### 503356859 06/18/2015

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3403481

SUBMISSION TYPE:		NEW ASSI	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMI	ASSIGNMENT			
CONVEYING PARTY D	ΑΤΑ					
		Name	Name		Execution Date	
MICHAEL BRENDAN H	ОРКА				06/10/2015	
WILLIAM RUSSELL GO	ODWIN				06/10/2015	
MICHIEL J. VAN NIEUW	/STADT				06/16/2015	
RECEIVING PARTY DA	ТА					
Name:	FORD	FORD GLOBAL TECHNOLOGIES, LLC				
Street Address:	FAIRLA	NE PLAZA SOU	TH, SUITE 800			
Internal Address:	330 TO	WN CENTER DF	RIVE			
City:	DEARB	ORN				
State/Country:	місніє	AN				
Postal Code:	48126					
PROPERTY NUMBERS Total: 1 Property Type		N	Number			
Property Type		Ν	umber	7		
Application Number: 14743						
Application Number:		4743606				
		4743606				
CORRESPONDENCE D						
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i>	OATA	503)459-4142 <b>the e-mail addr</b>				
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i>	PATA e sent to provided	503)459-4142 the e-mail addr ; if that is unsuc				
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone:	OATA e sent to provided	503)459-4142 the e-mail addr ; if that is unsuc 503-459-4141	ccessful, it will be se			
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email:	OATA e sent to provided	503)459-4142 the e-mail addr ; if that is unsuc 503-459-4141 enabnit@ahmrt.c	c <b>cessful, it will be se</b> om	nt via US Ma	il.	
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone:	OATA e sent to provided	503)459-4142 <i>the e-mail addr</i> <i>if that is unsuc</i> 503-459-4141 enabnit@ahmrt.c ALLEMAN HALL	ccessful, it will be se	nt via US Ma	il.	
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name:	OATA e sent to provided	503)459-4142 <i>the e-mail addr</i> <i>if that is unsuc</i> 503-459-4141 enabnit@ahmrt.c ALLEMAN HALL	om MCCOY RUSSELL & WAY, SUITE 600	nt via US Ma	il.	
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	OATA e sent to provided	503)459-4142 the e-mail addr tif that is unsuc 503-459-4141 enabnit@ahmrt.c ALLEMAN HALL 806 S.W. BROAL	om MCCOY RUSSELL & WAY, SUITE 600	nt via US Ma	il.	
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	OATA e sent to provided	503)459-4142 <i>the e-mail addr</i> <i>if that is unsuc</i> 503-459-4141 enabnit@ahmrt.c ALLEMAN HALL 306 S.W. BROAE PORTLAND, OR	om MCCOY RUSSELL & DWAY, SUITE 600 EGON 97205	nt via US Ma	il.	
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU	OATA e sent to provided	503)459-4142 <i>the e-mail addr</i> <i>if that is unsuc</i> 503-459-4141 enabnit@ahmrt.c ALLEMAN HALL 806 S.W. BROAE PORTLAND, OR 83541118	CCESSFUL, it will be se MCCOY RUSSELL & DWAY, SUITE 600 EGON 97205	nt via US Ma	il.	
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1:	OATA e sent to provided	503)459-4142 the e-mail addr f that is unsuc 503-459-4141 enabnit@ahmrt.c ALLEMAN HALL 806 S.W. BROAE PORTLAND, OR 83541118 JIBEK ENA	ccessful, it will be se om MCCOY RUSSELL & DWAY, SUITE 600 EGON 97205 ABNIT	nt via US Ma	il.	
CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU NAME OF SUBMITTER: SIGNATURE:	OATA e sent to provided	503)459-4142 the e-mail addr f that is unsuc 503-459-4141 enabnit@ahmrt.c ALLEMAN HALL 806 S.W. BROAL PORTLAND, OR 83541118 JIBEK ENA /Jibek Enal	ccessful, it will be se om MCCOY RUSSELL & DWAY, SUITE 600 EGON 97205 ABNIT	nt via US Ma	il.	
CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUNAME OF SUBMITTER: SIGNATURE: DATE SIGNED:	DATA e sent to provided	503)459-4142 <i>the e-mail addr</i> <i>if that is unsuc</i> 503-459-4141 enabnit@ahmrt.c ALLEMAN HALL 306 S.W. BROAE PORTLAND, OR 83541118 JIBEK ENA /Jibek Enal 06/18/2015	ccessful, it will be se om MCCOY RUSSELL & DWAY, SUITE 600 EGON 97205 ABNIT	nt via US Ma	il.	
CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU NAME OF SUBMITTER: DATE SIGNED: Total Attachments: 3	DATA e sent to provided JMBER: ment 8354	503)459-4142 <b>the e-mail addr</b> <b>if that is unsuc</b> 503-459-4141 enabnit@ahmrt.c ALLEMAN HALL 306 S.W. BROAL PORTLAND, OR 83541118 JIBEK ENA /Jibek Enal 06/18/2015	ccessful, it will be se om MCCOY RUSSELL & DWAY, SUITE 600 EGON 97205 ABNIT	nt via US Ma	il.	

