Form PTO-1595 R 11-25-	U.S. Patent and Trademark Office I
(Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002)	Attorney's Docket No. 030681-589
To the Director of the United States Patent and102608	
Name of conveying party(ies):	Name and address of receiving party(ies):
11-18-63	Name: SAMSUNG ELECTRONICS CO., LTD.
	Internal Address:
Eun-sik KIM and Yong-su KIM  Additional name(s) of conveying party(ies) attached?  Yes  No	U.S. PTC
Nature of conveyance:	Charat Address
Assignment	Street Address: 415 Maetan-dong, Paldal-gu, Suwon-city Kyungki-do, Republic of Korea
	City: State: Zip:
Execution Date: November 11, 2003	Additional name(s) & addresses attached? Yes X No
Application number(s) or patent number(s):	
If this document is being filed together with a new application,  A. Patent Application No.(s)  11/20/2003 HMRZI1 00000099 10714609	the execution date of the application is: November 11, 2003  B. Patent No.(s)
02 FC:8021 40.00 DP	
Additional numbers attached	I? Yes X No
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Charles F. Wieland III	40.00
Internal Address:	7. Total fee (37 CFR 3.41)\$ 40.00
Burns, Doane, Swecker & Mathis, L.L.P. Customer Number <b>2 1 8 3 9</b> P.O. Box 1404	Authorized to be charged to deposit account
Street Address:	8. Deposit account number: 02-4800
City: Alexandria State: VA Zip: 22313-1404	(Attach duplicate copy of this page if paying by deposit account.)
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9. Statement and Signature.	
To the best of my knowledge and belief, the foregoing informa of the original document.	
Charles F. Wieland III , Reg. No. 33,096	November 18, 2003
Name of Person Signing  Total number of pages including cover sheet, attack	Signature Date

Mail documents to be recorded with required cover sheet information to:

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## **ASSIGNMENT**

(JOINT)

THIS ASSIGNMENT, by 1) EUN-SIK KIM and 2) YONG-SU KIM residing at 1) 102-1102 SAMSUNG APT., SUYU 2-DONG, GANGBUK-GU, SEOUL, REPUBLIC OF KOREA and 2) 1-404 SIYOUNG APT., GAEPO 4-DONG, GANGNAM-GU, SEOUL, REPUBLIC OF KOREA (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in <u>HIGH DENSITY MAGNETORESISTANCE MEMORY AND MANUFACTURING METHOD THEREOF</u> set forth in an application for Letters Patent of the United States, which is a

(1)	which is a provisional application (a) bearing Application No, and filed on; or
	(b) to be filed herewith; or
(2)	which is a non-provisional application  (a) bearing Application No, and filed on : or
	(b) Apring an oath or declaration executed on even date herewith prior to filing of application;
	(c) having an oath or declaration executed on a different date then this Assignment; and

WHEREAS, <u>SAMSUNG ELECTRONICS CO.</u>, <u>LTD.</u>, a corporation duly organized under and pursuant to the laws of <u>REPUBLIC OF KOREA</u> and having a principal place of business at <u>416 MAETAN-DONG, PALDAL-GU, SUWON-CITY, KYUNGKI-DO, REPUBLIC OF KOREA</u> (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives,

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and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns; but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Burns, Doane, Swecker & Mathis, L.L.P., of Alexandria, Virginia, to insert in the spaces provided above the filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

DATE	11 November 2003	Junto Kin	
		Eun-sik Kim	_
DATE_	11 November 2003		
		Yong-su Kim	

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**RECORDED: 11/18/2003** 

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