

## PATENT ASSIGNMENT

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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>YONG-SUNG CHO</td> <td>07/02/2012</td> </tr> <tr> <td>NAM-HEE LEE</td> <td>07/02/2012</td> </tr> <tr> <td>SANG-YONG YOON</td> <td>07/02/2012</td> </tr> </tbody> </table>	Name	Execution Date	YONG-SUNG CHO	07/02/2012	NAM-HEE LEE	07/02/2012	SANG-YONG YOON	07/02/2012	
Name	Execution Date								
YONG-SUNG CHO	07/02/2012								
NAM-HEE LEE	07/02/2012								
SANG-YONG YOON	07/02/2012								
RECEIVING PARTY DATA									
Name:	SAMSUNG ELECTRONICS CO., LTD.								
Street Address:	416, MAETAN-DONG, YEONGTONG-GU,								
City:	SUWON-SI, GYEONGGI-DO,								
State/Country:	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF								
Postal Code:	442-742								
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>13546120</td> </tr> </tbody> </table>	Property Type	Number	Application Number:	13546120					
Property Type	Number								
Application Number:	13546120								
CORRESPONDENCE DATA									
Fax Number:	(571)283-0740								
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<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>									
Correspondent Name:	VOLENTINE & WHITT, PLLC								
Address Line 1:	11951 FREEDOM DRIVE, SUITE 1300								
Address Line 4:	RESTON, VIRGINIA 20190								
ATTORNEY DOCKET NUMBER:	SEC.3107								
NAME OF SUBMITTER:	ADAM C. VOLENTINE								
Total Attachments: 2 source=Assignment#page1.tif source=Assignment#page2.tif									

CH \$40.00 13546120

VOLENTINE &amp; WHITT, P.L.L.C. (01/2007)

ATTORNEY DOCKET NO. SEC.3107**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. Yong-Sung CHO 7. \_\_\_\_\_
2. Nam-Hee LEE 8. \_\_\_\_\_
3. Sang-Yong YOON 9. \_\_\_\_\_
4. \_\_\_\_\_ 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,  
of 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**

METHOD OF PROGRAMMING A NONVOLATILE 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 July 2, 2012

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.

VOLENTINE &amp; WHITT, P.L.L.C. (01/2007)

ATTORNEY DOCKET NO. SEC.3107

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 2012.7.2 Signature of Inventor Yong-Sung CHO  
Yong-Sung CHO

Date 2012.7.2 Signature of Inventor Nam-Hee LEE  
Nam-Hee LEE

Date 2012.7.2 Signature of Inventor Sang-Yong YOON  
Sang-Yong YOON

Date \_\_\_\_\_ Signature of Inventor \_\_\_\_\_

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 if it has not been witnessed.)

Witness \_\_\_\_\_

Witness \_\_\_\_\_

Applicant Reference No. CX8024US/KS