T APPLICATION 's Do. No.4591-66 a Ref. ID7050-US

## MRD 5-3-99

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ln re paten	t application of:	Jong-Chang SON et al.
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Serial No.

09/222,044

Filed:

December 29, 1998

For: NONVOLATILE MEMORY SEMICONDUCTOR DEVICE HAVING ALTERNATIVE PROGRAMMING OPERATIONS

Box Assignment Commissioner of Patents and Trademarks Washington, D.C. 20231

## **ASSIGNMENT TRANSMITTAL COVER SHEET**

Please record the attached original document or copy thereof and return the recorded instrument to the undersigned.

1.	Name of party conveying an interest:		g-Chang SON g-Min PARK
2.	Name and address of party(ies) receiving	ing an intere	est: Samsung Electronics Co., Ltd. 416 Maetan-Dong, Palkal-Ku Suwon-City, Kyungki-Do Republic of Korea
3.	Description of the interest conveyed:		
	x Assignment Change of Name	Security	y Agreement Merger Other:
	Date of execution of attached documen	nt: (1) (2)	March 23, 1999 March 23, 1999
4. Application number(s) or patent number(s). Additional shee If this document is being filed together with a new application application is.		tional sheet attached? Yes No $\underline{x}$ v application, the execution date of the	
	A. Patent Application No. 09/222,044		B. Patent No.
iabazz (	0000231 09222044		

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PATENT REEL: 9934 FRAME: 0858 5. Name and address of party to whom correspondence concerning document should be mailed:

Alan T. McCollom MARGER, JOHNSON, & McCOLLOM, P.C. 1030 S.W. Morrison Street Portland, Oregon 97205 Telephone: (503) 222-3613

- 6. Number of applications and patents involved: 1
- 7. Enclosed is our check for \$40.00 (check no. 02).
- 8. Any deficiency or overpayment should be charged or credited to deposit account number 13-1703.
- 9. 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.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Assignment, Commissioner of Patents and Trademarks, Washington D.C. 20231, on April 28, 1999.

Respectfully submitted,

Alan T. McCollom Reg. No. 28,881

Signature

Derek S. Watson

Total number of pages comprising cover sheet and attached assignment: 4

MARGER, JOHNSON, & McCOLLOM, P.C. 1030 S.W. Morrison Street Portland, Oregon 97205 (503) 222-3613

as. ú

PATENT APPLICATION Atty's Do. No. 4591-66

Korean Priority Document No.: 97-81000

Hana Ref. ID7050-US

## ASSIGNMENT

U.S.A. Patent Application
Sole or Joint
For Inventions Made Outside U.S.A.
Executed With Application

In consideration of the sum of Ten Dollars (10.00) and other good and valuable considerations paid to each of the undersigned, to wit:

- (1) Jong-Chang SON
- (2) Jong-Min PARK

[] X if continued on separate page

the receipt and sufficiency of which are hereby acknowledged by the undersigned who hereby sell(s), assign(s) and transfer(s) unto:

SAMSUNG ELECTRONICS CO., LTD. 416 MAETAN-DONG, PALDAL-KU SUWON-CITY, KYUNGKI-DO REPUBLIC OF KOREA

(hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States Of America as defined in 35 U.S.C. §100, in and to the invention known as:

## NONVOLATILE MEMORY SEMICONDUCTOR DEVICE HAVING ALTERNATIVE PROGRAMMING OPERATIONS

for which an application for Letters Patent of the United States of America filed on December 29, 1998, Serial Number 09/222,044 has been executed herewith by the undersigned, and in and to any and all divisionals, continuations, substitutes, and reissues thereof; and all resulting patents and the undersigned hereby authorizes and requests the United States Assistant Commissioner of Patents to issue said Letters Patent to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agrees that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

And the undersigned hereby agrees to testify and execute any papers for ASSIGNEE, its successors, assigns and legal representatives, deemed essential by ASSIGNEE to ASSIGNEE'S full protection and title in and to the invention hereby transferred.

PATENT REEL: 9934 FRAME: 0860

sign currently vith Oath or Declaration and Power of Attorney

SIGNED ON THE DATE(S) INDICATED BESIDE MY/OUR SIGNATURE(S):

**INVENTOR(S) DATE SIGNED** WITNESSED

(1) Jong C. Son March 23, AP Sen H. Lee

Jong-Chang SON

(2) Jong Min Park

Jong-Min PARK

3.23.99

Lyeny Kim,

FOR ADDITIONAL INVENTORS, "X" BOX [] AND CONTINUE ON SEC- 2.005

PLEASE RETURN RECORDED ASSIGNMENT TO:

RECORDED: 05/03/1999

Alan T. McCollom Marger Johnson McCollom 1030 S.W. Morrison Street Portland, OR 97205

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**PATENT REEL: 9934 FRAME: 0861**