505370437 03/12/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5417229

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHRISTINE LAMBERT	03/06/2019
MIRA BUMBAROSKA	03/05/2019
JEONG KIM	02/22/2019
DOUGLAS ALLEN DOBSON	03/05/2019

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:	16299680

CORRESPONDENCE DATA

Fax Number: (971)271-8021

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: 971-271-8020 Email: Tapia@mccrus.com MCCOY RUSSELL LLP

Correspondent Name: Address Line 1: 806 S.W. BROADWAY, SUITE 600

PORTLAND, OREGON 97205 Address Line 4:

ATTORNEY DOCKET NUMBER: 84118458 NAME OF SUBMITTER: **ASHLEY R. TAPIA SIGNATURE:** /Ashley R. Tapia/ **DATE SIGNED:** 03/12/2019

Total Attachments: 4

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Attorney Docket Number	84118458	

THE OF HINCHING	METHODS AND SYSTEMS FOR EXHAUST EMISSION CONTROL
This declaration is directed	d to:
United	ached application, or States application or PCT international application number filed on (I hereby authorize the insertion of the application filing date and en they become known.)
The above-identified appl	ication was made or authorized to be made by me.
I hereby state that I have including the claims.	reviewed and understand the contents of the specification in the above-identified application,
I believe that I am the orig	inal inventor or an original joint inventor of a claimed invention in the application.
communication in barr appu	disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for cations, material information which became available between the filing date of the prior alor PCT international filing date of the continuation-in-part application.
of the State of Delaware, hereinafter referred to as interest, domestic and fore of the ASSIGNEE, its suctor the inventions and discussed in the serial/application 16/299,680 ASSIGNEE, its successor applications, in and to the	onto agreement heretofore made or by contractual obligation, I do sell, assign and set over unto OLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws having its principal place of business at Dearborn, County of Wayne, and State of Michigan, the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and ign, in and to the inventions and discoveries in the above-identified invention including the right cessors, assigns or other legal representatives to make applications and to receive Letters Patent overies in any and all countries, entities and intergovernmental organizations, in its or their own name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to an number and filing date of the application to receive Letters Patent herein: Serial No. ———————————————————————————————————
organizations, and to perfo	rself, my heirs, successors, assigns or other legal representatives to execute any and all papers, Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental rm any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives are 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.
a unbusoiment of not mor	any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine than five (5) years or both.
LEGAL NAME OF INVENTION INVENTION INVESTIGATION OF THE PROPERTY OF THE PROPERT	
ignature: <u>MMA</u>	tere hambert
ote: An Application Data S se an additional declaration f	heet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

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Attorney Docket Number	94118458
Attorney Docker Number	0711070

Title of Invention	METHODS AND SYSTEMS FOR EXHAUST EMISSION CONTROL
This declaration is directed to:	
United	tached 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.
I hereby state that I have including the claims.	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.
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.	
FORD GLOBAL TECH of the State of Delawar hereinafter referred to a interest, domestic and fo of the ASSIGNEE, its s for the inventions and di name or names, or in my insert the serial/applica 16/299,680 ASSIGNEE, its succes applications, in and to the including all application reexaminations and reiss And I hereby agree for including applications for	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 pe	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 represent and warrant that I have not granted any rights inconsistent with the rights granted herein.	
I hereby acknowledge the or imprisonment of not to	hat 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 2/5/2019
Inventor: Mira Be	imbaroska Date: 3/3/2017/
Signature:	iblica
	ta Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

Attorney Docket Number	84118458

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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 disname or names, or in my insert the serial/applicat 16/299,680 ASSIGNEE, its success applications, in and to the	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, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, 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 acoveries in any and all countries, entities and intergovernmental organizations, in its or their own name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to ion number and filing date of the application to receive Letters Patent herein: Serial No. ———————————————————————————————————	
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 INVI		
Signature:	Franch &	
Orginature.		
	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	84118458	

Title of Invention	METHODS AND SYSTEMS FOR EXHAUST EMISSION CONTROL
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The above-identified appl	lication was made or authorized to be made by me.
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of the State of Delaware, hereinafter referred to as interest, domestic and force of the ASSIGNEE, its such for the inventions and disconame or names, or in my insert the serial/applications and to the ASSIGNEE, its successor applications, in and to the	ent agreement heretofore made or by contractual obligation, I do sell, assign and set over unto IOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws having its principal place of business at Dearborn, County of Wayne, and State of Michigan, the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and eign, in and to the inventions and discoveries in the above-identified invention including the right excessors, assigns or other legal representatives to make applications and to receive Letters Patent exoveries in any and all countries, entities and intergovernmental organizations, in its or their own name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to on number and filing date of the application to receive Letters Patent herein: Serial No. —, Filing DateMarch 12, 2019), and I hereby sell, assign and set over to the ors, assigns or other legal representatives, all rights of priority, including any provisional inventions and discoveries in any and all countries, entities and intergovernmental organizations a claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, e applications.
organizations, and to perfo	yself, my heirs, successors, assigns or other legal representatives to execute any and all papers, Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental orm any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives cure 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.
or imprisonment of not mo	any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine re than five (5) years or both.
LEGAL NAME OF INVE	± 1 1
Signature:	wa a. Ide
Note: An Application Data S Use an additional declaration	Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. form for each additional inventor.

PATENT REEL: 048574 FRAME: 0060

RECORDED: 03/12/2019