

U.S. DEPARTMENT OF COMMERCE Form **PTO-1595** U.S. Patent and Trademark Office (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002) To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof 1. Name of conveying party(ies): Name and address of receiving party(lés) Young-Jin Jeon Name: Hynix Semiconductor Inc. Internal Address: Street Address: Additional name(s) of conveying party(ies) San 136-1, Ami-ri X No Yes Bubal-eub Ichon-shi 3. Nature of Conveyance: x Assignment Merger Security Agreement Change of Name City: Kyoungki-do Other Zip: 467-860 Country Republic of Korea Additional name(s) & Yes x No December 31, 2002 Execution Date: address(es) attached: 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: B. Patent No.(s): A. Patent Application No.: 10/329,936 Additional numbers attached? Yes 6. Total number of applications and Name and address of party to whom correspondence patents involved: concerning document should be mailed: Name: Michael R. Hull 7. Total fee (37 CFR 3.41) 40.00 x Enclosed Internal Address: Atty. Dkt.: 29926/39020 Street Address: 6300 Sears Tower Authorized to be charged to deposit account 233 S. Wacker Drive 13-2855 8. Deposit account number: City: State: Zip: (Attach duplicate copy of this page if paying by deposit account) 60606-6357 Chicago DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. March 12, 2003 Michael R. Hull Name of Person Signing Total number of pages including cover sheet, attachments, and documents:

03/18/2003 TBIAZ1 000 01 FC:8021

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PATENT REEL: 013848 FRAME: 0135

Atty. Docket No: 29926/39020

ASSIGNMENT

Serial No:	10/329936
Filed:	December 26, 2002
Title:	DELAY MODEL CIRCUIT FOR USE IN DELAY LOCKED LOOP
Tine.	
Fo	or good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, the undersigned
hereby ass	ign(s) to Hynix Semiconductor Inc. , (hereinafter
"Assignee"), its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned
disclosed December	in an application for Letters Patent of the United States, executed by the undersigned on 31, 2002, and in said application and any and all other applications, which the undersigned may file, either
	intly 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.
Ti	he undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue said Letters
Patent to sa	aid assignee.
Ti	he undersigned hereby authorize(s) and request(s) 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.
TI	he undersigned warrant(s) themselves (himself/herself) to be the owners (owner) of the interest herein assigned and to
have the rig	ght to make this assignment and further warrant(s) that there are no outstanding prior assignments, licenses, or other
rights in the	e interest herein assigned.
Fo	or 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 o	r improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension
of any Lette	ers Patent that may be granted upon said application, that said assignee, its successors or assigns, may deem necessary
or expedien	nt, 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	y and all affirmative acts to obtain said Letters Patent, 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	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.
W	TTNESS my (our) hand(s) this3lth_ day of _December, 2002.
Witnesses	you's
	JEON VOLING IIN
Name	LEE, MYUNG-HEE
2)	Cim. Hye- Young

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Name: LIM, HYE-YOUNG

RECORDED: 03/19/2003 REEL: 013848 FRAME: 0136