

**PATENT ASSIGNMENT**

Electronic Version v1.1  
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT								
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT								
<b>CONVEYING PARTY DATA</b>									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:70%;">Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Min-Gyu SUNG</td> <td>12/24/2008</td> </tr> <tr> <td>Yong-Soo KIM</td> <td>12/24/2008</td> </tr> <tr> <td>Kwan-Yong LIM</td> <td>12/24/2008</td> </tr> </tbody> </table>		Name	Execution Date	Min-Gyu SUNG	12/24/2008	Yong-Soo KIM	12/24/2008	Kwan-Yong LIM	12/24/2008
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Min-Gyu SUNG	12/24/2008								
Yong-Soo KIM	12/24/2008								
Kwan-Yong LIM	12/24/2008								
<b>RECEIVING PARTY DATA</b>									
<b>Name:</b>	Hynix Semiconductor Inc.								
<b>Street Address:</b>	San 136-1, Ami-ri, Bubal-eup								
<b>City:</b>	Icheon-si, Gyeonggi-do								
<b>State/Country:</b>	REPUBLIC OF KOREA								
<b>Postal Code:</b>	467-701								
<b>PROPERTY NUMBERS Total: 1</b>									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12344119</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12344119				
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Application Number:	12344119								
<b>CORRESPONDENCE DATA</b>									
<b>Fax Number:</b>	(703)518-5499								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
<b>Phone:</b>	7036841111								
<b>Email:</b>	kchae@ipfirm.com								
<b>Correspondent Name:</b>	Yoon S. Ham								
<b>Address Line 1:</b>	1700 DIAGONAL ROAD								
<b>Address Line 2:</b>	Low Hauptman Ham & Berner LLP								
<b>Address Line 4:</b>	ALEXANDRIA, VIRGINIA 22314								
<b>ATTORNEY DOCKET NUMBER:</b>	123037-0053								
<b>NAME OF SUBMITTER:</b>	Yoon S. Ham								

Total Attachments: 3  
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**PATENT  
 REEL: 022030 FRAME: 0221**

**OP \$40.00 12344119**

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Docket No.: \_\_\_\_\_

### ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

- 1) **SUNG, Min-Gyu**
- 2) **KIM, Yong-Soo**
- 3) **LIM, Kwan-Yong**
- 4)
- 5)
- 6)

who has made a certain new and useful invention, hereby sells, assigns and transfers unto Hynix Semiconductor Inc. having a place of business at San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do 467-701, Republic of Korea., its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

SEMICONDUCTOR DEVICE HAVING VERTICAL CHANNEL  
TRANSISTOR AND METHOD FOR FABRICATING THE SAME

- (a) for which an application for United States Letters Patent was filed on \_\_\_\_\_, and identified by United States Patent Application No. \_\_\_\_\_; or
- (b) for which an application for United States Letters Patent was executed on \_\_\_\_\_.

and the undersigned hereby authorizes and requests the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefore and any and all extensions, divisions, reissues, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agrees that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agrees to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the date indicated aside my signature:

1) Sung Min Gyu  
Name: **SUNG, Min-Gyu**

December 24, 2008  
Date:

2) \_\_\_\_\_  
Name: **KIM, Yong-Soo**

\_\_\_\_\_  
Date:

3) \_\_\_\_\_  
Name: **LIM, Kwan-Yong**

\_\_\_\_\_  
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4) \_\_\_\_\_  
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SIGNED on the date indicated aside my signature:

1) \_\_\_\_\_  
Name: **SUNG, Min-Gyu**

\_\_\_\_\_  
Date:

2) *Kim Yong Soo*  
Name: **KIM, Yong-Soo**

\_\_\_\_\_  
December 24, 2008

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Date:

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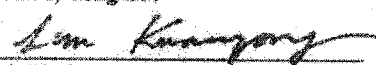
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