To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof 1. Name of conveying party(ies): Jong Tae Kwak 1.20 04	Form PTO-1595 (Rev. 03/ 01)	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof 1. Name of conveying party(les): Jong Tae Kwak Additional name(s) of conveying party(les) Wassignment Security Agreement Other Execution Date: August 5. 2003 Additional name(s) & additional	IOMB No. 0651-0027 (exp. 5/31/2002)	
Jong Tae Kwak Additional name(e) of conveying party(iee) Yes X No		
Name: Hynix Semiconductor Inc. Internal Address: Street Address: Additional numbers attached: To tal number of pages if paying by deposit account) Street Address: Street Ad		2. Name and address of receiving party(ies)
Internal Address: Street Address: Additional name(s) & address(es) attached: Additional name(s) & address(es) attached: Additional name(s) & address(es) attached: B. Patent No.(s): Address(es) attached: Additional name(es) & address(es) attached: Address(es)	Jong Tae Kwak	
Additional name(s) of conveying party(les)	•	Name: Hynix Semiconductor Inc.
Additional name(s) of conveying party(ies) 3. Nature of Conveyance: Assignment		Internal Address:
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Security Agreement Change of Name City: Kyungki-do Country Republic of Korea Zip: Additional name(s) & address(es) attached: 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the new application is: A. Patent Application No.: 10/654.498 B. Patent No.(s): Additional numbers attached? Yes x No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Michael R. Hull Internal Address: Atty. Dkt.: 29936/39490 Street Address: 6300 Sears Tower 233 S. Wacker Drive City: State: Zip: (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief. The preposing information is true and correct and any attached copy is a true copy of the original document. Michael R. Hull Name of Person Signing Total number of pages including cover sheet, attachments, and documents: 3		Ichon-shi
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Additional numbers attached? Additional numbers attached? Yes x No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Michael R. Hull Internal Address: Atty. Dkt.: 29936/39490 Street Address: 6300 Sears Tower 233 S. Wacker Drive City: State: Zip: Chicago IL 60606-6357 DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief. The pregoing information is true and correct and any attached copy is a true copy of the original document. Michael R. Hull Name of Person Signing Total number of pages including cover sheet, attachments, and documents: 3	If this document is being filed together with a new application, the ex	ecution date of the new application is:
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PATENT REEL: 014890 FRAME: 0250

Attorney Docket: 29936/39490

ASSIGNMENT

Serial No: 10/654,498

Filed: September 3, 2003

Title: Delay Locked Loop and Method of Driving the Same

For good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign(s) to Hynix Semiconductor Inc., of San 136-1, Ami-Ri, Bubal-Uep, Ichon-Shi, Kyungki-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, and in said application and any and all other U.S. applications 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 which may be obtained on any of said applications, and in any reissue or extension thereof.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee. The undersigned also hereby authorizes the attorneys of Marshall, Gerstein & Borun to insert the filing date and serial number of this application in the blanks above when they become known.

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

For said consideration the undersigned hereby agree(s), 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 that said assignee, its successors or assigns, may deem necessary or expedient, and for the aforesaid consideration the undersigned further agree(s) 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 in the United States and to 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 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.

REEL: 014890 FRAME: 0251

Attorney	Docket:
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SIGNED:

Date: August 5, 2003

RECORDED: 01/20/2004

Name: Jong Tae KWAK

PATENT REEL: 014890 FRAME: 0252