

## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Hyunsang HWANG</td> <td>03/18/2013</td> </tr> <tr> <td>Seonghyun KIM</td> <td>03/18/2013</td> </tr> <tr> <td>Xinjun LIU</td> <td>03/18/2013</td> </tr> </tbody> </table>		Name	Execution Date	Hyunsang HWANG	03/18/2013	Seonghyun KIM	03/18/2013	Xinjun LIU	03/18/2013		
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<table border="1"> <tr> <td>Name:</td> <td>GWANGJU INSTITUTE OF SCIENCE AND TECHNOLOGY</td> </tr> <tr> <td>Street Address:</td> <td>123 Cheomdan-gwagiro (Oryong-dong)</td> </tr> <tr> <td>City:</td> <td>Buk-gu, Gwangju</td> </tr> <tr> <td>State/Country:</td> <td>KOREA, REPUBLIC OF</td> </tr> <tr> <td>Postal Code:</td> <td>500-712</td> </tr> </table>		Name:	GWANGJU INSTITUTE OF SCIENCE AND TECHNOLOGY	Street Address:	123 Cheomdan-gwagiro (Oryong-dong)	City:	Buk-gu, Gwangju	State/Country:	KOREA, REPUBLIC OF	Postal Code:	500-712
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PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13864548</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13864548						
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CORRESPONDENCE DATA											
Fax Number: 7036838396 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 703 548 6284 Email: swoldeyesus@nathlaw.com Correspondent Name: NATH, GOLDBERG & MEYER Address Line 1: 112 S. West Street Address Line 2: Docket No. 32696U Address Line 4: Alexandria, VIRGINIA 22314											
ATTORNEY DOCKET NUMBER:	32696U										
NAME OF SUBMITTER:	Joshua B. Goldberg										
Signature:	/Joshua B. Goldberg/										

Date:	04/18/2013
	This document serves as an Oath/Declaration (37 CFR 1.63).
<b>Total Attachments: 3</b> source=ExecDec_Ass_32696U#page1.tif source=ExecDec_Ass_32696U#page2.tif source=ExecDec_Ass_32696U#page3.tif	

DECLARATION UNDER 37 CFR §1.63 AND ASSIGNMENT

As the undersigned inventor, I hereby declare that this Declaration under 37 CFR §1.63 is directed to the following invention:

**Title:** RESISTANCE CHANGE MEMORY DEVICE HAVING THRESHOLD SWITCHING AND MEMORY SWITCHING CHARACTERISTICS, METHOD OF FABRICATING THE SAME, AND RESISTANCE CHANGE MEMORY DEVICE INCLUDING THE SAME

U.S. application serial number or PCT international application number

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.

WHEREAS, GWANGJU INSTITUTE OF SCIENCE AND TECHNOLOGY

whose business address is 123 Cheomdan-gwagiro (Oryong-dong), Buk-gu, Gwangju 500-712, Republic of Korea hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest for the United States and elsewhere throughout the world in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof.

NOW, THEREFORE, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt, adequacy and sufficiency of which are hereby acknowledged, the undersigned hereby assigns, sells and transfers to said ASSIGNEE, its assigns and legal representatives, the entire right, title and interest for the United States and elsewhere throughout the world, in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges, and advantages in any way arising from or pertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said ASSIGNEE and its assigns and legal representatives, in as ample and as beneficial a manner for all intents and purposes as the undersigned might or could have held and enjoyed the same had this assignment not been made.

The undersigned hereby agrees to execute all papers necessary to file said applications in the United States and elsewhere throughout the world, and to assign the same to said ASSIGNEE, or any assignee acquiring title to said invention, and to execute any other papers that may be needed in connection with filing said application and securing any and all Letters Patent thereon. The undersigned authorizes and requests the Commissioner of Patents to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to said ASSIGNEE, its assigns and legal representatives, in accordance herewith.

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.

LEGAL NAME OF INVENTOR: **HWANG, Hyunsang**

INVENTOR SIGNATURE: \_\_\_\_\_

DATE: March 18, 2013

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**LEGAL NAME OF INVENTOR: KIM, Seonghyun**

**INVENTOR SIGNATURE:** 

**DATE:** March 18, 2013

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LEGAL NAME OF INVENTOR: Xinjun Liu

INVENTOR SIGNATURE: Xinjun Liu 刘新军

DATE: March 18, 2013

PATENT