FORM PTO-1595 (Rev. 6/93)

RECORDA'

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PARTMENT OF COMMERCE Patent and Trademark Office



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orney's Docket No. 030681-3

the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): 1) Kyung-jin LEE, 2) Taek-dong LEE, 3) In-seon LEE 1) Samsung Electronics Co., Ltd. and and 4) Min-sik HWANG 2) Korea Advanced Institute of Science and Technology Address: 1) 416 Maetan-dong, Paldal-gu, Suwon-city, Additional name(s) of conveying party(ies) attached? [] Yes [X] No Kyungki-do, Rep. of Korea 3. Nature of conveyance: 2) 373-1 Guseong-dong, Yuseong-gu [X] Assignment Merger [] Security Agreement] Change of Name Daejeon, Rep. of Korea Other: Additional name(s) & address(es) attached? [] Yes [X] No Execution Date: January 7, 2002 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: January 7, 2002 B. Patent No.(s) A. Patent Application No.(s) Additional numbers attached? [] Yes [X] No 6. Total number of applications and patents involved: 1 (one) 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR § 3.41): \$_40,00 Charles F. Wieland III Name: Address: Burns, Doane, Swecker & Mathis, L.L.P. [X] Enclosed [X] Authorized to be charged to deposit account, if necessary P.O. Box 1404 8. Deposit account number: Alexandria, Virginia 22313-1404 02-4800 DO NOT USE THIS SPACE lpue copy of the original document. Statement and Signature.
To the best of my knowledge and belief, the foregoing information is triple and correst and any attached copy Statement and signature. Charles F. Wieland III, Reg. No. 33,096 Total number of pages including cover sheet, attachments, and document: 3 Name of Person Signing

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

Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231

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PATENT

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REEL: 012460 FRAME: 0844

ASSIGNMENT

(JOINT)

THIS ASSIGNMENT, by 1) KYLING-IIN LEE, 2) TAEK-DONG LEE, 3) IN-SECN LEE, and 4) MIN-SIK HWANG, residing at 1) 824-808 Byrok rocked Woosung Apt., 973-3 Youngtong-Dong, PALDAL-GU, SUWON-CITY KYLINGKI-DO, REPUBLIC OF KOREA, 2) 212-405 FAMILY APT., 150 MUNICONG-DONG, SONGPA-GU, SEQUIL, REPUBLIC OF KOREA, 3) 302-1001 HYLINDAL APT., 1256 GURO 3-DONG, GURO-GU, SEQUIL, REPUBLIC OF KOREA, 3) 302-1001 HYLINDAL APT., 1256 GURO 3-DONG, GURO-GU, SEQUIL BETTELL OF KOREA and 4) 102-904 BIRARUL APT., 762-1 SEOSHIN-DONG, WANSAN-GU, JEONAU-CITY, JEOLABUK-DO, REPUBLIC OF KOREA (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assigners have invented certain new and useful improvements in PERPENDICULAR MAGNETIC THIN FILM FOR ULTRAHIGH DENSITY RECORDING set forth in an application for Letters Patent of the United States,

- (1) U which is a provisional application
 - (a) Dearing Application No. __ and filed on _;
 - (b) to be filed herewith; or
- (2) which is a non-provisional application
 - (a) Dearing Application No. _, and filed on _;
 - (b) A having an eath or declaration executed on even date herewith prior to filing of application;
 - (c) I having an oath or declaration executed on a different date than this Assignment; and

WHEREAS, 1) SAMSUNG ELECTRONICS CO., LTD, AND 2) KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY, a corporation duly organized under and pursuant to the laws of Rep. OF KOREA and having its principal place of business at 1) 416 MAETAN-DONG, PALDAL-GU. SUWON-CITY, KYUNGKL-DO. REP. OF KOREA AND 2) 373-1 GUSEONG-DONG, YUSEONG-GU, DAF JEON, REPUBLIC OF KOREA (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, thereon, and in and to any and all applications claiming priority to said applications of said continuations, and continuations-in-part of said applications, and relasues 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, and assigns, to the full and 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

(4/96)

Page 1 of 2

REEL: 012460 FRAME: 0845

Application Serial No.	
Attorney's Docket No.	030681-354

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 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	7 January 2002	Signature of Assignor	
-		Kyung-jin Lee	
Date	7 January 2002	Signature of Assignor	Fack Dy L
		· •	Taek-dong Lee
Date 7 January 2002 Signatu	Signature of Assignor	Jan Gar	
			In-seon Lee
	7 January 2002	Signature of Assignor	Fory.
Date_	/ January 2002	" Sidulatore of Mania	Min-sik Hwany

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RECORDED: 01/08/2002