## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT7678550

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
JEFFREY PAUL BROWN	06/23/2021
MANFRED KOBERSTEIN	06/24/2021
LOREN JOHN LOHMEYER	06/23/2021
RACHAEL SHEY	06/23/2021

### **RECEIVING PARTY DATA**

Name:	FORD GLOBAL TECHNOLOGIES, LLC
Street Address:	ONE AMERICAN ROAD, 4TH FLOOR
City:	DEARBORN
State/Country:	MICHIGAN
Postal Code:	48126

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	18075663

## **CORRESPONDENCE DATA**

Fax Number: (616)957-8196

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: 6169499610

Email: ptomail@priceheneveld.com

PRICE HENEVELD LLP / RYAN J. FLAHERTY **Correspondent Name:** 

Address Line 1: 695 KENMOOR S.E. Address Line 2: P.O. BOX 2567

Address Line 4: GRAND RAPIDS, UNITED STATES 49501-2567

ATTORNEY DOCKET NUMBER: 84525736	
NAME OF SUBMITTER:	RYAN J. FLAHERTY
SIGNATURE:	/Ryan J. Flaherty/
<b>DATE SIGNED:</b> 12/06/2022	
	This document serves as an Oath/Declaration (37 CFR 1.63).

**Total Attachments: 4** 

source=FOR2571A_Signed_Declarations_Parent#page1.tif
source=FOR2571A_Signed_Declarations_Parent#page2.tif
source=FOR2571A_Signed_Declarations_Parent#page3.tif
source=FOR2571A_Signed_Declarations_Parent#page4.tif

Attorney Docket Number	84379892

Title of Invention	HEAT PUMP REFRIGERANT LOOP ARRANGEMENTS
This declaration is direct	ed to:
_	States application or PCT international application number filed on (I hereby authorize the insertion of the application filing date and nen 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	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.	
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: Jeffrey Pa	
<del>-</del>	Paul Brown/ Jeffrey Paul Brown
	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	84379892

Title of Invention	HEAT PUMP REFRIGERANT LOOP ARRANGEMENTS	
This declaration is direct	ed to:	
	States application or PCT international application number filed on (I hereby authorize the insertion of the application filing date and nen 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 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.		
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 as	nd 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	
Inventor: Manfred	Koberstein Date:	
Signature:	/ /./t	
	n 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	84379892

Title of Invention	HEAT PUMP REFRIGERANT LOOP ARRANGEMENTS
This declaration is direct	ed to:
	tached application, or  States application or PCT international application number filed on (I hereby authorize the insertion of the application filing date and nen 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	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 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 TECHI of the State of Delaward hereinafter referred to as interest, domestic and for of the ASSIGNEE, its suffer the inventions and diname or names, or in my insert the serial/applications.  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 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 accessors, 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 the number and filing date of the application to receive Letters Patent herein: Serial No.  ———————————————————————————————————
including applications for organizations, and to per	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 form any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives ecure thereto the rights herein sold, assigned and set over.
And I hereby represent an	nd warrant that I have not granted any rights inconsistent with the rights granted herein.
or imprisonment of not m	at 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 Inventor: Loren Joh	ENTOR un Lohmeyer Date: June 23, 2021
Signature: /Loren Jo	ohn Lohmeyer/
	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	84379892

Title of Invention	HEAT PUMP REFRIGERANT LOOP ARRANGEMENTS	
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.		
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: Rachael S	7.3 HILLE 707 I	
Signature: /Rachae		
	a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. on form for each additional inventor.	

PATENT
RECORDED: 12/06/2022 REEL: 061992 FRAME: 0633