CH \$40.00 150461 12176127

Mail Stop: Assignment Recordation Services RECORDATION FO Director of the U.S. Patent PATENT and Trademark Office P.O. Box 1450				
Ale	xandria, VA 22313-1450	Attorney Docket No. <u>137846</u>		
	ase record the attached original document or copy thereof. al number of pages including cover sheet, attachments, and do	ocument: <u>5</u>		
1.	 A. Name of conveying parties: (1) Koji SHIMAZAWA (2) Hiraku HIRABAYASHI (3) Kosuke TANAKA (4) Eiji KOMURA B. Additional name(s) of conveying party(ies) attached? □ Yes ⊠ No 	 A. Name and address of receiving party: TDK CORPORATION 1-13-1, NIHONBASHI		
3.	 A. Nature of conveyance: Assignment	- □Yes ⊠ No		
4.	A. Patent Application No.(s) <u>12/176,127</u> Additional numbers a	B. Patent No.(s) ttached? □ Yes ⊠ No		
	C. Title of Application: THERMALLY ASSISTED	MAGNITIC HEAD WITH OPTICAL WAVEGUIDE		
5.	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: $\underline{1}$		
	Name: James A. Oliff	 Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of \$40.00. 		
	Address: OLIFF & BERRIDGE, PLC P.O. Box 320850 Alexandria, VA 22320-4850 Phone Number: 703-836-6400 Fax Number: 703-836-2787	 Credit any overpayment or charge any underpayment to deposit account number 15-0461. 		
9.	the original document. James A Olivi Registration No. 27,075	mation is true and correct and any attached copy is a true copy of Date: <u>August 6, 2008</u>		
	Joel S. Armstrong Registration No. 36,430			

700380467

PATENT REEL: 021352 FRAME: 0192

08/06/2008 14:15 FAX 7038362787 .

USPTO

OLIFF & BERRIDGE, PLC 7/21/2008 3:55:18 PM PAGE 4/004 Fax Server

🖾 004/005

TO: JAMES A. OLIFF COMPANY: OLIFF & BERRIDGE, PLC

07/18/2008 18:33 FAL 7038362787

01.1FF & BERRIDGE, PLC 07/18/2008 700378575

2001

Mail Step: Ausignment Recordation Services Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	RECORDATION FORM PATENTS	DNLY	U.S. DEPARTMENT OF COMMERCE Patent and Trackemerk Office noncy Docket No. <u>137846</u>
Please record the attached document, Total number of pages including cover sh	set, attachments, and docum	ent: <u>2</u>	
 A. Name of conveying parties: Koji SHIMAZAW Hiraku HIRABAY Kosuke TANAKA Kosuke TANAKA Eiji KOMURA Additional name(a) of conveying A. Nature of conveyance: Assignment Security Agreement Other 	ASHI ug party(ics) situched? Uver X No Merger	TDK 1-13-1 CHUO TOKY JAPA	ad address of receiving party: CORPORATION 1, NIHINBASHI O-KU YO 103-8272 N Mat name(a) & address(ca) attacled? [Yes 2] No
B. Execution Date: <u>[1-3] July</u> [4] July <u>14</u> , 2008	10, 2008:		
4. A. Patent Application No. <u>12/1</u>		B. Patont N	••
	Additional numbers atta		
C. Title of Application: THE	RMALLY ASSISTED N	AGNETIC HEAD	WITH OPTICAL WAVEGUIDE
 Name and address of party to whom concerning document should be main 		6. Total number	of applications and patents involved: 1
Name: James A. Oliff Address: OLIFF & BERRIDGE, P.O. Ber 320834	FLC		args Deposit Account No. 15-0461 the 37 CFR 3.41) in the amount of \$40.00.
Alexandria, VA Z Phone Number: 743–8 Pax Number: 763–83	232 9-4859 36-6 409		orpayment or charge any underpayment to at number 15-0461.
9. Sintement and signature. To the pest of my knowledge and be ariginal detument.	elief, the foregoing informat		t and any attached copy is a true copy of the
James A. Oliff, Registration No. 2' Joel 2. Armstrong, Registration No.	7,075 5. 36,430		July 18, 2008

.

PATENT REEL: 021352 FRAME: 0193 Marine I for

For Non-U.S. Clients

ASSIGNMENT

whereas, nwe,		
Name	Address	
	(c/o) TDK Corporation,	
1) Koji SHIMAZAWA	1-13-1, Nihonbashi, Chuo-ku, Tokyo 103-8272 Japan	
	(c/o) TDK Corporation,	- · · ·
2) Hiraku HIRABAYASHI	1-13-1, Nihonbashi, Chuo-ku, Tokyo 103-8272 Japan	
	(c/o) TDK Corporation,	
3) Kosuke TANAKA	1-13-1, Nihonbashi, Chuo-ku, Tokyo 103-8272 Japan	
	(c/o) TDK Corporation,	
4) Eiji KOMURA	1-13-1, Nihonbashi, Chuo-ku, Tokyo 103-8272 Japan	

hereinafter called assignor(s), have invented certain improvements in

Thermally Assisted Magnetic Head with Optical Waveguide

and executed an application for Letters Patent of the United States of America therefor on even date herewith unless otherwise indicated below:

filed on	July 18.	2008	Serial No.	12/176,127	; and
Whereas					
TDK Corporation					

1-13-1, Nihonbashi, Chuo-ku, Tokyo 103-8272 Japan

(assignee), desires to acquire the entire right, title and interest in the application and invention, and to any United States patents to be obtained therefor;

NOW THEREFORE, be it known that, for good and valuable consideration from assignee, the receipt of which is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

	INVENTORS	DATE SIGNED
1):	Koji Shimazawa	10. July 2008
Name:	Koji SHIMAZAWA	/
2):	-libaku Hibabayushi	10 July 2005
Name:	, Hiraku HIRABAYAŞHI	
3):	Kosuke Tanaka	10. July 2008
Name:	Kosuke TANAKA	
4):	Eiji Komura	14. July 2008
Name:	Eiji KOMURA	· · · · · · · · · · · · · · · · · · ·

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. § 261)

Page 1 of 1

RECORDED: 08/06/2008

PATENT REEL: 021352 FRAME: 0194