### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4938712

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
MARY CATHERINE FARMER	04/26/2018
DENNIS CRAIG REED	04/13/2018
PETER DOUGLAS KUECHLER	04/23/2018
TERRY GENE FELDPAUSCH	04/13/2018
MITCHELL THOMAS FINK	04/12/2018

#### **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:	15965293

#### **CORRESPONDENCE DATA**

Fax Number: (248)358-3351

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: 248-358-4400

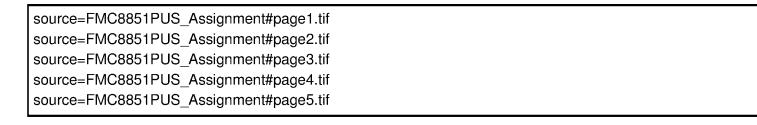
Email: svachon@brookskushman.com

BROOKS KUSHMAN P.C. **Correspondent Name:** 

Address Line 1: 1000 TOWN CENTER, 22ND FLOOR Address Line 4: SOUTHFIELD, MICHIGAN 48075

ATTORNEY DOCKET NUMBER:	84004815
NAME OF SUBMITTER:	JAMES A. BERTINO
SIGNATURE:	/James A. Bertino/
DATE SIGNED:	04/30/2018

**Total Attachments: 5** 



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Attorney Docket Number	84004815

Title of Invention	VEHICLE POWERTRAIN LASH CROSSING CONTROL STRATEGY
This declaration is directed	ed 10;
United	States application, or  States application or PCT international application number  filed on (I hereby authorize the insertion of the application filing date and ten they become known.)
The above-identified app	lication was made or authorized to be made by me.
I hereby state that I havincluding the claims.	re reviewed and understand the contents of the specification in the above-identified application,
I believe that I am the ori	ginal inventor or an original joint inventor of a claimed invention in the application.
continuation-in-part app	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.
FORD GLOBAL TECHN of the State of Delaware hereinafter referred to as interest, domestic and for of the ASSIGNEE, its sufor the inventions and disname or names, or in my insert the serial/applicat 15/965,293  ASSIGNEE, its success applications, in and to the including all application reexaminations and reisst And I hereby agree for micluding applications for organizations, and to per	nyself, my heirs, successors, assigns or other legal representatives to execute any and all papers, r Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental form any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives
	d warrant that I have not granted any rights inconsistent with the rights granted herein.
I hereby acknowledge that	at any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine ore than five (5) years or both.
LEGAL NAME OF INVI	
	Date: 1/201/0
Signature:	
	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   8400481	5

Title of Invention	VEHICLE POWERTRAIN LASH CROSSING CONTROL STRATEGY	
This declaration is direct	ed to:	
[] United	sached application, or  States application or PCT international application number  filed on (I hereby authorize the insertion of the application filing date and then they become known.)	
The above-identified app	lication was made or authorized to be made by me.	
	re reviewed and understand the contents of the specification in the above-identified application,	
I believe that I am the or	iginal 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 discations, material information which became available between the filing date of the prior nai 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 of the ASSIGNEE, its store the inventions and diname or names, or in my insert the serial/applications, its successapplications, in and to the including all application reexaminations and reissand I hereby agree for	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, 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 successors, assigns or other legal representatives to make applications and to receive Letters Patent scoveries in any and all countries, entities and intergovernmental organizations, in its or their own mame, 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., Filing Date April 27, 2018 , and I hereby sell, assign and set over to the sors, 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 claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, the applications.  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	
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 a	and warrant that I have not granted any rights inconsistent with the rights granted herein.	
I hereby acknowledge the	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 OF INV	VENTOR 4/13-7019	
Inventor: Dennis C	raig need	
Signature:	- Cray So Cof	
Note: An Application Da Use an additional declarati	ta Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.	

***	01001015
Attorney Docket Number	L 840048 L5
Trentino, monton Linearons	

Title of Invention	VEHICLE POWERTRAIN LASH CROSSING CONTROL STRATEGY		
This declaration is direct	ed to:		
☐ I Inited	X The attached application, or United States application or PCT international application number filed on		
The above-identified app	lication was made or authorized to be made by me.		
I hereby state that I have including the claims.	ve reviewed and understand the contents of the specification in the above-identified application,		
I believe that I am the or	iginal 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 disciplinations, 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. 15/965,293			
	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.		
I hereby acknowledge the or imprisonment of not re-	nat any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine nore than five (5) years or both.		
LEGAL NAME OF INV	VENTOR GREET		
Inventor: Peter Do	uglas Kuechler Date:		
Signature:			
Note: An Application Dat	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.		
	on form for each additional inventor.		

Attorney Docket Number	84004815

Title of Invention	VEHICLE POWERTRAIN LASH CROSSING CONTROL STRATEGY	
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X The attached application, or United States application or PCT international application number filed on (I hereby authorize the insertion of the application filing date and number into this form when they become known.)		
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. 15/965,293 , Filing Date April 27, 2018 ), 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 Inventor: Terry Ge	YENTOR ne Feldpausch  Date: 4-13-35/8	
Signature: Try Gare Follows		
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	84004815

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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 attorney to insert the serial/application number and filing date of the application to receive Letters Patent herein: Serial No. 15/965,293		
organizations, and to perform any and all nots 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		
11:	W. Fier	
Signature: MAMM J. M.		
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: 045670 FRAME: 0646

**RECORDED: 04/30/2018**