505914019 02/12/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5960736

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
DOUGLAS MARTIN	01/02/2020
JOHN ROLLINGER	01/02/2020
JULIA BUCKLAND SEEDS	01/12/2020
JOSEPH LYLE THOMAS	01/06/2020
JOSHUA SCHUMAKER	01/06/2020
ADAM RICHARDS	02/10/2020
JOHN ERIK MIKAEL HELLSTROM	01/06/2020

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:	16789247

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: 9712718020

Email: mcnett@mccrus.com

Correspondent Name: MCCOY RUSSELL LLP

Address Line 1:806 SW BROADWAY SUITE 600Address Line 4:PORTLAND, OREGON 97205

ATTORNEY DOCKET NUMBER: 84221067	
NAME OF SUBMITTER:	LUKAS MCNETT
SIGNATURE:	/Lukas McNett/

PATENT 505914019 REEL: 051804 FRAME: 0978

DATE SIGNED:	02/12/2020
Total Attachments: 7	
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Attorney Docket Number	84221067
Audiney Docket Number	04221007

little of Invention SYSTEMS AND METHODS FOR IMPROVING FUEL ECONOMY AND		
REDUCING EMISSIONS		
This declaration is directed to:		
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. 16/789,247 , Filing Date February 12, 2020), 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: Douglas Martin Date: _//2/252 5		
Inventor: Douglas Martin Date: 1/2/2626		
Signature: Bongles R. Martin		
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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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. 16/789,247 , Filing Date February 12, 2020), 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		
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LEGAL NAME OF INV		
Inventor: John Roll	linger Date: 1/4-/2-0	
Signature:	in Rollinger	
	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.	

Attorney Docket Number	84221067
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FORD GLOBAL TECH of the State of Delawar hereinafter referred to a interest, domestic and for of the ASSIGNEE, its safor the inventions and domain or names, or in magnifications and to the serial polications, in and to the including all application reexaminations and reissaform of the serial polications and the serial polications are serial polications.	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 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 oreign, 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 ation number and filing date of the application to receive Letters Patent herein: Serial No., Filing Date February 12, 2020), and I hereby sell, assign and set over to the issors, assigns or other legal representatives, all rights of priority, including any provisional he inventions and discoveries in any and all countries, entities and intergovernmental organizations and claiming benefit of the filing date hereof, continuations, continuations—in-part, divisionals, see applications. 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.		
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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	VENTOR		
Inventor: Julia Bud	ckland Seeds Date: 1/12/20		
Signature:	V H3 Sede		
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Attorney Docket Number	84221067		
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Pursuant to my employ	ment agreement heretofore made or by contractu	al obligation. I do sell, assign and set over unto
	INOLOGIES, LLC, a Ford Motor Company subsic	
	re, having its principal place of business at Dear	
	as the ASSIGNEE, its successors, assigns or other	
	oreign, in and to the inventions and discoveries in	
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	y name, at its or their election (and I hereby author	
	ition number and filing date of the application	
16/789,247	Filing Date February 12, 2020	and I hereby sell, assign and set over to the
ASSIGNEE its succes	ssors, assigns or other legal representatives, al	rights of priority, including any provisional
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	ons claiming benefit of the filing date hereof,	
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And I hereby agree for	myself, my heirs, successors, assigns or other les	gal representatives to execute any and all papers,
	or Letters Patent of any and all kinds and in any	
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 s	
And I hereby represent a	ind warrant that I have not granted any rights incor	isistent with the rights granted herein.
	hat any willful false statement made in this declar	ation is punishable under 18 U.S.C. 1001 by fine
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LEGAL NAME OF INV		Date: 1-6- 2020
Inventor: <u>Joseph L</u>	yle Thomas	Date:
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Signature:		
Note: An Amblication Dat	ta Sheet (PTO/SB/14 or equivalent), including naming	the entire inventive entity, must accompany this form.
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Title of Invention  This declaration is direct	SYSTEMS AND METHODS FOR AND REDUCING EMISSIONS cted to:	R IMPROVING FUEI	ECONOMY
	attached application, or ed States application or PCT international ap filed on (I hereby	pplication number	the application filing date and
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scluding applications for rganizations, and to peri	nyself, my heirs, successors, assigns or or r Letters Patent of any and all kinds and form any and all acts which the ASSIGN scure thereto the rights herein sold, assign	l in any and all countries ÆE, its successors, assig	contities and interpovernmental
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imprisonment of not me	at any willful false statement made in thi	s declaration is punishab	de under 18 U.S.C. 1001 by fine
EGAL NAME OF INVE ventor: <u>Joshua Sch</u>		Date:	1-6-2020
		Loui.	· v coco
gnature: Joseph	<del>ve Johnske-</del>		
te: An Application Data e an additional declaration	Sheet (PTO/SB/14 or equivalent), including form for each additional inventor.	naming the entire inventiv	e entity, must accompany this form

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LEGAL NAME OF INV	and the second s
Inventor: Adam Ric	<u>Phards</u> Date: <u>2/10/20</u>
Signature:	
Note: An Application Data	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.
TEST 30 AUGILIODAL GEGIAFATIC	n roun for each additional inventor.

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LEGAL NAME OF INV	N 1.1 1 1 11 11 11 11 11 11 11 11 11 11 1
Inventor: John Eri	k Mikael Hellstrom Date: 1/6 2020
Signature:	
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	on form for angle additional inventor

PATENT REEL: 051804 FRAME: 0986

**RECORDED: 02/12/2020**