PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT6585938

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAKESHI YOSHIMURA	02/21/2019
SHINGO MURAKAMI	02/19/2019
ZHENYU SHEN	02/25/2019

RECEIVING PARTY DATA

Name:	HITACHI AUTOMOTIVE SYSTEMS, LTD.	
Street Address:	2520, TAKABA	
City:	HITACHINAKA-SHI, IBARAKI	
State/Country:	JAPAN	
Postal Code:	312-8503	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17193097

CORRESPONDENCE DATA

Fax Number: (202)672-5399

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Email: ipdocketing@foley.com, mguild@foley.com

FOLEY & LARDNER LLP Correspondent Name: Address Line 1: 3000 K STREET N.W.

Address Line 2: SUITE 600

Address Line 4: WASHINGTON, D.C. 20007-5109

ATTORNEY DOCKET NUMBER:	106991-0217
NAME OF SUBMITTER:	MELISSA GUILD
SIGNATURE:	/MELISSA GUILD/
DATE SIGNED:	03/05/2021

Total Attachments: 5

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COMBINED ASSIGNMENT AND DECLARATION

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred and by these presents hereby sells, assigns, and transfers, unto

Hitachi Automotive Systems, Ltd. of 2520, Takaba, Hitachinaka-shi, Ibaraki 312-8503 Japan

(hereinafter referred to as "ASSIGNEE") its successors and assigns, his or her full and exclusive right, title and interest for the United States, its territories and possessions, in and to the invention relating to

FLOW CONTROL VALVE AND COOLING SYSTEM

as set forth	in the follow	wing patent application(s):	
check one		the attached application	
	\boxtimes	U.S. application or PCT international application number	

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application(s), all applications claiming priority to the above-identified application(s), and all applications to which the above-identified application(s) claim priority, and all other applications for Letters Patent of the United States for the above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the Patent Cooperation Treaty, the Paris Convention for the Protection of Industrial Property and any other international agreement associated with said applications, all applications claiming priority to said application(s), and all applications to which said application(s) claim priority; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY further sells and assigns to ASSIGNEE any and all claims for damages by way of past, present and future infringement of any of the rights stemming from

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the aforementioned patent application(s) and patent(s), as well as but not limited to the right to collect damages and royalties for infringement occurring from the date of publication of any said application(s), with the right, but not the obligation, to sue for and collect such damages and royalties for said infringement

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in the United States on the above-identified invention in the name of the ASSIGNOR or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks for the United States to issue each said U.S. Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, review, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, declarations, and depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of FOLEY & LARDNER LLP do not represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE. Since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

INVENTOR DECLARATION FOR U.S. PATENT APPLICATION

As a below named inventor, I HEREBY DECLARE:

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	THAT this declaration is directed to:		
check one		the attached application	
		U.S. application or PCT international application number PCT/JP2017/031128 filed August 30, 2017	

THAT the above-identified application was made or authorized to be made by me.

THAT I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

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.

NAMES AND SIGNATURES OF INVENTORS				
Name: Takeshi YOSHIMURA	Signature:	Date:		
City and State/Country	Takeshi Yoshimura	2/21/2019		
Of Residence: Atsugi-shi, Kanagawa, Japan		·		
Name: Shingo MURAKAMI	Signature:	Date:		
City and State/Country				
Of Residence: Ebina-shi, Kanagawa, Japan				
Name: Zhenyu SHEN	Signature:	Date:		
City and State/Country				
Of Residence: Yanji City, Jilin Province, China				

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Name: Takeshi YOSHIMURA	Signature:	Date:	
City and State/Country			
Of Residence: Atsugi-shi, Kanagawa, Japan			
Name: Shingo MURAKAMI	Signature:	Date:	
City and State/Country			
Of Residence: Ebina-shi, Kanagawa, Japan	Shingo Murakani	2/19/2019	
Name: Zhenyu SHEN	Signature:	Date:	
City and State/Country			
Of Residence: Yanji City, Jilin Province, China			

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Name: Shingo MURAKAMI	Signature:	Date:	
City and State/Country			
Of Residence: Ebina-shi, Kanagawa, Japan			
Name: Zhenyu SHEN	Signature:	Date:	
City and State/Country	71 //	T 25 2.10	
Of Residence: Yanji City, Jilin Province, China	Thenyu Shen	Hebroay 25, 2019	

RECORDED: 03/05/2021