## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Hideo OHNO	11/22/2012
Shoji IKEDA	11/22/2012
Fumihiro MATSUKURA	11/22/2012
Masaki ENDOH	11/30/2012
Shun KANAI	11/22/2012
Katsuya MIURA	11/07/2012
Hiroyuki YAMAMOTO	11/12/2012

#### **RECEIVING PARTY DATA**

Name:	Hitachi, Ltd.	
Street Address:	6-6, Marunouchi 1-chome	
Internal Address:	Chiyoda-ku	
City:	Tokyo	
State/Country:	JAPAN	

Name:	TOHOKU UNIVERSITY	
Street Address:	2-1-1, Katahira	
Internal Address:	Aoba-ku, Sendai-shi	
City:	Miyagi	
State/Country:	JAPAN	
Postal Code:	980-8577	

### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13701257

#### **CORRESPONDENCE DATA**

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**PATENT REEL: 029846 FRAME: 0714** 502237739

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ATTORNEY DOCKET NUMBER: 1021.52804X00

NAME OF SUBMITTER: Melvin Kraus

Total Attachments: 2

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PATENT REEL: 029846 FRAME: 0715

#### **ASSIGNMENT**

(譲渡証)

As a below named inventor, I hereby declare that:

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me citizen of Japan by Hitachi, Ltd.,

and TOHOKU UNIVERSITY,

corporations organized under the laws of Japan,

located at 6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo, Japan,

and 2-1-1, Katahira, Aoba-ku, Sendai-shi, Miyagi 980-8577 Japan,

receipt of which is hereby acknowledged I do hereby sell and assign to said Hitachi, Ltd.,

and TOHOKU UNIVERSITY,

their successors and assigns, all my right, title and interest, in and for the United States of America, in and to

#### MAGNETORESISTANCE EFFECT ELEMENT AND MAGNETIC MEMORY

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefore, No. PCT/JP2011/062119 filed 26/May/2011, and all United States Letters Patent which may be granted therefore, and all divisions, continuations and extensions thereof, the said interest being

the entire ownership of the said Letters Patent when granted, to be held and enjoyed by sai Hitachi, Ltd., and TOHOKU UNIVERSITY.

their successors, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said Hitachi, Ltd., and TOHOKU UNIVERSITY,

Signed on the date(s) indicated aside our signatures:

	INVENTOR(S) (発明者フルネームサイン)	Date Signed (署名日)
1)	Mode	11/22/2012
2)_	spar l'alla	11/22/2012
3)	Fundhin Marsubura	Nov. 22, 2012
4)	Masalci Endoh	Nov. 30.2012
5)	Shun Kanai	Nov.22.2012

PATENT REEL: 029846 FRAME: 0716

### **ASSIGNMENT**

(譲渡証)

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the entire ownership of the said Letters Patent when granted, to be held and enjoyed by said Hitachi, Ltd., and TOHOKU UNIVERSITY,

their successors, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said Hitachi, Ltd., and TOHOKU UNIVERSITY,

Signed on the date(s) indicated aside our signatures:

INVENTOR(S) (発明者フルネームサイン)

Date Signed (署名日)

6) Katsky	a Miura	
	Yawumoto	11/12/2012

PATENT REEL: 029846 FRAME: 0717

RECORDED: 02/21/2013