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	• To the Director of the U.S. Patent a	103390948		
14	1. Name of conveying party(ies):	2. Name and address of	documents the new address(es) below.	
3,28.0	In-jun HWANG Sung-chul LEE Additional name(s) of conveying party(ies) attached? 디 \ 3. Nature of conveyance/Execution Date(s):	SAMSUNG ELECTRONIC 416 Maetan-dong, Suwon-si Gyeonng, Bepublic of Korea	SAMSUNG ELECTRONICS CO., LTD. 416 Maetan-dong, Yeongtong-gu, Suwon-si Gyeonnggi-do,	
יי	 Execution Date(s): March 19, 2007 and March 19, 20 Assignment	07 Additional name(s) & addr	ess(es) attached? 2 Yes 2 No	
	Application number(s) or patent number(s):			
	 A. Patent Application No.(s) Additional numbers attached? ☐ Yes ☑ No 	B. Patent No.(s)		
-	5. Name and address of party to whom corresponden concerning document should be mailed:	ice 6. Total number of appli 1	cations and patents involved:	
	SUGHRUE MION, PLLC WASHINGTON OFFICE 23373 CUSTOMER NUMBER	D Enclosed.		
1		8. Deposit Account Num (Attach duplicate copy of th	iber: his page if paying by deposit account)	
	9. Signature:			
	/darrylmexic/		March 28, 2007	
	Darryl Mexic Reg. No. 23,063 Date			
	Total number of pages including cover sheet, attachments, and documents: 2 Mail documents to be recorded with required cover sheet information to: MAIL STOP ASSIGNMENT RECORDATION SERVICES Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450			
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04/03/2007 DBYRNE 00000187 11727689 01 FC:8021 (40.00 DP)

PATENT REEL: 019120 FRAME: 0810

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Assignment

Whereas, We, In-jun HWANG and Sung-chul LEE, both of Yongin-si, Republic of Korea, hereinafter called assignors, have invented certain improvements in SEMICONDUCTOR DEVICE USING MAGNETIC DOMAIN WALL MOVEMENT AND METHOD OF MANUFACTURING THE SAME and executed an application for Letters Patent of the United States of America therefor on <u>March 19</u>, 2007 i and

Whereas, SAMSUNG ELECTRONICS CO., LTD., 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

We, the above named assignors, hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee.

We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number _______ and Confirmation number _______ filed ______) the application number and filing date of said application when known.

Date: 19/March/2007

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s/In-iwn HWANG Date: 19/March/2007

s/Sung-chul LEE

(Legalization not required for recording but is prime facie evidence of execution under 35 U.S.C. §261)

PATENT REEL: 019120 FRAME: 0811

RECORDED: 03/28/2007