

## PATENT ASSIGNMENT

Electronic Version v1.1  
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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>Min Su KIM</td> <td>11/15/2012</td> </tr> </tbody> </table>		Name	Execution Date	Min Su KIM	11/15/2012
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Min Su KIM	11/15/2012				
RECEIVING PARTY DATA					
Name:	SK hynix Inc.				
Street Address:	2091, Gyeongchung-daero, Bubal-eub				
City:	Icheon-si Gyeonggi-do				
State/Country:	KOREA, REPUBLIC OF				
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>13602272</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13602272
Property Type	Number				
Application Number:	13602272				
CORRESPONDENCE DATA					
Fax Number:	6309087653				
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>					
Phone:	6309087652				
Email:	uspto.actions@wwplaw.com				
Correspondent Name:	William Park & Associates LTD.				
Address Line 1:	930 N. York Road, Suite 201				
Address Line 4:	Hinsdale, ILLINOIS 60521				
ATTORNEY DOCKET NUMBER:	PA0838-0				
NAME OF SUBMITTER:	Woochoon William Park				
Total Attachments: 2 source=PA0838-0_Assignment#page1.tif source=PA0838-0_Assignment#page2.tif					

OP \$40.00 13602272

DOCKET:

PATENT

### ASSIGNMENT OF APPLICATION

Now, therefore, in consideration of the sum of one dollar (\$1), the receipt whereof is acknowledge, and other good and valuable consideration, I/We, the assignor(s)

#### ASSIGNOR(S)

KIM, Min Su  
2091, Gyeongchung-daero, Bubal-eub, Icheon-si, Gyeonggi-do 467-734,  
Republic of Korea

by these presents do sell, assign and transfer unto said assignee

#### ASSINGEE

SK hynix Inc.  
2091, Gyeongchung-daero, Bubal-eub, Icheon-si, Gyeonggi-do 467-734,  
Republic of Korea

and the heirs, successors, assigns and legal representatives of the assignee the full and exclusive right to the said invention in the United States which are disclosed in the U.S. patent application titled

### NONVOLATILE MEMORY APPARATUS

for which an application for a United States Patent was filed on September 3, 2012 Application Number 13/602,272; or

for which an application for a United States Patent was executed by the undersigned on \_\_\_\_\_

and any and all improvements thereof, the entire rights, title and interest in and to any and all Patents which may be granted therefore in the United States. I/We hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and for the use of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

The assignor(s) agree promptly upon request of the Assignee, its heirs, successors, assigns and legal representatives of the assignee to communicate any facts known to it respecting the patent and the invention set forth therein, and to execute and deliver without further compensation any power of attorney,

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Assignment, application, whether original, continuation, divisional or reissue, or other papers that may be necessary or fully

Assignor(s) hereby covenants that no assignment, sale agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale;

Assignor(s) further covenants that assignee will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to Assignor(s) and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to assignee or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

**ASSIGNOR SIGNATURE(S)**

KIK MIN SU  
KIM, Min Su

2012.11.15  
Date