

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Hak-soo Yu	05/23/2011
In-gyu Baek	05/24/2011
Hong-sun Hwang	05/23/2011
Young-kug Moon	05/31/2011
RECEIVING PARTY DATA	
Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	416, Maetan-dong, Yeongtong-gu,
City:	Suwon-si, Gyeonggi-do,
State/Country:	REPUBLIC OF KOREA
Postal Code:	442-742
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	13152316
CORRESPONDENCE DATA	
Fax Number:	(571)283-0740
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	5712830720
Email:	aloomis@volentine.com
Correspondent Name:	VOLENTINE & WHITT, PLLC
Address Line 1:	11951 FREEDOM DRIVE, SUITE 1260
Address Line 4:	RESTON, VIRGINIA 20190
ATTORNEY DOCKET NUMBER:	SEC.2936
NAME OF SUBMITTER:	ADAM C. VOLENTINE
Total Attachments: 2 source=Assignment#page1.tif source=Assignment#page2.tif	

CH \$40.00 13152316

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PATENT
REEL: 026383 FRAME: 0518

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned

**Insert
Name(s) of
Inventor(s)**

- | | |
|--------------------------|-----------|
| 1. <u>Hak-soo YU</u> | 7. _____ |
| 2. <u>In-gyu BAEK</u> | 8. _____ |
| 3. <u>Hong-sun HWANG</u> | 9. _____ |
| 4. <u>Young-kug MOON</u> | 10. _____ |
| 5. _____ | 11. _____ |
| 6. _____ | 12. _____ |

**Insert
Name(s) of
Assignee(s) &**

the undersigned hereby sell(s) and assign(s) to

Address(es)

SAMSUNG ELECTRONICS CO., LTD.
416, Maetan-dong, Yeongtong-gu,
Suwon-si, Gyeonggi-do 442-742, Republic of Korea

(hereinafter designated as the Assignee) the entire right, title and interest for the United States as defined in 35 USC 100, in the invention known as

**Title of
Invention**

SEMICONDUCTOR MEMORY DEVICE

**Date of
Signing of
Application**

for which an application for patent in the United States of America has been executed by
the undersigned on May 23, 24, 23, & 31, 2011

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuing, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

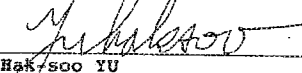
The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

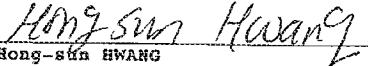
The undersigned hereby grant(s) the practitioners associated with the **CUSTOMER NUMBER 20987** the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date May-23-2011 Signature of Inventor 
Hak-soo YU

Date May 24, 2011 Signature of Inventor 
In-gyu BAEK

Date May-23-2011 Signature of Inventor 
Hong-sun HWANG

Date May 31, 2011 Signature of Inventor 
Young-kug MOON

Date _____ Signature of Inventor _____

Date _____ Signature of Inventor _____

(Note regarding Witnessing: It is recommended that the execution by the Inventor(s) be witnessed by at least two witnesses who sign here. However, the current practice of the U.S. Patent and Trademark Office is to record an Assignment even it has not been witnessed.)

Witness _____

Witness _____

Applicant Reference No. SS-36616-US