

MODIFIED Form PTO-1595 RE U.S. DEPARTMENT OF COMMERCE r_A102659788 (Rev. 10/02) U.S. Patent and Trademark Office To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(Sang-su LEE SAMSUNG ELECTRONICS CO., LTD. Young-joo SEO 416 Maetan-dong, Yeongtong-gu Se-woong PARK Suwon-si, Gyeonggi-do, Yoon-nam LEE Korea Additional name(s) of conveying party(ies) attached?

Yes

No 3. Nature of conveyance: ☑ Assignment ☐ Merger ☐ Change of Name ☐ Security Agreement ☐ Other Execution Date: November 29, 2003 Additional name(s) & address(es) attached? ☐ Yes 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) 10/612,300 Not Yet Assigned Additional numbers attached? ☐ Yes ☑ No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: SUGHRUE MION, PLLC 7. Total fee (37 CFR 3.41): \$40.00 ☑ Enclosed. WASHINGTON OFFICE ☐ Authorized to be charged to Deposit Account No. 19-4880. 23373 The USPTO is directed and authorized to charge all required CUSTOMER NUMBER fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. 8. Deposit Account Number: 19-4880 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and signature. 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. Arche Pylls. 38,551 Reg. No. 23,063 January 29, 2004 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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PATENT REEL: 014931 FRAME: 0765

Assignment

712 Jamshil Hanshincore Apt., 8 622-1701 Shinnamushil Dongbo Ap Gyeonqqi-do, Republic of Korea: Youngtong-dong, Paldal-qu, Suwo Nulpuren Byucksan Apt., 488 Man Republic of Korea hereinafter called assignor(s), have inve METHOD AND APPARATUS FOR RE and executed an application for Letters ; and Whereas,	Young-joo Seo, Se-woong Park and Yoon-nam Lee of Shincheon-dong, Songpa-qu, Seoul, Republic of Kore ot., 968 Youngtong-dong, Paldal-qu, Suwon-si, 101-601 Hwanggol Maeul Jugong 1-danji Apt., on-si, Gyeonggi-do, Republic of Korea: 118-801 appo-dong, Paldal-qu, Suwon-si, Gyeonggi-do, ented certain improvements in STORING DEFECTIVE MEMORY CELLS Patent of the United States of America therefor on
Gyeongqi-do, Republic of Korea: Youngtong-dong, Paldal-qu, Suwo Nulpuren Byucksan Apt., 488 Man Republic of Korea hereinafter called assignor(s), have inve METHOD AND APPARATUS FOR RE and executed an application for Letters ; and Whereas,	ot., 968 Youngtong-dong, Paldal-qu, Suwon-si, 101-601 Hwanggol Maeul Jugong 1-danji Apt., on-si, Gyeonggi-do, Republic of Korea: 118-801 epo-dong, Paldal-gu, Suwon-si, Gyeonggi-do, ented certain improvements in estoring Defective MEMORY CELLS
Gyeonqqi-do, Republic of Korea: Youngtong-dong, Paldal-qu, Suwo Nulpuren Byucksan Apt., 488 Man Republic of Korea hereinaster called assignor(s), have inve METHOD AND APPARATUS FOR RE and executed an application for Letters ; and Whereas,	101-601 Hwanggol Maeul Jugong 1-danji Apt., 'on-si, Gyeonggi-do, Republic of Korea: 118-801 appo-dong, Paldal-gu, Suwon-si, Gyeonggi-do, ented certain improvements in STORING DEFECTIVE MEMORY CELLS
Nulpuren Byucksan Apt., 488 Man Republic of Korea hereinafter called assignor(s), have inveneered and APPARATUS FOR RE and executed an application for Letters ; and Whereas,	ented certain improvements in STORING DEFECTIVE MEMORY CELLS
hereinafter called assignor(s), have inveneered and apparatus for return and executed an application for Letters whereas,	ented certain improvements in STORING DEFECTIVE MEMORY CELLS
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and executed an application for Letters; and Whereas,	STORING DEFECTIVE MEMORY CELLS
and executed an application for Letters; and Whereas,	STORING DEFECTIVE MEMORY CELLS
and executed an application for Letters; and Whereas,	
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Whereas,	
	Samsung Electronics Co., Ltd.
	416 Maetan-dong, Yeongtongtong
	Suwon-si, Gyéonggi-do
<u> </u>	Republic of Korea
(assignee), desires to acquire the invention, and to any United States pate	entire right, title, and interest in the application and ents to be obtained therefor;
Now therefore, for valuable con-	sideration, receipt whereof is hereby acknowledged,
including rights of priority under the Int I/we request the Director - U.S. Patent a upon the invention set forth in the applic I/we hereby agree that the assignee may I/we will execute without further consid	ed States of America and all countries foreign thereto, ernational Convention of Paris (1883) as amended, and and Trademark Office to issue any Letters Patent granted cation to the assignee, its successors and assigns; and apply for foreign Letters Patent on the invention and eration all papers deemed necessary by the assignee in oreign applications when called upon to do so by the
** **	st our attorneys SUGHRUE MION, PLLC of 2100
Anneulvania Avenue NW Washington	, DC 20037-3213 to insert here in parentheses
Application number 10/612,300	and Confirmation number
3197, filed	3 July 2003) the filing date
and application number of said applicati	on when known.
Date LEE SANG SO	29 November 2003
s/ Sang-su Lee	
Date: São YouNG J	750 29 November 2003
SE WOON G	PAR C 29 November 2003
	NAM. 29 November 2003
s/ Yoon-nam Lee	
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(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

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PATENT REEL: 014931 FRAME: 0766