PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jianwen James Yi	07/09/2013
Claudia Olivia Iyer	07/16/2013
Steven Wooldridge	07/09/2013
Gary Alan Coulson	07/09/2013
David Bruce Reiche	07/10/2013
Brad Alan VanDerWege	07/09/2013

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:	13946740

CORRESPONDENCE DATA

Fax Number: 5034594142

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

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

Correspondent Name: ALLEMAN HALL MCCOY RUSSELL & TUTTLE, LLP

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

ATTORNEY DOCKET NUMBER:	83374945
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REEL: 030841 FRAME: 0883

PATENT

502427040

NAME OF SUBMITTER:	Jibek Enabnit		
Signature:	/Jibek Enabnit/		
Date: 07/19/2013			
Total Attachments: 6 source=Executed Assignment 83374945#page1.tif source=Executed Assignment 83374945#page2.tif source=Executed Assignment 83374945#page3.tif source=Executed Assignment 83374945#page4.tif source=Executed Assignment 83374945#page5.tif source=Executed Assignment 83374945#page6.tif			

2013-Jul-16 12:33 PM Ford Motor 313-594-0010

Please direct all correspondence to customer number: 36865

Attorney Docket Number 833	74945

ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

Title of Invention	n	FUEL INJECTOR SPRAY PATTERN		
This declaration is	direct	ed to:		
		tached application, or States application or PCT international application number filed on		
The above-identifi	ied app	lication 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.			
		iginal inventor or an original joint inventor of a claimed invention in the application.		
continuation-in-pa	ırt app	b disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for illcations, 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 of the State of De hereinafter referre interest, domestic of the ASSIGNEE for the inventions name or names, o insert the serial/s 13/946,740 ASSIGNEE, its applications, in ar	TECH elawar ed to a and for and d r in m applica succes d to ti	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 is scoveries 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 tion number and filing date of the application to receive Letters Patent herein: Serial No. ———————————————————————————————————		
including applications, and	tions f i 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 rform 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 repr	esent a	and warrant that I have not granted any rights inconsistent with the rights granted herein.		
I hereby acknowled imprisonment of	edge ti of <u>not i</u>	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 C	F IN	/ENTOR James Yi Date; //9/2ご/こ		
Signature:	71			
		a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.		
Use an additional d	eclarati	on form for each additional inventor.		

2013-Jul-16 12:33 PM Ford Motor 313-594-0010

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Attorney Docket Number 83374945		
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FORD GLOBAL of the State of D hereinafter referre interest, domestic of the ASSIGNER for the inventions name or names, o insert the serial/a 13/946,740 ASSIGNEE, its applications, in ar	TECH elaware ed to a and fo a and fo a and di r in my applica buccess and to the olication	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 uccessors, 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 tion number and filing date of the application to receive Letters Patent herein: Serial No.
including applications, and	tions fo I 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 rform 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 repr	esent a	nd warrant that I have not granted any rights inconsistent with the rights granted herein.
or imprisonment of	of not n	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 C		
Inventor: <u>Cl</u>	audia C	Divia Iver Date:
Signature:	Ü	an fr
Note: An Applicat Use an additional de	ion Dat eclaration	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, on form for each additional inventor.

2013-Jul-16 12:33 PM Ford Motor 313-594-0010

Title of Invention

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FUEL INJECTOR SPRAY PATTERN

This declaration is directed to:
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. 13/946,740 , Filing Date July 19, 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: Steven_Wooldridge Date: 7/9/20/3
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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FORD GLOBAL of the State of D hereinafter referr Interest, domestic of the ASSIGNE for the inventions name or names, of insert the serial 13/946.7 ASSIGNEE, its applications in a	TECH belawar ed to a c and fo E, its s s and d or in m /applic 40 succe and to t plication	ment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto INOLOGIES, 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 successors, assigns or other legal representatives to make applications and to receive Letters Patent discoveries in any and all countries, entitles and intergovernmental organizations, in its or their own attempting the property of the application to receive Letters Patent herein: Serial No. Filing Date July 19, 2013 And I hereby sell, assign and set over to the inventions and discoveries in any and all countries, entities and intergovernmental organizations one claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, see applications.
including applications, an	ations : ad to p	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 rep	resent	and warrant that I have not granted any rights inconsistent with the rights granted herein,
I hereby acknow	ledge t	that 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 IN	VËNTOR TY L Q 3A.3
Inventor: <u>G</u>	iary Al	an Coulson Date: Skiy 7, 2013
Signature:	$\cup a$	y (Man Conko
Note: An Applica	ation D	() ata Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.
Use an additional	declarat	tion form for each additional inventor.

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FORD GLOBAL of the State of D hereinafter referrinterest, domestic of the ASSIGNE for the inventions name or names, coinsert the serial/13/946,74 ASSIGNEE, its applications, in a including all appreciaminations and I hereby agrincluding applica	TECH relawar ed to a and fo and fo and fo and do r in m applica 40 succes and to the clication are for tions f	ment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto MOLOGIES, 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 oreign, 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 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 atton number and filing date of the application to receive Letters Patent herein: Serial No., Filing Date July 19, 2013, and I hereby sell, assign and set over to the isors, assigns or other legal representatives, all rights of priority, including any provisional me inventions and discoveries in any and all countries, entities and intergovernmental organizations are applications. In the provisional intergovernmental organizations are applications. In the provisional intergovernmental organizations are applications. In the provisional intergovernmental organizations are applications.
•	•	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.
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LEGAL NAME (Inventor: D		VENTOR ruce Reiche Date: 10 July 2013
	avid D	Deid Leight
Signature:		- MARCH INTERNAL
Note: An Applica Use an additional d	tion Da Icclarati	to 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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FORD GLOBAL To of the State of Delinereinafter referred interest, domestic a of the ASSIGNEE, for the inventions a name or names, or insert the serial/aj 13/946,740 ASSIGNEE, its sapplications, in and including all applications and	rech laward to a and fo , its st and di in my pplica ucces d to th ication	••
including applications, and	ons fo 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 rform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives ecure thereto the rights herein sold, assigned and set over.
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LEGAL NAME OF		
Inventor: <u>Bra</u>	d Ala	n VanDerWege Date: 4/9/13
Signature:	[m]	4 UNIT
Nasa Au Auutlaasta	u Des	Cheet (DTO/OD)///an equivalent) including naming the entire inventive entity, good agreement this form
		a Sheet (PTO/SB/14/or equivalent), including naming the entire inventive entity, must accompany this form. on form for each additional inventor.

PATENT REEL: 030841 FRAME: 0890

RECORDED: 07/19/2013