502568619 11/14/2013

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JONG-WOOK ROH	11/12/2013
WEON-HO SHIN	11/12/2013
JUNG-YOUNG CHO	11/12/2013
KYU-HYOUNG LEE	11/12/2013
UN-YONG JEONG	11/12/2013

RECEIVING PARTY DATA

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Street Address:	129, SAMSUNG-RO, YEONGTONG-GU
City:	SUWON-SI, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	443-742

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Postal Code:	120-749

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	14078794	

CORRESPONDENCE DATA

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PATENT

REEL: 031598 FRAME: 0571

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Address Line 2: 22ND FLC	20 CHURCH STREET 22ND FLOOR HARTFORD, CONNECTICUT 06103	
ATTORNEY DOCKET NUMBER:	YPL1319US	
NAME OF SUBMITTER:	GRANT M. EHRLICH, PH.D.	
Signature:	/Grant M. Ehrlich/	
Date:	11/14/2013	
	This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 4 source=6WU2668#page1.tif source=6WU2668#page2.tif source=6WU2668#page3.tif source=6WU2668#page4.tif		

PATENT REEL: 031598 FRAME: 0572

DECLARATION AND ASSIGNMENT

Title of Invention: THERMOELECTRIC MATERIAL, THERMOELECTRIC ELEMENT, AND MODULE INCLUDING THE SAME, AND PREPARATION METHOD THEREOF

IXI the attached application (Attorney Docket Number YPL1319US), or

As a below named inventor, I hereby declare that:

This declaration is directed to:

TITLE TOURS AND SHEET OF THE P	Section Republication of the Section Control

ford men		.1.1		a em a remen e com		CARDINAL PROPERTY (P.	
[] United	States	application	or PCT	international	application n	umber	
 · · · · · · · · · · · · · · · · · · ·		filed on _		,			

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

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

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, each undersigned inventor has made certain inventions, improvements, and discoveries (herein referred to as the "INVENTION") disclosed in the above-identified patent application (herein referred to as the ("APPLICATION");

Whereas, <u>SAMSUNG ELECTRONICS CO., LTD.</u> a corporation of the <u>Republic of Korea</u> having a place of business at <u>129</u>, <u>Samsung-ro</u>, <u>Yeongtong-gu</u>, <u>Suwon-si</u>, <u>Gveonggi-do</u>, <u>443-742</u>, <u>Republic of Korea</u> (herein referred to as "ASSIGNEE"), desires to acquire, and each undersigned inventor desires to grant to ASSIGNEE, the entire worldwide right, title, and interest in and to the INVENTION and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor (herein referred to ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to the ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, and any and all other patent applications and patents for the INVENTION which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the INVENTION, to ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned

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had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the INVENTION, the APPLICATION, and all related patents and applications, in ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by ASSIGNEE, its successors, legal representatives, and assigns.

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.

The undersigned hereby grant(s) the law firm of Cantor Colburn LLP the power to insert on this Declaration and 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.

Legal Name of Inventor: Jong-wook ROH	
Signature:	Date: 12 November 2013
Legal Name of Inventor: Weon-ho SHIN	
Signature:	Date: 12 November 2013
Legal Name of Inventor: Jung-young CHO	
Signature: Molly Com	Date: 12 November 2013
Legal Name of Inventor: Kyu-Hyoung LEE	
Signature:	Date: 12 November 2013

DECLARATION AND ASSIGNMENT

Title of Invention: THERMOELECTRIC MATERIAL, THERMOELECTRIC ELEMENT, AND MODULE INCLUDING THE SAME, AND PREPARATION METHOD THEREOF

As a below named inventor, I hereby declare that:

This declaration is directed to:

[X] the attached application (Attorney Docket Number <u>YPL1319</u>	<u>US</u>), oi
[] United States application or PCT international application nur	nber

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

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

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, each undersigned inventor has made certain inventions, improvements, and discoveries (herein referred to as the "INVENTION") disclosed in the above-identified patent application (herein referred to as the ("APPLICATION");

Whereas, Industry-Academic Cooperation Foundation, Yonsei University, a corporation of the Republic of Korea having a place of business at 50, Yonsei-ro, Seodaemun -gu, Seoul, 120-749, Republic of Korea (herein referred to as "ASSIGNEE"), desires to acquire, and each undersigned inventor desires to grant to ASSIGNEE, the entire worldwide right, title, and interest in and to the INVENTION and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor (herein referred to ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to the ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, and any and all other patent applications and patents for the INVENTION which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filling of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the INVENTION, to ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned

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had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the INVENTION, the APPLICATION, and all related patents and applications, in ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by ASSIGNEE, its successors, legal representatives, and assigns.

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.

The undersigned hereby grant(s) the law firm of Cantor Colburn LLP the power to insert on this Declaration and 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.

Legal Name of Inve	ntor: Un-yong JEONG	
	17	
Signature:		Date: 12 November 2013