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To the Hon. Commissioner of Patents & Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Nobuyuki ISHIWATA, Keishi OHASHI
and Hisanao TSUGE

Additional name(s) of conveying party(ies) attached? Yes No

3. Nature of conveyance:

- Assignment Merger
- Security Agreement Change of Name
- Other

Execution Date: December 3, 1999

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

Name:
NEC CORPORATION

Street Address:
7-1, Shiba 5-chome
Minato-ku
Tokyo, Japan



4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: December 3, 1999

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:

YOUNG & THOMPSON
Second Floor
745 South 23rd Street
Arlington, VA 22202

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41).....\$ 40

- Enclosed
- Authorized to be charged to deposit account

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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.

Lauren Terry
Name of Person Signing

Lauren Terry
Signature

December 8, 1999
Date

Total number of pages including cover sheet: **[2]**

Deed of Assignment (Before Patent)

ASSIGNMENT

WHEREAS, NOBUYUKI ISHIWATA, KEISHI OHASHI and HISANAO TSUGE
of Tokyo, Japan

have invented certain new and useful improvements in TUNNELING MAGNETORESISTANCE
TRANSDUCER AND METHOD FOR MANUFACTURING THE SAME

for which we are about to make application for Letters
(I/we have made-or am/are about to make)

Patent of the United States of America;

AND WHEREAS, NEC Corporation, 7-1, Shiba 3-chome,
Minato-ku, Tokyo, Japan is

desirous of acquiring an interest therein and in the Letters Patent to be obtained therefor from the
United States;

NOW THEREFORE, be it known by all whom it may concern, that for and in consideration of
One Dollars (\$ 1.00)

to us in hand paid, the receipt of which is hereby acknowledged the said ASSIGNOR
have assigned, sold, and set over, and by these presents do hereby assign, sell, and set over unto the said
ASSIGNEE, NEC Corporation

* the full and exclusive right, title, and interest in and to the said invention,
as fully set forth and described in the:

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Inapplicable
wording

(a) specification prepared and executed by us on the 3-rd day of December, 1999,

(b) application filed on the day of , 19 , Serial No. ,

preparatory to obtaining Letters Patent therefor; said invention, application and Letters Patent to be
held and enjoyed by the said ASSIGNEE, NEC Corporation
for their own use and behoof, and for their legal representatives, to the full end of the term
for which said Letters Patent are granted, as fully and entirely as the same would have been held by
us had this assignment and sale not been made.

IN TESTIMONY WHEREOF, we hereunto set our hands and affix our seals at
Tokyo, Japan this 3-rd day of December, A.D. 19 99

Nobuyuki Ishiwata (石井) (Inventor's full Signature) NOBUYUKI ISHIWATA
Keishi Ohashi (大橋) KEISHI OHASHI
Hisanao Tsuge (辻) HISANAO TSUGE

Witness:

Fumitake Watanabe
[Signature]

* State whether the full and exclusive right, or what part of the whole interest is assigned.