Form <b>PTO-1595</b> (Rev. 07/05) OMB No. 0851-0027 (exp. 6/30/2008)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office		
RECORDATION FORM COVER SHEET			
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To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.			
Name of conveying parties:	2. Name and address of receiving party(les)		
Seung Wook Kwack (08/10/2005) and Ki Chang Kwean (08/10/2005)	Name: HYNIX SEMICONDUCTOR INC.		
Additional name(s) of conveying party(les) attached?  Yes X No.  No. Nature of conveyance/Execution Date(s):	Street Address:		
	San 136-1, Ami-ri, Bubal-eup		
Execution Dates: in parentheses after Inventor name	San 130-1, Ami-n, bubar-eup		
X Assignment Merger Change of Name			
Security Agreement   Joint Research Agreement	City: Icheon-shi		
Government Interest Assignment	State: Gyunggi-do		
Executive Order 9424, Confirmatory License	Country: Republic of Korea Zip:		
Other	Additional name(s) & address(es) Yes X No attached:		
4. Application or patent number(s):  A. Patent Application No. 11/162,168	This document is being filed together with a new application.  B. Patent No.(s)		
Additional numbers attached?	Yes X No		
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:		
Name: Randall G. Rueth MARSHALL, GERSTEIN & BORUN LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00		
Internal Address: Atty. Dkt.: 29925/40814	Authorized to be charged by credit card		
Street Address: 233 S. Wacker Drive, Suite 6300	X Authorized to be charged to deposit account		
Sears Tower	Enclosed		
	None required (government interest not affecting title)		
City: Chicago	8. Payment Information		
State: IL Zip: 60606-6357	a. Credit Card Last 4 Numbers		
Phone Number: (312) 474-6300	Expiration Date		
Fax Number: (312) 474-0448	b. Deposit Account Number 13-2855		
Email Address:	Authorized User Name Randall G. Rueth		
9. Signature:			
high	September 1, 2005		
Signature	Date		
Randall G. Rueth - 45,887 Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:		
I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office, facsimile no. 571-273-0140, on the date shown below.			
Dated: September 1, 2005 Signature: (Randali G. Rueth)			

**PATENT REEL: 016709 FRAME: 0652** 



## ASSIGNMENT

Serial No: 11/16

11/162,168

Filed:

August 31, 2005

Title:

DATA OUTPUT DEVICE AND METHOD OF SEMICONDUCTOR DEVICE

For \$10.00 (Ten Dollars) and other good and sufficient consideration, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to Hynix Semiconductor Inc., of San 136-1, Ami-ri, Bubal-eup, Icheon-shi, Gyunggi-do, Republic of Korea hereinafter "Assignee"), its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, executed by the undersigned on, August 10, 2005 and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension thereof.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the execution date and/or filing date and serial number of said application when officially known.

The undersigned warrant themselves to be the owners of the interest herein assigned and to have the right to make this assignment and further warrant that there are no outstanding prior assignments, licenses, or other rights in the interest herein assigned.

For said consideration the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation, continuation-in-part and substitute applications for said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application, and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns, may deem necessary or expedient, and for the aforesaid consideration the undersigned further agree upon the request of said assignee, its successors or assigns, in the event of any application or Letters Patent assigned herein becoming involved in Interference, to cooperate to the best of the ability of the undersigned with said assignee, its successors or assigns, in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, the undersigned hereby agreeing to perform, upon request, any and all affirmative acts to obtain said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in said assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by said assignee, its successors and assigns, to the full end of

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the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made.

Date:	2015.08.10	Signature:	KWACK, Seung Wook
Date:	2005. 08.10	Signature:	KWEAN, KI Chang
Date:		Signature:	
Date:		Signature:	
Date:	-	Signature:	
Date:		Signature:	
Date:		Signature:	