### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2890738

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
ANTHONY MORELLI	06/09/2014
BRIEN LLOYD FULTON	06/09/2014
THOMAS KOSTRZEWSKI	06/09/2014
JASON RONALD SMITH	06/02/2014
KYLE POHLKAMP	06/09/2014

### 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:	14300147

### **CORRESPONDENCE DATA**

Fax Number: (503)459-4142

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: 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:	83441297
NAME OF SUBMITTER:	MAXFIELD FULTON
SIGNATURE:	/Maxfield Fulton/
DATE SIGNED:	06/09/2014

**Total Attachments: 5** 

source=Executed Assignment 83441297#page1.tif

REEL: 033061 FRAME: 0282 502844141

PATENT -

source=Executed Assignment 83441297#page2.tif
source=Executed Assignment 83441297#page3.tif
source=Executed Assignment 83441297#page4.tif
source=Executed Assignment 83441297#page5.tif

***************************************	
Attorney Docket Number	83441297
1 ( \$1004 (3.6.) Extractor 2 ( \$100 ( 100 )	, 4.4

Title of Invent	ion	SYSTEM AND METHOD FOR DETERMINING TURBINE DEGRADATION AND MITIGATING TURBINE DEGRADATION IN A VARIABLE GEOMETRY
	:	TURBOCHARGER
This declaration	is direct	ed to:
	United	tached application, or  I States application or PCT international application numberfiled on
The above-identi	fied app	olication was made or authorized to be made by me.
I hereby state th including the cla		ve reviewed and understand the contents of the specification in the above-identified application,
I believe that I ar	n the or	iginal 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. 14/300,147 , Filing Date June 9, 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 INV	/ENTOR //a/>//
Inventor: A	unthops ////	Morelli Date; <u>Q. 1/02/9</u>
Signature:		
		a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.
Use an additional	declaratí	on form for each additional inventor.

	the state of the s	
- 8		
ŧ	Attorney Docket Number   83441297	
- 8	Attorney Docket Humber   05441227	

Title of Invention	SYSTEM AND METHOD FOR DETERMINING TURBINE DEGRADATION AND MITIGATING TURBINE DEGRADATION IN A VARIABLE GEOMETRY TURBOCHARGER	
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.	ye reviewed and understand the contents of the specification in the above-identified application,	
I believe that I am the o	riginal 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, Country 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. 14/300,147, Filing Date June 9, 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 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 IN		
	oyd Fulton Date: / June 20/4	
Signature: Andrew Commence of the Commence of		
	ta Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, on form for each additional inventor.	

I de la companya del companya de la companya del companya de la co	1 may 1 a a market
Attorney Docket Number	1 \$23.64E7\$7
( TARGING) EXOCACC PARILICAL	{ XXX***********

Title of Inventi	ion	SYSTEM AND METHOD FOR DETERMINING TURBINE DEGRADATION AND MITIGATING TURBINE DEGRADATION IN A VARIABLE GEOMETRY TURBOCHARGER	
This declaration i	s direct		
	The attached application, or United States application or PCT international application numberfiled on		
The above-identif	fied app	dication 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 an	n 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 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 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. $14/300$ , $147$ , Filing Date $3une 9$ , $2014$ , 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 C			
Inventor: The Signature:	iomas i	Kostrzewski Date: D5/07/299	
Note: An Applicat Use an additional de	ion Data eclaratio	Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. In form for each additional inventor.	

Attorney Docket Number	83441297

Title of Invent	ion	SYSTEM AND METHOD FOR DETERMINING TURBINE DEGRADATION AND MITIGATING TURBINE DEGRADATION IN A VARIABLE GEOMETRY TURBOCHARGER		
This declaration	is direc	ted to:		
	The attached application, or United States application or PCT international application number filed on			
The shouldest	ified ar	optication was made or authorized to be made by me.		
I hereby state the including the cla	aat I ha iims	ave reviewed and understand the contents of the specification in the above-identified application,		
I hallove that I s	m the c	original inventor or an original joint inventor of a claimed invention in the application.		
I am aware of the continuation-in-	ne duty part a) the nat	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 prior ional or PCT international filing date of the continuation-in-part application.		
FORD GLOBA of the State of hereinafter refe interest, domes of the ASSIGN for the inventioname or names insert the seri 14/300, 1 ASSIGNEE, applications, it including all reexamination.  And I hereby including applorganizations, may deem need to the state of the serious and the serious applications, and the serious apploach including applorganizations, may deem need to the state of the state	Delawerred to tic and tell application application and to aggree flication and to essary	expense 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 are, 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 foreign, in and to the inventions and discoveries in the above-identified invention including the right assuccessors, assigns or other legal representatives to make applications and to receive Letters Patent 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 ication number and filing date of the application to receive Letters Patent herein: Serial No. Filing Date June 9, 2014 ), and I hereby sell, assign and set over to the personance of the inventions and discoveries in any and all countries, entities and intergovernmental organizations of the inventions and discoveries in any and all countries, entities and intergovernmental organizations of the inventions claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, sissue applications.  For myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, so for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives to secure thereto the rights herein sold, assigned and set over.		
And I hereby	represe	nt and warrant that I have not granted any rights inconsistent with the rights granted herein.		
I hereby ackn	owledg	te that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by the not more than five (5) years or both.		
LEGAL NAN	AE OF	INVENTOR TOUR OF THE TOUR		
Inventor	Jason	Ronald Smith		
Signature:		CHC MES (		
}		Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form		

RECORDED: 06/09/2014

Attorney Docket Number	83441297	 <del> </del>
Anomey Docket Number	0344127/	

# 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		SYSTEM AND METHOD FOR DETERMINING TURBINE DEGRADATION AND MITIGATING TURBINE DEGRADATION IN A VARIABLE GEOMETRY				
		TURBOCHARGER				
This declaration i	This declaration is directed to:					
	United	attached application, or  d States application or PCT international application numberfiled 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. $14/300$ , $147$ , Filing Date June 9, $2014$ ), 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 O						
Inventor: Ky	<u>yle Pol</u>	olkamp Date: 6/9/2014				
Signature: 14 112						
NGAL ALAMOT MARKATAN TO THE CONTROL OF THE CONTROL						
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.						