PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2779194

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RAJIT JOHRI	03/18/2014
WEI LIANG	03/18/2014
XIAOYONG WANG	03/18/2014
MARK STEVEN YAMAZAKI	03/18/2014
MING LANG KUANG	03/20/2014
RYAN ABRAHAM MCGEE	03/20/2014

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:	14221476

CORRESPONDENCE DATA

Fax Number: (313)322-7162

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via

US Mail.

Phone: 248-358-4400

Email: jrichmond@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:	83391704
NAME OF SUBMITTER:	JODY RICHMOND
SIGNATURE:	/Jody Richmond/
DATE SIGNED:	03/21/2014

	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 6	
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source=Assignment#page2.tif	
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source=Assignment#page5.tif	
source=Assignment#page6.tif	

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Attorney Docket Number   83391704	

Title of Invention METHOD AND SYSTEM FOR ADAPTIVE MOTOR POWER ESTIMATION IN HYBRID ELECTRIC VEHICLES					
This declaration	is direct	æd to:			
Š	United	ttached application, or I States application or PCT international application number filed on			
The above-identi	fled app	olication was made or authorized to be made by me.			
I hereby state the including the claim		ve reviewed and understand the contents of the specification in the above-identified application,			
I believe that I an	a the or	iginal inventor or an original joint inventor of a claimed invention in the application.			
continuation-in-p	art app	o disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for blications, material information which became available between the filing date of the prior mal or PCT international filing date of the continuation-in-part application.			
FORD GLOBAL of the State of E hereinafter referr interest, domestic of the ASSIGNE for the inventions name or names, consert the serial 14/221, 476 ASSIGNEE, its applications, in a	TECH: Delaware ed to a and fo E, its si s and di or in my applica  success and to the plication	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, s 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 iscoveries in any and all countries, entities and intergovernmental organizations, in its or their own y name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to attoin number and filing date of the application to receive Letters Patent herein: Serial No, Filing DateMarch_21,_2014), and I hereby sell, assign and set over to the sors, assigns or other legal representatives, all rights of priority, including any provisional the inventions and discoveries in any and all countries, entities and intergovernmental organizations are claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, are applications.			
including applica organizations, an	tions fo d 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 riorm any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives accure thereto the rights herein sold, assigned and set over.			
And I hereby repo	resent a	nd warrant that I have not granted any rights inconsistent with the rights granted herein.			
I hereby acknowled	ledge th	nat any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine more than five (5) years or both.			
LEGAL NAME ( Inventor: R	.zr 119 v aiit_Joh	# Date: 02/16/2-01-4			
Signature:	Comment.				
Note: An Applica	tion Date	a Sheet (PTO/8B/14 or equivalent), including naming the entire inventive entity, must accompany this form.			

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Attorney	110000	10.13 (1)	anan i	833917	/S 0/1	
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Title of Invention	METHOD AND SYSTEM FOR ADAPTIVE MOTOR POWER LOSS ESTIMATION IN HYBRID ELECTRIC VEHICLES
This declaration is	directed to:
	The attached application, or United States application or PCT international application numberfiled on
The above-identifi	ed application was made or authorized to be made by me.
I hereby state that including the clain	t I have reviewed and understand the contents of the specification in the above-identified application, ns.
I believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.
continuation-in-pa	duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for applications, material information which became available between the filing date of the prior attentional or PCT international filing date of the continuation-in-part application.
FORD GLOBAL of the State of Dehereinafter referre interest, domestic of the ASSIGNEE for the inventions name or names, or insert the serial/a 14/221, 476 ASSIGNEE, its applications, in an including all appreexaminations an	mployment 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 elaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, and to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and and foreign, in and to the inventions and discoveries in the above-identified invention including the right its successors, assigns or other legal representatives to make applications and to receive Letters Patent and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own 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.  ———————————————————————————————————
including applicat organizations, and	see for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, ions for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives by to secure thereto the rights herein sold, assigned and set over.
And I hereby repre	esent and warrant that I have not granted any rights inconsistent with the rights granted herein.
	edge 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 O	FINVENTOR STATES AND
Inventor: We	ei Liang Date: V////VVY
Signature:	
Material Academic	ion Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.
	ion Data Silver (F (U/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, sclaration form for each additional inventor.

