 , Filing Date May 27, 2016 ), 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

ASSUMPT:, 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 NA Inventor:	ME OF INVEN Xiaoming W			Date:	5/19/2016
Signature:	<u> </u>	<u>~~~~{</u>	Narx		
Note: An At	mlication Data Sh	eet (PTO/SB/14	or converent, accounce adapte or	C COLCC GIVEI	ntive entity, must accompany this form.
Use an additi	onal declaration fo	rm for each addi	tional inventor.		

### PATENT REEL: 038740 FRAME: 0026

### **RECORDED: 05/27/2016**