

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KANG G. SHIN	07/10/2015
EUGENE KIM	07/10/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE REGENTS OF THE UNIVERSITY OF MICHIGAN
<b>Street Address:</b>	1600 HURON PARKWAY, 2ND FLOOR
<b>City:</b>	ANN ARBOR
<b>State/Country:</b>	MICHIGAN
<b>Postal Code:</b>	48109-2590
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14676326
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(248)641-0270
<i>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.</i>	
<b>Phone:</b>	2486411600
<b>Email:</b>	TROYDOCKETING@HDP.COM
<b>Correspondent Name:</b>	HARNES, DICKEY & PIERCE, P.L.C.
<b>Address Line 1:</b>	P.O. BOX 828
<b>Address Line 4:</b>	BLOOMFIELD HILLS, MICHIGAN 48303
<b>ATTORNEY DOCKET NUMBER:</b>	2115-006092-US
<b>NAME OF SUBMITTER:</b>	TIMOTHY D. MACINTYRE
<b>SIGNATURE:</b>	/Timothy D. MacIntyre/
<b>DATE SIGNED:</b>	07/17/2015
<b>Total Attachments: 2</b>	
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## ASSIGNMENT

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

REAL-TIME BATTERY THERMAL MANAGEMENT FOR ELECTRIC VEHICLES

for which Assignor is about to make or has made United States or International application for patent

- (a)  executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration);
- (b)  executed on \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_; or
- (c)  filed on April 1, 2015, and assigned Serial No. 14/676,326 or PCT International Application No. \_\_\_\_\_; and

WHEREAS, The Regents of The University of Michigan, 1600 Huron Parkway, 2nd Floor, Ann Arbor, Michigan 48109-2590, hereinafter referred to as Assignee, is desirous of acquiring all right, title, and interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor hereby confirms any prior assignment to Assignee, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights.

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, any derivation proceedings relating thereto, and as to Letters Patent any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth.

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment.

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

The undersigned hereby grant(s) the law firm of Harness, Dickey & Pierce, P.L.C. 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 U.S. Patent and Trademark Office for recordation of this document.

ASSIGNMENT

*[Handwritten signature]*

Kang G. Shin

State of Michigan )  
County of Washtenaw ) ss.

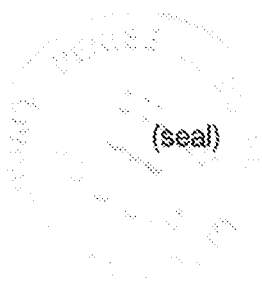
On this 10<sup>th</sup> day of July, 2015, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

*[Handwritten signature: Denise M. Duprie]*  
Notary Public,

Acting in the County Of  
State Of

My Commission Expires

DENISE M. DUPRIE  
NOTARY PUBLIC, STATE OF MI  
COUNTY OF LIVINGSTON  
MY COMMISSION EXPIRES Oct 8, 2018  
ACTING IN COUNTY OF WASHTENAW



(seal)

*[Handwritten signature: Eugene Kim]*  
Eugene Kim

State of Michigan )  
County of Washtenaw ) ss.

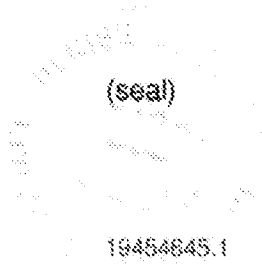
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*[Handwritten signature: Denise M. Duprie]*  
Notary Public,

Acting in the County Of  
State Of

My Commission Expires

DENISE M. DUPRIE  
NOTARY PUBLIC, STATE OF MI  
COUNTY OF LIVINGSTON  
MY COMMISSION EXPIRES Oct 8, 2018  
ACTING IN COUNTY OF WASHTENAW



(seal)

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