ocket No.: 15546 08-07-2002 FORM PTO-1595 (Modified) RΙ U.S. DEPARTMENT OF COMMERCE (Rev. 03-01) Patent and Trademark Office OMB No. 0651-0027 (exp.5/31/2002) P08A/REV03 102180660 Tab settings → → To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. Name of conveying party(ies): 2. Name and address of receiving party(ies): Kyung-Ho Shin, Woo-Young Lee, Young-Joon Park, Kyung-Il Lee, Jae-Geun Ha Name: Korea Institute of Science and Technology Address: 39-1, Hawolgok-Dong, Sungbook-Ku-☐ Yes 🛛 No Additional names(s) of conveying party(ies) MRD 8-2.02 3. Nature of conveyance: ■ Assignment Merger City: Seoul State/Provide Security Agreement Change of Name Country: Korea Other Execution Date: May 13, 2002 ☐ Yes ☑ No Additional name(s) & address(es) 4. Application number(s) or patent numbers(s): If this document is being filed together with a new application, the execution date of the application is: B. Patent No.(s) Patent Application No. Filing date May 13, 2002 10/145,167 ☐ Yes 🛛 No Additional numbers 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: Edward W. Grolz 7. Total fee (37 CFR 3.41):....\$ 40.00 Registration No. 33,705 ☒ Enclosed - Any excess or insufficiency should be credited or debited to deposit account Address: SCULLY, SCOTT, MURPHY & PRESSER ☐ Authorized to be charged to deposit account 400 Garden City Plaza 08/06/2002 TDIAZ1 00000137 10145167 8. Deposit account number: 40.00 DP 01 FC:581 City: Garden City 19-1013/SSMP State/Prov.: NY (Attach duplicate copy of this page if paying by deposit account) ZIP: 11530 Country: U.S.A.

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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.

Edward W. Grolz

Name of Person Signing

Signature

Total number of pages including cover sheet, attachments, and

July 29, 2002 Date

Assignment

In consideration of One Dollar (\$1.00), and other good and valuable considerations, the receipt of which is hereby acknowledged, , the undersigned,

Kyung-Ho SHIN, Woo-Young LEE, Young-Joon PARK, Kyung-Il LEE , and Jae-Geun HA

Hereby sell, assign and transfer to Korea Institute of Science and Technology a corporation

of Korea

having a place of business at

39-1, Hawolgok-Dong, Sungbook-Ku, Seoul, Korea

its successors, assigns and legal representatives, the entire right, title and interest for all countries, in and to any and all improvements which are disclosed and claimed, and as possessed by the undersigned, any and all improvements which are disclosed but not claimed, in the application for United States Patent, which has been executed by the undersigned on May 13, 2002 and is entitled

MAGNETIC TUNNELING JUNCTION AND FABRICATION METHOD THEREOF

which have been or shall be issued on said improvements;

and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed on any of said improvements disclosed in said application; and in and to all original and reissued patents

Authorize and request the Commissioner of Patents to issue to said Assignee, the corporation above named, its successors, assigns and legal representatives, in accordance with this assignment, any and all United States Letters Patent on said improvements, or any of them, disclosed in said application;

Agree that said Assignee may apply for and receive foreign Letters Patent for said improvements, or any of them; and may claim, in applications for said foreign Letters Patent, the priority of the aforesaid United States application under the provisions of the International Convention; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will, for the United States and all foreign countries, execute

REEL: 013150 FRAME: 0030

and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee its successors, assigns and representatives, all facts known to the undersigned relating to said improvements and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Cournant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: May 13 2002 Witness:	Kyung-Ho SHIN
Date: May 13 2002 -	Web-Young LEE (L.S.)
Date: May 13 2000 -	Young-Joon PARK

PATENT REEL: 013150 FRAME: 0031 and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee its successors, assigns and representatives, all facts known to the undersigned relating to said improvements and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Cournant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: May 13 2002 Witness:				Kyung-Il LEE		
Date:	Hay	ري	2002	Jae-Geun HA		
Witness:		1.0 L	· .			
	•					
Date:				(L.S.)		
Witness:						

PATENT REEL: 013150 FRAME: 0032

Docket No.: 15546

FORM PTO-1595 (Modified) RECORDATION FO	RECORDATION FORM COVER SHEET		
OMB No. 0651-0027 (exp.5/31/2002) P08A/REV03 PATENT	PATENTS ONLY		
Tab settings → → → ▼	▼ ▼	▼ ▼	
To the Honorable Commissioner of Patents and Trademarks:	Please record the attached or	riginal documents or copy thereof.	
1. Name of conveying party(ies): Kyung-Ho Shin, Woo-Young Lee, Young-Joon Park, Kyung-Il Lee, Jae-Geun Ha	Name and address of receiving party(ies): Name: Korea Institute of Science and Technology		
	Address: 39-1, Hawolgok-Dong, Sungbook-Ku		
Additional names(s) of conveying party(ies)		71 TO TO	
3. Nature of conveyance:		5 3 2	
🛮 Assignment 🗆 Merger			
☐ Security Agreement ☐ Change of Name	City: Seoul	State/Prov.:	
Other	Country: Korea	ZIP:	
Execution Date: May 13, 2002	Additional name(s) & address(es)	☐ Yes ⊠ No	
If this document is being filed together with a new application, Patent Application No. Filing date 10/145,167 May 13, 2002	the execution date of the app B. Patent No.(s)	olication is:	
Additional numbers	☐ Yes 🏿 No		
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:		
Name: Edward W. Grolz	7. Total fee (37 CFR 3.41):	\$ 40.00	
Registration No. 33,705	Enclosed - Any excess or insufficiency should be credited or debited to deposit account		
Address: SCULLY, SCOTT, MURPHY & PRESSER	_	·	
400 Garden City Plaza	I	ged to deposit account	
	8. Deposit account number:		
City: Garden City State/Prov.: NY	19-1013/SSMP		
Country: U.S.A. ZIP: 11530	(Attach duplicate copy of this	page if paying by deposit account)	
9. Statement and signature. To the best of my knowledge and belief, the foregoing information of the original document. Edward W. Grolz Name of Person Signing Total number of pages including	Signature	ny attached copy is a true copy July 29, 2002 Date	

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

RECORDED: 08/02/2002