501772688 12/30/2011

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Cheul Hee KOO	12/20/2011
Byoung Young KIM	12/20/2011

RECEIVING PARTY DATA

Name:	Hynix Semiconductor Inc.
Street Address:	San 136-1, Ami-ri, Bubal-eub
City:	Icheon-si, Gyeonggi-do
State/Country:	REPUBLIC OF KOREA

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13340961

CORRESPONDENCE DATA

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via US Mail.

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ATTORNEY DOCKET NUMBER: PA0448-0

NAME OF SUBMITTER: Woochoon William Park

Total Attachments: 2

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PATENT REEL: 027462 FRAME: 0329 OP \$40.00 13340961

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)

KOO, Cheul Hee

San 136-1, Ami-ri, Bubal-eub, Ichon-si, Gyeonggi-do 467-860, Republic of Korea

KIM, Byoung Young

San 136-1, Ami-ri, Bubal-eub, Ichon-si, Gyeonggi-do 467-860, Republic of Korea

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

ASSINGEE

Hynix Semiconductor Inc. San 136-1, Ami-ri, Bubal-eub, Ichon-si, Gyeonggi-do 467-860, 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 DEVICE, PROGRAM METHOD THEREOF, AND DATA PROCESSING SYSTEM INCLUDING THE SAME

\square for which an application for a ${\mathsf l}$	Jnited Sta	ites Patent	was filed	on	
Application Number	; o	r			
for which an application for	a United	States Pa	atent was	executed	d 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

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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, 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)

Koo, cheal hee	201	1, 12, 20
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KIM, Byoung Young	Date	