ASSIGNMENT RECORDA



ents Only

Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): 3. Nature of conveying party(ies): 4. A. Chang-Hyun Lee 3. Nature of conveying party(ies): 5. Samsung Electronics Co., Ltd. 416 Maetan-dong, Paldal-ku Suwon, Kyunggi-do Republic of Koren 4. Additional name(s) of conveying party(ies) attached? Yes x No 3. Nature of conveyance: 7. Assignment 8. Merger 9. Security Agreement 9. Change of Name 9. Other 10. Execution Date: A. Adjust 1, 2003 4. Application Serial No. 11. Patent No. 12. Name and address of receiving party(ies): 8. Samsung Electronics Co., Ltd. 416 Maetan-dong, Paldal-ku Suwon, Kyunggi-do Republic of Koren 4. Additional name(s) & address(en) attached? Yes x No 4. Additional name(s) & address(en) attached? Yes x No 5. Name and address of party to whome correspondence concerning document is being filed together with a new application, the execution date of the application is: August 13, 2003 Additional numbers attached? Yes x No 5. Name and address of receiving party(ies): 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41) \$49.00 8. Deposit account number: 50-0220 DO NOT USE THIS SPACE 9. Statement and signature 7. 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. Scott C. Hatfield, Reg. No. 38,176 Name of Person Signing 1. Total number of pages including cover sheet, attachments add document: 2 CERTIFICATE OF MAILING UNDER 37 CFR \$1.8 1. Intereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an	To: Commissioner for Patents: 8'13'	102531250 Date: August 13, 2003
A. Chang-Hyun Lee Samsung Electronics Co., Ltd. 416 Maetan-dong, Paldal-ku Suwon, Kyunggi-do Republic of Korea Additional name(s) of conveying party(ies) attached? Yes x No 3. Nature of conveyance: x	Please record the attached original documents or copy thereo	
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3. Nature of conveyance: X	A. Chang-Hyun Lee	416 Maetan-dong, Paldal-ku Suwon, Kyunggi-do
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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an	Name of Person Signing Signature/	$\frac{08/3/03}{\text{Date}}$
envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on August 13, 2003.	I hereby certify that this correspondence is being deposited with the	e United States Postal Service with sufficient postage as first class mail in an
Jayce Paoli Joy ce Tarli	Jayce Paoli Joz ce Tavli	

PATENT REEL: 014396 FRAME: 0520

Attorney Docket No. 5649-1145

ASSIGNMENT

TIIIS ASSIGNMENT, made by me, Chang-llyun Lee, a citizen of the Republic of Republic of Korea;

WITNESSETH: That,

03-AUG-12 14:54 FROM:KORYO

WHEREAS, I am the sole inventor of certain new and useful improvements in METHODS OF PROGRAMMING NON-VOLATILE SEMICONDUCTOR MEMORY DEVICES INCLUDING COUPLING VOLTAGES AND RELATED DEVICES for which an application has been filed, or is being concurrently filed, in the United States Patent and Trademark Office. I hereby authorize and request Myers Bigel Sibley & Sajovcc, P.A., to insert here in parentheses (Application No. , filed) the filing date and application number of said application when known or to file this Assignment concurrently with the application; and

WHEREAS, Samsung Electronics Co., Ltd, a Korean corporation having a principal place of business at 416, Maetan-dong, Paldal-ku, Suwon, Kyunggi-do, Republic of Korea, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in said application, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I have sold and by these presents do hereby sell, assign, transfer, and convey unto the said assignee, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues or other forms of protection thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted along with any term extensions thereon or therefor, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by me if this assignment and

Page 1 of 2

PATENT REEL: 014396 FRAME: 0521 sale had not been made.

03-AUG-12 14:55 FROM: KORYO

I hereby request that said Letters Patent be issued in accordance with this assignment.

I further covenant and agree that, at the time of the execution and delivery of these presents, I possess full title to the invention and application above-mentioned, and that I have the unencumbered right and authority to make this assignment.

I further covenant and agree to communicate to said assignce or its representatives any facts known to me relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors, or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said assignee, its successors, assigns, and other legal representatives; and I hereby instruct, and further covenant and agree to bind my heirs, legal representatives, and assigns, to do same, without further compensation, but at the expense of said assignee or its representatives.

	IN WITNESS WHEREOF, I have hereunto set my hand and seal on this	/	day
of_	<u>August</u> , 2003.		
	Chang Lyma (SEAL) CHANG-HYUN LEE		
	CHANG-HYUN LEE		

** *********	

RECORDED: 08/13/2003

Witness

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