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and Trademark Office P.O. Box 1450						
Ale	xand	ria, VA 22313-1450		Att	orney Docket No. <u>157842</u>	
		cord the attached document. The contract of pages including cover she	et, attachments, and docum	ent: 3		
Total named of pages and analysis analysis and analysis analysis and analysis and analysis and analysis an						
1.	A.	Name of conveying party:			d address of receiving party:	
		KABUSHIKI KAISHA CHUO KENKYUS		1, TOY	TA JIDOSHA KABUSHIKI JISHA OTA-CHO,	
	В.	Additional name(s) of conveying	g party(ies) attached? □ Yes ⊠ No	TOYOTA-SHI, AICHI-KEN 471-8571 JAPAN		
3.	A.	Nature of conveyance:		B. Additions	al name(s) & address(es) attached? ☐ Yes	
	\boxtimes	Assignment	Merger			
		Security Agreement	Change of Name			
		Other				
	В.	Execution Date: <u>08/08/201</u>	<u>3</u>			
4.	A.	Patent Application No. <u>13/906</u>	5,930	B. Patent No	o.(s)	
			Additional numbers attac	ched? 🔲 Yes 🗵 No		
	C.	Title of Application: <u>HEAT</u>	TRANSFER MEMI	BER AND MODU	JLE WITH THE SAME	
5.		ne and address of party to whom o		6. Total number of	of applications and patents involved: 1	
	Na	ame: James A. Oliff ddress: OLIFF & BERRIDGE	, PLC	7. Please cha total fee (3	arge Deposit Account No. 15-0461 the 37 CFR 3.41) in the amount of \$40.00.	
	P.O. Box 32085 Alexandria, VA 2232 Phone Number: 703-83 Fax Number: 703-83 Email: <u>email@olifi</u>		20-4850 36-6400 6-2787		rpayment or charge any underpayment to it number 15-0461.	
9.	9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is original document. Date: September 9, 2013 James A. Oliff, Registration No. 27,075 Todd M. Guise, Registration No. 46,748 Roane T. Noel, Registration No. 63,004					

PATENT REEL: 031331 FRAME: 0434

ASSIGNMENT

WHEREAS, Kabushiki Kaisha Toyota Chuo Kenkyusho, a company established under the laws of Japan whose address is 41-1, Yokomichi, Nagakute-shi, Aichi-ken, 480-1192 Japan (hereinafter called "Assignor"), is the owner by assignment duly recorded in the United States Patent and Trademark Office of the following United States Letters Patent(s) and/or patent application(s) (hereinafter called "Patent Properties"):

Application or Patent Number and Date of Filing or Issue 13/906,930 filed May 31, 2013

Named
<u>Inventors</u>
Makoto IMAI
Atsushi TANIDA
Takashi ASADA
Masanori USUI
Tomoyuki SHOJI

The undersigned has reviewed all the documents in the chain of title identified above; and to the best of the undersigned's knowledge and belief, title is in the Assignor. The undersigned is empowered to sign this Assignment on behalf of the Assignor.

WHEREAS, Toyota Jidosha Kabushiki Kaisha, a company established under the laws of Japan whose address is 1, Toyota-cho, Toyota-shi, Aichi-ken 471-8571 Japan (hereinafter called "Assignee"), is desirous of acquiring the entire right, title and interest for the United States, its territories, dependencies and possessions, in and to said Patent Properties (and/or patents that may be granted therefrom), including any and all provisional, non-provisional, divisional, continuation, international, design, confirmation, substitute and reissue application(s) or extensions of the same.

Now, To All Whom It May Concern: Be it known that for and in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor has sold, assigned, transferred and set over, and does hereby sell, assign, transfer and set over, unto Assignee, its successors, assigns and legal representatives, the entire right, title and interest for the United States, its territories, dependencies and possessions, in and to said Patent Properties (and/or patents that may be granted therefrom), including any and all provisional, non-provisional, divisional, continuation, international, design, confirmation, substitute and reissue application(s) or extensions thereof; the same to be held and enjoyed by Assignee, its successors, assigns and legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor had this assignment and sale not been made, together with all claims for damages by reason of past infringement of

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PATENT REEL: 031331 FRAME: 0435 said Patent Properties with the right to sue for and collect the same for its own use and for the use of its successors, assigns and legal representatives.

Assignor agrees that this assignment is binding on Assignor and its successors, assigns and legal representatives.

Assignor authorizes and requests the Commissioner of Patents and Trademarks of the United States to issue any Letters Patent of the United States, resulting from said Patent Properties and any confirmations, divisions, continuations, reexaminations, reissues or extensions thereof, to Assignee.

Assignor agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning said Patent Properties (and/or patents that may be granted therefrom), or any confirmation, division, continuation, reexamination or reissue thereof, and to cooperate with Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.

Assignor covenants that it has full right to convey the interest herein assigned and that it has not executed and will not execute any agreement in conflict herewith.

Assignor 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.

Assignor 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 Assignee.

Assignor grants the firm of OLIFF & BERRIDGE, PLC of Alexandria, Virginia the power to insert on this Assignment any further identification which 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.

This Assignment is effective a	as of the 87h day of Cinf., 2013.
	Taketoshi Trizihava
Witness	Signature
	Officer of Assignor
•	Taketoshi FUJIKAWA
Witness	Typewritten Name of Officer
	Division Manager
	Intellectual Property Division
	Title of Officer

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