PATENT APPLICATION Attorney's Do. No. 9898-293 Client Ref. No. SS-17762-US

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1. Name of party(ies) conveying an interest: Hoe-Ju Chang and Kyu-Hyoun Kim

2. Name and address of party(ies) receiving an interest:

Samsung Electronics Co., Ltd. 416 Maetan-dong, Paldal-gu, Suwon-City Kyungki-do, Republic of Korea

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306-5995, on December 8, 2003.

3. Description of the interest conveyed:

🖂 Assignment 🔲 Change of Name 🔛 Security Agreement 🛄 Merger

Date of execution of attached document: September 4, 2003

4. Application number(s) or patent number(s). Additional sheet attached? Yes \_\_\_\_ No \_\_\_\_\_

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

A. Patent Application No.B. Patent No.10/656,303, filed September 4, 2003

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

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. 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: December 8, 2003

Respectfully submitted, MARGER JOHNSON & McCOLLOM, P.C.

Alan T. McCollom Reg. No. 28,881

MARGER JOHNSON & McCOLLOM, P.C. 1030 SW Morrison Street Portland, OR 97205 (503) 222-3613

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



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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) Hoe-Ju CHUNG (2) Kyu-Hyonn 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 irransfer(s) unto:

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

(bereinafter 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 DUTY CYCLE CORRECTION CIRCUIT AND INTERPOLATION CIRCUIT INTERPOLATING CLOCK SIGNAL IN THE SEMICONDUCTOR MEMORY DEVICE

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 rejusts 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 ASSIGNES, for its interest as ASSIGNES, its successors, assigns and legal representatives; the undersigned agrees that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNES;

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

## PATENT REEL:06418005RAME:-07608-0-60

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Please sign <u>concurrently</u> with Oath of Declaration and Power of Attorney

# SIGNED ON THE DATES INDICATED BESIDE OUR SIGNATURES:

INVENTORS) DATE SIGNED WITNESSED (1) <u>Hoe-ju Chung</u> 2003.9.4 \_\_\_\_\_ Roc-JuCHUNG \_\_\_\_\_\_ (2) <u>Kyu-Hyoun</u> Kim 2003.9.4 \_\_\_\_\_

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> > (503) 222-3613 FAX: (503) 274-4622

Internet: info@techlaw.com

- To: ASSIGNMENT DIVISION U.S. Patent and Trademark Office
- Fax: (703) 306-5995
- From: Alan T. McCollom, Reg. No. 28,881
- Date: December 3, 2003

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REMARKS:

RE: U.S. Patent Application No. 10/656,303 Our Ref. 9898-293

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