Attorney Docket Number	83391704

Title of Inventi-	OR METHOD AND SYSTEM FOR ADAPTIVE MOTOR POWER LOSS ESTIMATION IN HYBRID ELECTRIC VEHICLES
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The above-identifi	ied application was made or authorized to be made by me.
I hereby state that including the clair	it I have reviewed and understand the contents of the specification in the above-identified application, us.
I believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.
continuation-in-pa	duty to disclose information which is material to patentability as defined in 37 C.P.R. 1.56, including for applications, material information which became available between the filing date of the prior e national or PCT international filing date of the continuation-in-part application.
FORD GLOBAL of the State of De hereinafter referre interest, domestic of the ASSIGNEE for the inventions name or names, or insert the serial/a 14/221, 47 ASSIGNEE, its applications, in an including all applications.	mployment 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 elaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, and to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and and foreign, 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 and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to application number and filling date of the application to receive Letters Patent herein: Serial No.  [April 21, 2014], and I hereby sell, assign and set over to the successors, assigns or other legal representatives, all rights of priority, including any provisional did to the inventions and discoveries in any and all countries, entities and intergovernmental organizations lications claiming benefit of the filling date hereof, continuations, continuations-in-part, divisionals, divisionals, divisionals, and provisionals.
including applications, and	be for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, ions for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives my to secure thereto the rights herein sold, assigned and set over.
And I hereby repre	esent and warrant that I have not granted any rights inconsistent with the rights granted herein.
or imprisonment o	edge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine f not more than five (5) years or both.
LEGAL NAME O	
Inventor: Xia	20yong Wang Date: 3-18-2019 20yong Wang
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Note: An Application Use an additional des	on Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, claration form for each additional inventor.

Attorney Docket Number	83391704

ESTIMATION IN HYBRID ELECTRIC VEHICLES	
This declaration is directed to:	
X 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. $14/221$ , $476$ , Filing Date March $21$ , $2014$ , 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 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: Mark Steven Yamazaki Date: 3/8/2014	
Inventor: Mark Steven Yamazaki Date: Signature: Date:	
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.	

Attorney Docket Number	83391704
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Title of Inventi	ion	METHOD AND ESTIMATION IN				POWER LOSS
This declaration i	s directe					
Š	X 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.						
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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 altorney to insert the serial/application number and filing date of the application to receive Letters Patent herein: Serial No. 14/221, 476, Filing DateMarch_21, 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.						
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LEGAL NAME	************	***************************************			- 68 / L - 7	<i>y</i>
	ling Lan			Date:	-48013	<u> 2014 —                                    </u>
Signature:	44/4	44			£ '	
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Attorney Docket Number	83391704	 	-
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of the State of hereinafter referencest, domest of the ASSIGNI for the invention name or names, insert the serial 14/221, 47 ASSIGNEE, its applications, in including all appropriate of the state of the serial of	employment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto L 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 ic and foreign, in and to the inventions and discoveries in the above-identified invention including the right EE, its successors, assigns or other legal representatives to make applications and to receive Letters Patent as 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 L'application number and filing date of the application to receive Letters Patent herein. Serial No.  6 , Filing Date March 21, 2014 ), and I hereby sell, assign and set over to the successors, assigns or other legal representatives, all rights of priority, including any provisional and to the inventions and discoveries in any and all countries, entities and intergovernmental organizations oplications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, and reissue applications.
organizations, as	ree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, ations for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental od to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives sary to secure thereto the rights herein sold, assigned and set over.
And I hereby rep	resent and warrant that I have not granted any rights inconsistent with the rights granted herein.
or andargoument	ledge 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	1 1 1 1 2 1 1 2 1 1 2 1 2 2 2 2 2 2 2 2
Inventor: R Signature:	Date: 3/20/2014
Note: An Applica Use an additional d	tion Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. icclaration form for each additional inventor.

PATENT REEL: 032494 FRAME: 0604

RECORDED: 03/21/2014