PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jae Bum KO	06/16/2011
Jong Chern LEE	06/16/2011

RECEIVING PARTY DATA

Name:	Hynix Semiconductor Inc.
Street Address:	San 136-1, Ami-ri, Bubal-eub
City:	Ichon-si
State/Country:	REPUBLIC OF KOREA
Postal Code:	467-860

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13181956

CORRESPONDENCE DATA

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NAME OF SUBMITTER: K. Kevin Mun

Total Attachments: 2

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PATENT REEL: 026585 FRAME: 0149

ASSIGNMENT

WHEREAS, We, the below named inventors (hereinafter referred to as "Assignors"), have made an invention entitled:

SEMICONDUCTOR APPARATUS AND MEMORY SYSTEM INCLUDING THE SAME

for which we executed an application for United States Letters Patent

Concurrently herewith, or

WHEREAS, Hynix Semiconductor Inc. (hereinafter referred to as "Assignee"),
organized and operating under the laws of Republic of Korea, whose post office
address is San 136-1, Ami-ri, Bubal-eub, Ichon-si, Gyeonggi-do 467-860, Republic of
Korea, is desirous of securing the entire right, title, and interest in and to this invention
in all countries throughout the world, and in and to the application for United States
Letters Patent on this invention and the letters Patent to be issues upon this application;

filed as Application No. _____ on ____

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, Assignors have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto Assignee, its lawful successors and assigns, the entire right, title, and interest in and to this invention, this application, all divisions and continuations thereof, all Letters Patent of the United States which may be granted thereon, all reissues thereof, all rights to claim priority on the basis of this application, all applications for Letters Patent which may hereafter be filed for this invention in any foreign country, all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and Assignors hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, ASSIGNORS HEREBY covenant that Assignor has the full right to convey the interest assigned by this Assignment, and Assignors have not executed and will not execute any agreement in conflict with this Assignment;

AND, ASSIGNORS HEREBY further covenant and agree, without further consideration, that Assignors will communicate with Assignee, its successors and assigns, any facts known to Assignors respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any

Page 1 of 2



expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

IN TESTIMONY WHEREOF, We have hereunto set our hands.

Signature of Inventor:	
Inventor(s) Name:	KO, Jae Bum
Residence:	San 136-1, Ami-ri, Bubal-eub, Ichon-si, Gyeonggi-do 467-860, Republic of Korea
Citizenship:	Korean
Date:	2011. 6.16
Signature of Inventor: Inventor(s) Name: Residence:	LEE, Jong Chern San 136-1, Ami-ri, Bubal-eub, Ichon-si, Gyeonggi-do 467-860, Republic of Korea
Citizenship: Date:	Korean 7.011. 6.16