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		MAR 1 3 2002			Attorney Docket No. 111147						
To the Director of the U.S. Patent and Trademark Office: Please record the attached original document or copy thereof.											
1.	A.	Name of conveying parties: 1. Koichi TERUNUMA 2. Ken-ichi TAKANO 3. Noriyuki ITO 3 /3 02	2.	Α.	Name and address of receiving party: TDK CORPORATION 1-13-1, Nihonbashi, Chuo-ku Tokyo, 103-8272, Japan						
	B.	Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No									
3.	Α.	Nature of conveyance:		В.	Additional name(s) & address(cs) attached? ☐Yes ☐ No						
	\boxtimes	Assignment									
		Security Agreement									
		Other									
	В.	Execution Date: 1. December 3, 2001 2. December 3, 2001 3. December 3, 2001									
4.	Α.	If this document is being filed together with a new appl	icatio	n, the	execution date of the application is:						
	B. Patent Application No. 09/991,994			C. Patent No.(s)							
	Additional numbers attached?										
5.		ne and address of party to whom correspondence cerning document should be mailed:	6.	Tota	al number of applications and patents involved: $\underline{1}$						
	Name: James A. Oliff			Α.	Total fee (37 CFR 3.41)\$ 40						
			}	B.	Enclosed (Check No. 128722)						
	Ad	ddress: OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, VA 22320	8.		dit any overpayment or charge any underpayment to osit account number 15-0461.						
9.	9. 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.										
Janas A. Oliff Registration No. 27,075 John S. Kern Registration No. 42,719											
	Total number of pages including cover sheet, attachments, and document: 2										

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PATENT REEL: 012673 FRAME: 0241

		(1)	Koichi TERUNUMA	(5)			
(1-8)	Insert	(2)	Ken-ichi TAKANO	(6)			
	Name(s) of Inventor(s)	(3)	Noriyuki ITO	(7)			
	• • • • • • • • • • • • • • • • • • • •	(4)					
		` ,	In consideration of the sum of o	one dollar (\$1.00) and other good and valuable consirsigned agrees to assign, and hereby does assign, training	deration paid		
(9)	Insert Name of Assignee	(9)	TDK Corporation				
(10)	Insert Address of	` '		hi, Chuo-ku, Tokyo, 103-8272,	Tanan		
	Assignee	(10)	1-13-1, NIHOHOASI	III, Chuo-ku, 10kyo, 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, 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	(11)	THIN FILM MAGNETIC	C HEAD AND METHOD OF MANUFACT	URING		
	Identification such as Title, Case		THE SAME				
	Number, or Foreign Application Number	(Attor	ney Docket No.				
			rich the undersigned has (have) e on date herewith or	executed an application for patent in the United State	es of America		
(12)	Insert Date of	(12)					
	Signing of Application	(12)	on				
(13)	Alternative	(13)	U.S. application Serial Number	er -			
(13)	Identification for	,	* -				
	filed applications	filed					
applicat any app the Assi claims of reexami resulting entire in assignmention	ions and patents as the Assig 2) Each undersigned agreestication or continuation or dignee in every way possible if 3) Each undersigned agreest or provisions of the Internation of th	nee mays to exect vision the nobtains so to exect on all Corners to perfeted State rizes and the said that he has sheirs, sy grants or desir	r deem necessary. ute all papers necessary in connecesof, or any patent or reissue a ing evidence and going forward ute all papers and documents any ention for Protection of Industrorm all affirmative acts which mes patent to the Assignee. I requests the Commissioner of F. Assignee, as Assignee of the entise not executed, and will not executed the firm of OLIFF & BERRIDGE, able in order to comply with the	nd perform any act which may be necessary in connectial Property or similar agreements. The necessary to obtain, maintain or confirm by respectively. The patents to issue any and all Letters Patents of the Unitire interest, and covenants that he has full right to concute, any agreements in conflict herewith, and agree presentatives. The power to insert on this assignment any furturely of the United States Patent and Trademark Office.	concerning cooperate with ction with cissue or cited States onvey the cs that this		
		-	ie undersigned on the date(s) o	opposite the undersigned name(s).			
Date	December 3, 20	101	Inventor Signature		_ (SEAL)		
	Db 2 20	ω1		KOICHI TEKUNUMA			
Date	December 3, 20		Inventor Signature	Ken-ichi Takano	_ (SEAL)		
				Ken-ichi TAKANO			
Date	December 3, 200	1	Inventor Signature	noriguki Ito	(SEAL)		
				Noriyuki ITO	_ (,		
Date			Inventor Signature		_ (SEAL)		
	m.						
If neith			be signed before: (a) a Notary Pu least two witnesses who also sig	ublic if within the U.S.A. (b) a U.S. Consul if outsid gn here:	e the U.S.A.		
	December 3, 20			- , , ,			
Date			Witness	- Gulcari Hishmura			
Date	December 3, 2	100	Witness	- Zum KaTo			

RECORDED: 03/13/2002

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