

PATENT ASSIGNMENT

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Kwan-Woo DO</td> <td>01/14/2010</td> </tr> <tr> <td>Kee-Jeung LEE</td> <td>01/14/2010</td> </tr> <tr> <td>Mi-Hyoung LEE</td> <td>01/14/2010</td> </tr> <tr> <td>Jeong-Yeop LEE</td> <td>01/14/2010</td> </tr> <tr> <td>Young-Dae KIM</td> <td>01/14/2010</td> </tr> </tbody> </table>		Name	Execution Date	Kwan-Woo DO	01/14/2010	Kee-Jeung LEE	01/14/2010	Mi-Hyoung LEE	01/14/2010	Jeong-Yeop LEE	01/14/2010	Young-Dae KIM	01/14/2010
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RECEIVING PARTY DATA													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>Hynix Semiconductor, Inc.</td> </tr> <tr> <td>Street Address:</td> <td>San 136-1, Ami-ri, Bubal-eup, Icheon-si</td> </tr> <tr> <td>City:</td> <td>Gyeonggi-do</td> </tr> <tr> <td>State/Country:</td> <td>REPUBLIC OF KOREA</td> </tr> <tr> <td>Postal Code:</td> <td>467-701</td> </tr> </table>		Name:	Hynix Semiconductor, Inc.	Street Address:	San 136-1, Ami-ri, Bubal-eup, Icheon-si	City:	Gyeonggi-do	State/Country:	REPUBLIC OF KOREA	Postal Code:	467-701		
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CORRESPONDENCE DATA													
<p>Fax Number: (571)327-5452 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 571-327-5450 Email: jbak@ipntlaw.com Correspondent Name: IP & T Law Firm PLC Address Line 1: 7700 Little River Turnpike Address Line 2: Suite 207 Address Line 4: Annandale, VIRGINIA 22003</p>													
ATTORNEY DOCKET NUMBER:	P09H0170/US												
NAME OF SUBMITTER:	Jung H. Kim												

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PATENT
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Total Attachments: 4

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ASSIGNMENT OF PATENT APPLICATION

WHEREAS I/We, the below named inventor(s) has made an invention entitled:

SEMICONDUCTOR DEVICE INCLUDING CARBON-CONTAINING

ELECTRODE AND METHOD FOR FABRICATING THE SAME

For which I/We executed an application for Letters Patent of the United States concurrently herewith; and/or

For which I/We filed an application for Letters Patent of the United States on December 29, 2009 (Application No. 12/648,337),

BE IT KNOWN that, for good and valuable consideration, the receipt of which is hereby acknowledged, I/We, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto **Hynix Semiconductor, Inc.**, a corporation of the Republic of Korea, whose post office address is **San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea** (hereinafter referred to as Assignee), its lawful successors and assigns my/our entire right, title, and interest in and to this application and the invention(s) and improvement(s) set forth therein; and any and all continuations, continuations-in-part, divisionals, and renewals of and substitutes for said application for said Letters Patent and any and all Letters Patent of the United States and of countries foreign thereto, which may be granted thereon or therefore; and any reissues, reexaminations, or extensions of all such Letters Patent.

I/WE HEREBY authorize the Assignee, its lawful successors and assigns to apply for Letters Patent in all countries foreign to the United States directly in its own name, and to claim priority of the filing date of any of the above-mentioned applications for Letters Patent of the United States and of countries foreign thereto under the provisions of any and all international conventions and treaties.

I/WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as foresaid, to issue all Letters Patent for this invention to the Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with said Assignee, its successors and assigns, any facts known to me/us respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid said Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and in countries foreign thereto, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

AND, I/WE HEREBY authorize and request the attorneys of record to insert the serial number and filing date of said application now identified by the attorney docket number and title set forth above as soon as the same shall have been known to them by the United States Patent and Trademark Office.

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

Signature of first assignor:

Name of first assignor:

Address:

Do Kwan Woo

DO, Kwan-Woo

San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea

Date January 14, 2010

Signature of second assignor:

Name of second assignor:

Address:

Kee Jeung Lee
LEE, Kee-Jeung

San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea

Date January 14, 2010

Signature of third assignor:

Name of third assignor:

Address:

_____ Date _____

KIM, Young-Dae

San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea

Signature of fourth assignor:

Name of fourth assignor:

Address:

Lee Mi Hyoung Date January 14, 2010

LEE, Mi-Hyoung

San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea

Signature of fifth assignor:

Name of fifth assignor:

Address:

Lee Jeong-Yeop Date January 14, 2010

LEE, Jeong-Yeop

San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea

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I/WE HEREBY authorize the Assignee, its lawful successors and assigns to apply for Letters Patent in all countries foreign to the United States directly in its own name, and to claim priority of the filing date of any of the above-mentioned applications for Letters Patent of the United States and of countries foreign thereto under the provisions of any and all international conventions and treaties.

I/WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as foresaid, to issue all Letters Patent for this invention to the Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with said Assignee, its successors and assigns, any facts known to me/us respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid said Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and in countries foreign thereto, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

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Signature of first assignor:	_____	Date	_____
Name of first assignor:	DO, Kwan-Woo		
Address:	San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea		
Signature of second assignor:	_____	Date	_____
Name of second assignor:	LEE, Kee-Jeung		
Address:	San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea		

Signature of third assignor:

Name of third assignor:

Address:

Kim Young Dae Date January 14, 2010
KIM, Young-Dae
San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea

Signature of fourth assignor:

Name of fourth assignor:

Address:

LEE, Mi-Hyoung
San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea

Signature of fifth assignor:

Name of fifth assignor:

Address:

LEE, Jeong-Yeop
San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea