PATENT APPLICATION Docket No. 9898-459 Client No. SS-22211-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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

1. Name of party(ies) conveying an interest: Sang-Woong SHIN, Chul-Soo KIM,

Young-Hyun JUN, and Sang-Bo LEE

2. Name and address of party(ies) receiving an interest: Samsung Electronics Co., Ltd.

416 Maetan-dong, Yeongtong-gu,

Suwon-si, Gyeonggi-do

Korea (South)

3. Description of the interest conveyed:

Date of execution of attached document: July 7, 2005

4. Application number(s) or patent number(s). Additional sheet attached? Yes ____ No X

If this document is being filed together with a new application, the execution date of the application is:

Patent Application No. 11/188,184, filed on 20 Jul 2005

5. Name and address of party to whom correspondence concerning document should be mailed:

MARGER JOHNSON & McCOLLOM, P.C. 210 S.W. Morrison Street, Suite 400 Portland, Oregon 97204 Telephone: (503) 222-3613

Telephone: (503) 222-3613

- 6. Number of applications and patents involved: 1
- 7. PTO Form 2038 authorizing credit card payment (\$40) is enclosed.
- 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.

Dated: August 19, 2005

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.

Alan T. McCollom Reg. No. 28,881

MARGER JOHNSON & McCOLLOM, P.C. 210 SW Morrison Street, Suite 400 Portland, OR 97204 (503) 222-3613

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

PATENT REEL: 016648 FRAME: 0832

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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) Sang-Woong SHIN
- (2) Chul-Soo KIM
- (3) Young-Hyun JUN
- (4) Sang-Bo LEE

☐ 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, YEONGTONG-GU SUWON-SI, GYEONGGI-DO REPUBLIC OF KOREA

(hereinafter designated "ASSIGNEE") the entire right, title and interest in and to the invention as defined in 35 USC §100, for the United States of America, the invention entitled:

SEMICONDUCTOR MEMORY DEVICE HAVING LOCAL SENSE AMPLIFIER WITH ON/OFF CONTROL

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: 016648 FRAME: 0833 Please sign concurrently with Oath or Declaration and Power of Attorney

1

SIGNED ON THE DATES INDICATED BESIDE OUR SIGNATURES:

INVENTOR(S)	DATE SIGNED	WITNESSED
(1) Sang-Woong Shin Sang-Woong SHIN	Jul. 7,2005	
(2) Chul Goo KIM	Jul. 1. 200+	
(3) Young-Hyun JUN	July 1. 2005	
(4) Sang-Bo Lee Sang-Bo LEE	July 7.2005	

PLEASE RETURN RECORDED ASSIGNMENT TO:

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

RECORDED: 08/19/2005