PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jeffrey Allen Doering	07/30/2013
Alex O'Connor Gibson	08/09/2013
Dennis Craig Reed	07/30/2013
Ralph Wayne Cunningham	08/05/2013

RECEIVING PARTY DATA

Name:	Ford Global Technologies, LLC
Street Address:	Fairlane Plaza South, Suite 800
City:	Dearborn
State/Country:	MICHIGAN
Postal Code:	48126

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13964982

CORRESPONDENCE DATA

Fax Number: 5034594142

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 503-459-4141
Email: fulton@ahmrt.com

Correspondent Name: ALLEMAN HALL MCCOY RUSSELL & TUTTLE, LLP

Address Line 1: 806 S.W. BROADWAY, SUITE 600 Address Line 4: PORTLAND, OREGON 97205

ATTORNEY DOCKET NUMBER:	83380943
NAME OF SUBMITTER:	Maxfield Fulton
Signature:	/Maxfield Fulton/
	PATENT

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Date:	08/12/2013
Total Attachments: 4 source=Executed Assignment 83380943#pa source=Executed Assignment 83380943#pa source=Executed Assignment 83380943#pa source=Executed Assignment 83380943#pa	age2.tif age3.tif

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Attorney Docket Number	83380943

Title of Invention	methods and systems for controlling catalyst temperature
This declaration is	directed to:
	The attached application, or United States application or PCT international application numberfiled on
The above-identif	ed application was made or authorized to be made by me.
I hereby state that including the clair	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 art 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.
for the State of D hereinafter referred interest, domestic of the ASSIGNE for the inventions name or names, coinsert the serial/13/964,98 ASSIGNEE, its applications, in a including all appreexaminations as	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, ed 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 E, 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 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. 2 , Filing Date August 12, 2013 , 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 plications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, and reissue applications.
including applications, an	ree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, thions for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental d to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives eary 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 imprisonment	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 Inventor: Je	OF INVENTOR effrey Allen Doering / Date: 30 July 2013
Signature:	4/45.
Nova An Ametic	sion Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.
Use an additional	declaration from for each additional inventor.
	PATENT

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A respondent twenty as Michaelean	92290042	
Attorney Docket Number	83380943	;
	and the second s	

Title of Invention	METHODS AND SYSTEMS FOR CONTROLLING CATALYST TEMPERATURE	
This declaration is direc		
	ttached application, or d States application or PCT international application number filed on	
The above-identified ap	plication was made or authorized to be made by me.	
I hereby state that I ha including the claims.	ve reviewed and understand the contents of the specification in the above-identified application,	
I believe that I am the or	figinal 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. 13/964,982, Filing Date August 12, 2013, 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 s	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 IN		
Inventor: Alex Q'C	Germon Gibson Date: 2/1/4/5	
Signature:	1	
	ta Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form,	

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Title of Invention METHODS AND SYSTEMS FOR CONTROLLING CATALYST TEMPERATURE	
This declaration is direc	
	ttached application, or d States application or PCT international application number filed on
The above-identified ap	plication was made or authorized to be made by me.
I hereby state that I had including the claims.	ve reviewed and understand the contents of the specification in the above-identified application,
I believe that I am the or	riginal 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 plications, material information which became available between the filing date of the prior onal 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 for the ASSIGNEE, its sfor the inventions and drame or names, or in minsert the serial/applications and the serial/applications and the serial succession of the serial ser	ment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto fNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws re, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and preign, in and to the inventions and discoveries in the above-identified invention including the right nuccessors, 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 attorn number and filing date of the application to receive Letters Patent herein: Serial No. —, Filing Date August 12, 2013—), and I hereby sell, assign and set over to the issors, assigns or other legal representatives, all rights of priority, including any provisional he 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, sue applications.
including applications f organizations, and to pe	myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental erform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives secure thereto the rights herein sold, assigned and set over.
And I hereby represent a	and warrant that I have not granted any rights inconsistent with the rights granted herein.
	has 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 OF INV	VENTOR
Inventor: <u>Dennis (</u>	raig Reed Date: 7-30-/3
Signature:	
Note: An Application De	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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Attorney Do		83380943	

I HE OF THACH	TEMPERATURE			
This declaration is dire				
	attached application, or ed 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 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.			
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. 13/964,982 , Filing Date August 12, 2013), 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: Ralph Wayne Cunningham Date: 3 Aug 20/3				
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.				
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RECORDED: 08/12/2013