

07-25-2001

FORM PTO-1595  
(Rev. 6-93)



U.S. DEPARTMENT OF COMMERCE  
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Attorney Docket No.: 053616-5007

To the Commissioner for Patents:  
Please record the attached original documents or copy thereof.

ATTN: BOX ASSIGNMENT

1. Name of conveying party(ies):

- 1) Jijun SUN
- 2) Satoru ARAKI

07/13/01

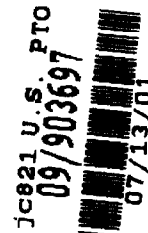
Additional name(s) of conveying party(ies) attached?

Yes  No

2. Name and address of receiving party(ies):

Name: TDK Corporation

Internal Address:



Street Address: 1-13-1, Nihonbashi, Chuo-ku,  
Tokyo 103-8272, Japan

City: \_\_\_\_\_  
State: \_\_\_\_\_ Zip: \_\_\_\_\_

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

Yes  No

3. Nature of conveyance:

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

Execution Date: 1) June 14, 2001 and 2) June 25, 2001

4. Application number(s) or patent number(s): **NEW APPLICATION**

09/903697

If this document is being filed together with a new application the execution date of the application is:

1) June 14, 2001 and 2) June 25, 2001

A. Patent Application No.(s) B. Patent No.(s)

Additional numbers attached:  Yes  No

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

Name: Robert J. Gaybrick

Internal Address: Morgan, Lewis & Bockius LLP  
Customer No. 009629

Street Address: 1800 M Street, N.W.  
City: Washington State: D.C. Zip: 20036

6. Total number of applications and patents involved: 1

7. Total fee (37 C.F.R §3.41): \$40.00  
 Enclosed  
 Authorized to be charged to deposit account 50-0310

8. Deposit account number: 50-0310  
Attach duplicate of page if paying by deposit account

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.

Robert J. Goodell  
Name of Person Signing  
Reg. No. 41,040

Signature

July 13, 2001  
Date

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

**ASSIGNMENT**

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

**MAGNETIC TUNNEL JUNCTION READ HEAD DEVICES HAVING A  
TUNNELING BARRIER FORMED BY MULTI-LAYER, MULTI-OXIDATION PROCESSES**

for which I/WE executed an application for United States Letters Patent concurrently herewith; or filed an application for United States Letters Patent on \_\_\_\_\_, (Application No. \_\_\_\_\_); and

WHEREAS, TDK Corporation, a corporation of Japan, whose post office address is 1-13-1, Nihonbashi, Chuo-ku, Tokyo 103-8272, Japan (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignee 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.

AND, I/WE HEREBY authorize and request the attorneys I/WE have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No. \_\_\_\_\_, filed \_\_\_\_\_) the filing date and application number of said application when known. July 13, 2001

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).

|   |   |                              |
|---|---|------------------------------|
| <b>Full Name of Sole or First Assignor</b><br>Jijun SUN                   | Assignor's Signature<br><i>Jijun Sun</i>    | Date<br><i>June 14, 2001</i> |
| Address<br>TDK Corporation<br>1-13-1, Nihonbashi, Chuo-ku, Tokyo 103-8272 |   | Citizenship<br>China         |
| <b>Full Name of Second Assignor</b><br>Satoru Araki                       | Assignor's Signature<br><i>Satoru Araki</i> | Date<br><i>June 25, 2001</i> |
| Address<br>TDK Corporation<br>1-13-1, Nihonbashi, Chuo-ku, Tokyo 103-8272 |   | Citizenship<br>Japan         |
| Names of additional inventors attached [ ] Yes [ X ] No                   |   |                              |