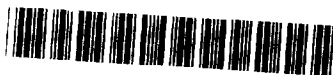


11-28-2000



101528904

Director of the U.S. Patent and Trademark Office
Box Assignments
Washington, D.C. 20231

MMD
10.25.00

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Attorney Docket No. 107704

JAMES A. OLIFF
U.S. PTO
09/69/984
10/25/00

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:
Hiroshi KIYONO
Nobutaka NISHIO

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

3. A. Nature of conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Other _____

B. Execution Date: October 20, 2000

B. Additional name(s) & address(es) attached?
 Yes No

09/16/94 984

4. A. If this document is being filed together with a new application, the execution date of the application is: October 20, 2000

B. Patent Application No.(s) _____ C. Patent No.(s) _____

Additional numbers attached? Yes No

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 19928
Alexandria, VA 22320

6. Total number of applications and patents involved: 1

7. A. Total fee (37 CFR 3.41).....\$ 40.00
B. Enclosed (Check No. 113123)

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 correct and any attached copy is a true copy of the original document.

Thomas J. Pardini
James A. Oliff Registration No. 27,075
Thomas J. Pardini Registration No. 30,411

Date: October 25, 2000

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

11/27/2000 GTOM11 00000177 09694984
01 FC:581 40.00 DP

PATENT
REEL: 011267 FRAME: 0384

ASSIGNMENT

(1-8) Insert Name(s) of Inventor(s) (1) Hiroshi KIYONO (5) (2) Nobutaka NISHIO (6) (3) (7) (4) (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, 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) METHOD, APPARATUS, SYSTEM AND COMPUTER PROCESS FOR IMPROVING PROPERTY OF THIN-FILM MAGNETIC HEAD (Attorney Docket No.)

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 October 20, 2000

(13) Alternative Identification for filed applications (13) U.S. application Serial Number filed October 25, 2000

- 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 Patents 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 October 20, 2000 Inventor Signature Hitoshi Kiyono (SEAL)
Date October 20, 2000 Inventor Signature Nobutaka Nishio (SEAL)
Date Inventor Signature (SEAL)
Date Inventor Signature (SEAL)
Date Inventor Signature (SEAL)
Date Inventor Signature (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 October 20, 2000 Witness Yakari Hishimura
Date October 20, 2000 Witness Izumi Kato