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

11-26-01 1. Name of party(ies) conveying an interest: Eun-Young CHOI, Jung-Dal CHOI, Jae-Duk LEE, Hong-Soo KIM 2. Name and address of party(ies) receiving an interest: Samsung Electronics Co., Ltd. 416 Maetan-dong, Paldal-ku, Suwon-City Kyungki-do KOREA Description of the interest conveyed: 3. Assignment Change of Name Security Agreement Merger Date of execution of attached document: November 12, 2001 Application number(s) or patent number(s). Additional sheet attached? Yes ____ No ____ 4. If this document is being filed together with a new application, the execution date of the application is: November 26, 2001 B. Patent No. A. Patent Application No. Name and address of party to whom correspondence concerning document should be mailed: 5. MARGER JOHNSON & McCOLLOM, P.C. 1030 S.W. Morrison Street Portland, Oregon 97205 Telephone: (503) 222-3613 Number of applications and patents involved: 1 6. PTO Form 2038 authorizing credit card payment (\$40) is enclosed. 7. Any deficiency or overpayment should be charged or credited to deposit account number 13-1703. 8. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a 9. true copy of the original document. Dated: November 26, 2001

11/30/2001 JBALINAN 00000001 09995501

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MARGER JOHNSON & McCOLLOM, P.C.

1030 SW Morrison Street Portland, OR 97205 (503) 222-3613

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.

Alan T. McCollom Reg. No. 28,881

> Total number of pages comprising cover sheet and attached assignment: 3

> > PATENT REEL: 012330 FRAME: 0474

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PATENT APPLICATION Atty's Do. No. 4591-195 Koryo Ref. No.:IE10130-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) Eun-Young CHOJ
- (2) Jung-Dal CHOI
- (3) Jae-Duk LEE
- (4) Hong-Soo KIM

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. §1.00, in and to the invention known as:

NAND TYPE FLASH MEMORY DEVICE HAVING DUMMY REGION

for which an application for Letters Patent of the United States of America has been executed even date 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: 012330 FRAME: 0475

A SHOULD BE AND A SHOULD BE AN

Please sign concurrently with Oath or Declaration and Power of Attorney

SIGNED ON THE DATES INDICATED BESIDE OUR SIGNATURES:

(1) Eur-Young CHOI November 12th, 2001 Ok chem Hong Eun-Young CHOI November 12th, 2001 Dae Woung Keng Jung-Dai Chon Nov. 12th, 2001 Hong Suk Kwang Jae-Duk LEE Nov. 12th, 2001 Hong-Soo KIM

Date Signed With Least Nov. 12th, 2001 Ween Wi Jang Suk Kwang Hong-Soo KIM

FOR ADDITIONAL INVENTORS, "X" BOX \square AND CONTINUE ON SEC- 2.005

PLEASE RETURN RECORDED ASSIGNMENT TO:

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

RECORDED: 11/26/2001

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