PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7542653

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	ASSIGNMENT		

CONVEYING PARTY DATA

Name	Execution Date	
JONG WON KIM	07/20/2022	
SANG SHIN LEE	07/20/2022	

RECEIVING PARTY DATA

Name:	HYUNDAI MOTOR COMPANY
Street Address: 12, HEOLLEUNG-RO, SEOCHO-GU	
City:	SEOUL
State/Country: KOREA, REPUBLIC OF	
Postal Code: 06797	
Name:	KIA CORPORATION
Street Address:	12, HEOLLEUNG-RO, SEOCHO-GU
City:	SEOUL
State/Country:	KOREA, REPUBLIC OF
Postal Code:	06797

PROPERTY NUMBERS Total: 1

Property Type	Number			
Application Number:	17946266			

CORRESPONDENCE DATA

507495763

Fax Number: (312)913-0002

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: 3129130001 Email: fuller@mbhb.com

Correspondent Name: MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP

Address Line 1:300 SOUTH WACKER DRIVEAddress Line 4:CHICAGO, ILLINOIS 60606

ATTORNEY DOCKET NUMBER:	22-1022-US
NAME OF SUBMITTER:	JORI R. FULLER
SIGNATURE:	/Jori R. Fuller/
DATE SIGNED:	09/16/2022

PATENT REEL: 061121 FRAME: 0812

Total Attachments: 2

 $source = 22\text{-}1022\text{-}US_Assignment\#page1.tif}$

source=22-1022-US_Assignment#page2.tif

PATENT REEL: 061121 FRAME: 0813

ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e)) For Application with Filing Date on or after September 16, 2012

ASSIGNMENT

	Insert	(1) KIM, Jong Won	(2) LEE, Sang Shin
(1-6)	Legal Name(s)	(3)	. (4)
	of Inventors(s)	(5)	. (6)
		•	1.00) and other good and valuable consideration d sufficiency of which are hereby acknowledged, does assign, transfer and set over to
(7)	Insert Name of	(7) HYUNDAI MOTOR COMPA	ANY
(8)	Assignee Insert Address of Assignee	(8) 12, Heolleung-ro, Seocho-gu.	Seoul, Republic of Korea
(9)	Insert Name of	(9) KIA CORPORATION	
. ,	Assignee	. /	
(10)	Insert Address of	(10) 12, Heolleung-ro, Seocho-gu	, Seoul, Republic of Korea
	Assignee	35 U.S.C. §100, in the invention, and in all approvisional, non-provisional, divisional, contin	est for the United States of America as defined in plications for patent including any and all
(11)	Insert Identification	(11) <u>INJECTION-TYPE HEAT E</u>	EXCHANGE MODULE AND
	such as Title, Case	VEHICLE THERMAL MAN	NAGEMENT SYSTEM USING
	Number, or Foreign	SAME	
(1.0)	4.1		\underline{S}), filed on even date herewith or as
(12)	Alternative identification for	(12) U.S. Application Number 17	7946,266
	filed applications	filed September 16, 2022	

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.
- 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

(13) Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

PATENT REEL: 061121 FRAME: 0814 identified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contemts of the above-identified application, including the claims, and an aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CPP. §1.56.

Thereby 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 (S) years, or both.

In witness whereaf, executed by the undersigned on the date(s) opposite the undersigned name (s)

Date	26.	July 1	202	Inventor Signature		V/M , J _{Gry} War KIM, Jong Won			_(SEAL)
Date_	040	Jul	2024	Inventor Sig	gnatime	Lee	<u>Sawy</u> EE, Sang 3	<u>Shin</u> Shin	_(SEAL