249/465 RI **IEET** U.S. DEPARTMENT OF COMMERCE 09-10-2004 FORM PTO-1595 (modified) **Patent and Trademark Office** (Rev. 6-93) OMB No. 0651-0011 (exp. 4/94) To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: Samsung Electronics Co., Ltd. Soo-doo CHAE, Chung-woo KIM, Jung-hyun LEE, Moon-kyung Internal Address: KIM, Hyun-sang HWANG Street Address: 416 Maetan-dong, Yeongtong-gu, City: Suwon-si, Gyeonggi-do, REPUBLIC OF KOREA Additional name(s) of conveying party(ies) attached? No Additional name(s) & address(es) attached? No 3. Nature of conveyance: Assignment Merger X Change of Name Security Agreement Other Execution Date: August 28, 2004 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) 10/835,097 Additional numbers attached? No 6. Total number of applications and patents Name and address of party to whom correspondence concerning document should be mailed: involved: One Name: Eugene M. Lee Internal Address: LEE & STERBA, P.C. Street Address: 1101 Wilson Boulevard, Suite 2000 City: Arlington, State: VA ZIP: 22209 7. Total fee (37 C.F.R., 3.41).....\$40.00 Enclosed (PTO-2038) 09/08/2004 EEKUBAYI 00000011 10835097 Authorized to be charged to deposit account any additional 40.00 OF 01 FC:8021 8. Deposit account number: 5-01645 (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 foregoing information is true and correct and any attached copy is a true copy of the original document.

Eugene M. Lee

Name of Person Signing

September 7, 2004

Date

Total number of pages including cover sheet, attachmets, and document: 2 pages attached, incl. cover

Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments Alexandria, VA. 22313

> PATENT REEL: 015764 FRAME: 0300

## **ASSIGNMENT**

name and address of assignee	For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto SAMSUNG ELECTRONICS CO., LTD.  416 Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea 442-742	
	(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to his invention relating to	
title of invention	NONVOLATILE SEMICONDUCTOR MEMORY DEVICE HAVING A GATE STACK AND METHOD OF MANUFACTURING THE SAME	
	as set forth in this United States Patent Application	
check one	executed concurrently herewith	
	executed on	
	X Scrial No. 10/835,097 Filed April 30, 2004	

in and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention;

Each of the undersigned hereby grants the firm of LEE & STERBA, P.C. the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

NAMES AND SIGNATURES OF INVENTORS				
Name; Soo-doo CHAE	Signature: Gooder Char	Date: 28/ALG/04		
Name: Chung-woo KIM	Signature:	Date: 28/ALG/04		
Name: Jung-hyun LEE	Signature: Tury-Upon Cee	Date: 28/ALG/04		
Name: Moon-kyung KIM	Signature:	Date: 28/ALG/04		
Name: Hyun-sang HWANG	Signature: Hyperstang Hwany	Date: 28/ALG/04		
NAMES AND SIGNATURES OF WITNESSES				
Name:	Signature:	Date:		
Name:	Signature:	Date:		

Note: Prima facis evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.

RECORDED: 09/07/2004

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