

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
Name	Execution Date
Chi-Weon Yoon	05/12/2011
Dong-Hyuk Chae	05/12/2011
Sang-Wan Nam	05/12/2011
Sung-Won Yun	05/12/2011
<b>RECEIVING PARTY DATA</b>	
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
<b>PROPERTY NUMBERS Total: 1</b>	
Property Type	Number
Application Number:	13157344
<b>CORRESPONDENCE DATA</b>	
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ATTORNEY DOCKET NUMBER:	SEC.2924
NAME OF SUBMITTER:	ADAM C. VOLENTINE
Total Attachments: 4 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif	

CH \$40.00 13157344

# 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>Chi-Weon YOON</u>  | 7. _____  |
| 2. <u>Dong-Hyuk CHAE</u> | 8. _____  |
| 3. <u>Sang-Wan NAM</u>   | 9. _____  |
| 4. <u>Sung-Won YUN</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**

NON-VOLATILE MEMORY DEVICE, NON-VOLATILE MEMORY SYSTEM,  
AND RELATED METHODS OF PROGRAMMING

**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 12, 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 2011.5.12 Signature of Inventor Yoon Chil Weon  
Chi-Weon YOON

Date \_\_\_\_\_ Signature of Inventor \_\_\_\_\_  
Dong-Ryuk CHAE

Date 2011.5.12 Signature of Inventor Sang-Wan Nam  
Sang-Wan NAM

Date 2011.5.12 Signature of Inventor Yun Sung Won  
Sung-Won YUN

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. SIP100069US

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Inventor(s)**

- 1. Chi-Weon YOON 7. \_\_\_\_\_
- 2. Dong-Hyuk CHAE 8. \_\_\_\_\_
- 3. Sang-Wan NAM 9. \_\_\_\_\_
- 4. Sung-Won YUN 10. \_\_\_\_\_
- 5. \_\_\_\_\_ 11. \_\_\_\_\_
- 6. \_\_\_\_\_ 12. \_\_\_\_\_

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

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

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

Date \_\_\_\_\_ Signature of Inventor Chi-Weon YOON

Date 12th May 2011 Signature of Inventor Dong-Hyuk Chae  
Dong-Hyuk CHAE

Date \_\_\_\_\_ Signature of Inventor Sang-Wan NAM

Date \_\_\_\_\_ Signature of Inventor Sung-Won YUN

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

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

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Witness \_\_\_\_\_

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