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103529459

Attorney Docket No. 138677

Please record the attached original document or copy thereof.

1. A. Name of conveying parties:

Daisuke MIYAUCHI  
Yoshihiro TSUCHIYA  
Tsutomu CHOU  
Shinji HARA  
Takahiko MACHITA  
Koji SHIMAZAWA

B. Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

2. A. Name and address of receiving party:

TDK CORPORATION  
1-13-1, NIHONBASHI, CHUO-KU  
TOKYO, 103-8272, JAPAN

B. Additional name(s) & address(es) attached?

☐ Yes ☒ No

3. A. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

B. Execution Date: (ALL) September 24, 2008

4. ☒ This document is being filed together with a new application.

A. Patent Application No.(s) \_\_\_\_\_

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

C. Title of Application: MAGNETORESISTIVE ELEMENT INCLUDING A PAIR OF FREE LAYERS  
COUPLED TO A PAIR OF SHIELD LAYERS

5. Name and address of party to whom correspondence  
concerning document should be mailed:

Name: James A. Oliff

Address: OLIFF & BERRIDGE, PLC  
P.O. Box 320850  
Alexandria, VA 22320-4850

6. Total number of applications and patents involved: 1

7. A. Total fee (37 CFR 3.41).....\$ 40.00

B. Enclosed (Check No. 210497)

8. Credit any overpayment or charge any underpayment to  
deposit account number 15-0461.

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and any attached copy is a true copy of the original document.

James A. Oliff Registration No. 27,075  
Joel S. Armstrong Registration No. 36,430

10/10/2008 MJAMA1 00000046 12285069

Date: September 29, 2008

Total number of pages including cover sheet, attachments, and document: 2

# ASSIGNMENT

(1-8)	Insert Name(s) of Inventor(s)	(1)	Daisuke MIYAUCHI	(5)	Takahiko MACHITA
		(2)	Yoshihiro TSUCHIYA	(6)	Koji SHIMAZAWA
		(3)	Tsutomu CHOU	(7)	
		(4)	Shinji HARA	(8)	

In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, each undersigned agrees to assign, and hereby does assign, transfer and set over to

(9)	Insert Name of Assignee	(9)	TDK Corporation
(10)	Insert Address of Assignee	(10)	1-13-1, Nihonbashi, Chuo-ku, Tokyo, 103-8272, Japan

(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, confirmation, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as

(11)	Insert Identification such as Title, Case Number, or Foreign Application Number	(11)	MAGNETORESISTIVE ELEMENT INCLUDING A PAIR OF FREE LAYERS COUPLED TO A PAIR OF SHIELD LAYERS
		(Attorney Docket No.)	138677 )

for which the undersigned has (have) executed an application for patent in the United States of America on even date herewith or

(12)	Insert Date of Signing of Application	(12)	on
(13)	Alternative Identification for filed applications	(13)	U.S. application Serial Number September 29, 2008

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and any continuing, divisional or reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.
- 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all Letters Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he has full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreements in conflict herewith, and agrees that this assignment is binding on him and his heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of OLIFF & BERRIDGE, PLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	September 24, 2008	Inventor Signature	<i>Daisuke Miyachi</i>	(SEAL)
Date	September 24, 2008	Inventor Signature	<i>Yoshihiro Tsuchiya</i>	(SEAL)
Date	September 24, 2008	Inventor Signature	<i>Tsutomu Chou</i>	(SEAL)
Date	September 24, 2008	Inventor Signature	<i>Shinji Hara</i>	(SEAL)
Date	September 24, 2008	Inventor Signature	<i>Takahiko Machita</i>	(SEAL)
Date	September 24, 2008	Inventor Signature	<i>Koji Shimazawa</i>	(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date	September 24, 2008	Witness	<i>Hiroki Matsukama</i>	
Date	September 24, 2008	Witness	<i>Yumi Kato</i>	