#### Please direct all correspondence to customer number: 36865

Attorney Docket Number 83541118

### 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	DUAL RATE DIESEL PA	<b>RTICULATE FILT</b>	ER LEAK MONITOR
This declaration is directed	ed to:		
	ached application, or States application or PCT internationa filed on	l application number	
The above-identified app	lication was made or authorized to be n	nade by me.	
I hereby state that I hav including the claims.	e reviewed and understand the conter	nts of the specification in	the above-identified application,
I believe that I am the ori	ginal inventor or an original joint inver	ntor of a claimed invention	in the application.
continuation-in-part appl	disclose information which is materia lications, material information which al or PCT international filing date of the	became available betwe	en the filing date of the prior
FORD GLOBAL TECHN of the State of Delaware hereinafter referred to as interest, domestic and for of the ASSIGNEE, its su for the inventions and dis name or names, or in my insert the serial/applicat 14/743,606 ASSIGNEE, its success applications, in and to the	tent agreement heretofore made or by NOLOGIES, LLC, a Ford Motor Comp , having its principal place of busines the ASSIGNEE, its successors, assig eign, in and to the inventions and disc ccessors, assigns or other legal represe coveries in any and all countries, entit name, at its or their election (and I he ion number and filing date of the , Filing Date <u>June 18,20</u> ors, assigns or other legal represen e inventions and discoveries in any and s claiming benefit of the filing date are applications.	any subsidiary, organized as at Dearborn, County of ms or other legal represen overies in the above-identi entatives to make applicati ies and intergovernmental reby authorize the ASSIGI application to receive La 15, and I hereby tatives, all rights of price 1 all countries, entities and	and existing by virtue of the laws Wayne, and State of Michigan, tatives, the entire right, title and fied invention including the right ons and to receive Letters Patent organizations, in its or their own NEE or ASSIGNEE's attorney to etters Patent herein: Serial No. y sell, assign and set over to the prity, including any provisional intergovernmental organizations
including applications for organizations, and to perl	nyself, my heirs, successors, assigns o r Letters Patent of any and all kinds a form any and all acts which the ASSI coure thereto the rights herein sold, assi	nd in any and all countrie GNEE, its successors, assig	s, entities and intergovernmental
And I hereby represent an	d warrant that I have not granted any r	ights inconsistent with the	rights granted herein.
	at any willful false statement made in to ore than five (5) years or both.	this declaration is punishab	ble under 18 U.S.C. 1001 by fine
LEGAL NAME OF INVI		Date:	June 10. 2.015
BA , S	S & Mart	Loane.	- Juesser is a constant
Signature: <u>J</u> /Au			
	Sheet (PTO/SB/14 or equivalent), includin 1 form for each additional inventor.	ng naming the entire inventiv	e entity, must accompany this form.

PATENT REEL: 035863 FRAME: 0446 Attorney Docket Number | 83541118

ю.

## 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	DUAL RATE DIESEL PARTICULATE FILTER LEAK MONITOR				
This declaration is di	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. $14/743,606$ , Filing Date June 18,2015, 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					
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: 035863 FRAME: 0447

Attorney Docket Number 83541118

PATENT REEL: 035863 FRAME: 0448

# 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	DUAL RATE DIESEL PARTICULATE FILTER LEAK MONITOR			
This declaration is dir	ected to:			
Uni Uni	The attached application, or United States application or PCT international application number			
The above-identified	application was made or authorized to be made by me.			
I hereby state that I including the claims.	have 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	y 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 tional or PCT international filing date of the continuation-in-part application.			
FORD GLOBAL TEC of the State of Delav hereinafter referred to interest, domestic and of the ASSIGNEE, it for the inventions and name or names, or in insert the serial/appl 14/743,606 ASSIGNEE, its succ applications, in and to including all applica reexaminations and re And I hereby agree f including applications	oyment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto CHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws vare, having its principal place of business at Dearborn. County of Wayne, and State of Michigan, o as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and I 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 Patent I discoveries in any and all countries, entities and intergovernmental organizations, in its or their own my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to lication number and filing date of the application to receive Letters Patent herein: Serial No			
may deem necessary I	to secure thereto the rights herein sold, assigned and set over.			
	at 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 I Inventor: Micks	NVENTOR cf I/Van Nieuwstadt Date: 75 JUN 15			
	N. Madel			
Signature: ( <u>)////</u>				
	Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. ation form for each additional inventor.			

#### **RECORDED: 06/18/2015**