Customer Service Window Mall Stop Assignment Recordation Services Randolph Building 401 Dulany Street Alexandria, VA 22314	U.S. PTO 11/715478 Atty. Docket No.: 9862-000228/U Page 1 of
03-27-200	NAME OF TAXABLE OF TAX
I 103387690	is and trademarks.
Name of conveying party(ies):	2. Name and address of receiving party(ies)
Kyoung-Ho KIM,	Name: SAMSUNG ELECTRONICS CO., LTD.
Seong-Jin JANG,	Street Address: 416 Maetan-dong, Yeongtong-gu
Joung-Yeal KIM, and	City: Suwon-si State: Gyeonggi-do
Sung-Hoon KIM	Country: Republic of Korea
Additional name(s) of conveying party(ies) attached? YES NO Nature of conveyance: Merger Security Agreement	Additional name(s) & address(es) attached? TYES NO
☐ Change of Name ☐ Other:	
Execution Date: 3/8/07, 3/8/07, 3/8/7 and 3/8/7 4. Application number(s) or patent number(s): If this document is being filed together with a new application, to 3/8/7	he execution date of the application is: 3/8/07, 3/8/07, 3/8/7 an
A. Patent Application No(s).	B. Patent No.(s).
Additional numbers atta	ched? TYES NO
5. Name and address of party to whom correspondence	6. Total No. of applications/patents involved: One (1)
concerning document should be mailed:	7. Total fee (37 C.F.R. § 3.41): \$40.00
Name: HARNESS, DICKEY & PIERCE, P.L.C.	⊠ Enclosed
Street Address: P.O. BOX 8910 City: RESTON State: VA ZIP: 20195	Authorized to be charged to deposit account, if no fee attached.
Country: USA	8. Deposit account number: <u>08-0750</u>
Country: USA	(Attach triplicate copy of this page if paying by deposit account)
DO NOT US	THIS SPACE
9. Statement and signature.	information is true and correct and any attached copy is a true March 8, 2007 Date
Total number of pages including co	over sheet, attachments, and document:
	JAC:jn

03/09/2007 FMETEKI1 00000094 11715478

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PATENT REEL: 019089 FRAME: 0142

ASSIGNMENT

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

AN INPUT LATENCY CONTROL CIRCUIT, A SEMICONDUCTOR MEMORY DEVICE INCLUDING AN INPUT LATENCY CONTROL CIRCUIT AND METHOD THEREOF

for which Assignor is about to make or has made United States or International application for patent

(a)	\boxtimes	executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);
(b)		executed on,; or
(c)	_	filed on, and assigned Serial No or PCT Internationa Application No;
(d)		U.S. Patent No, issued; and
WHE	REAS	Samsung Flectronics Co. Ltd. 416 Maetan-dong Yeongtong-gu, Suwon

si, Gyeonggi-do, Republic of Korea, hereinafter referred to as Assignee, is desirous of acquiring an interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor by these presents does sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the said invention as described in the aforesaid application, said application for patent and all Letters Patent therefor to be held and enjoyed by Assignee to the full end of the term for which said Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to recover for past infringements of, or liabilities for, any of the rights relating to any of said applications or patents resulting therefrom;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale or agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue said Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

The undersigned hereby grant(s) the law firm of Harness, Dickey & Pierce, P.L.C. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

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REEL: 019089 FRAME: 0143

ASSIGNMENT

ファマリア Kyoung-Ho KIM

Dated

Seong-Jin Jang

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<u></u> 길 정열 Joung-Yeal KIM

Sung-Hoon Kim
Sung-Hoon KiM

Mar. B. 2007

Dated

Page 2 of 2

RECORDED: 03/08/2007

