

03-23-2001

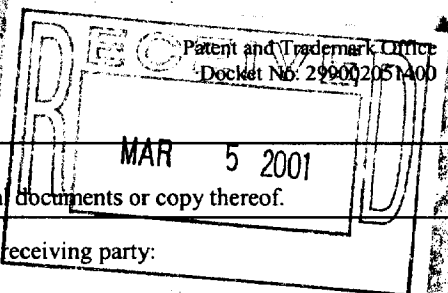


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U.S. DEPARTMENT OF COMMERCE

SHEET



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

1. Name of conveying party: Yasuaki HIRANO

- Individual
- General Partnership
- Corporation-State
- Association
- Limited Partnership
- Other

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

2. Name and address of receiving party:

Name: Sharp Kabushiki Kaisha
Internal Address:
Street Address: 22-22, Nagaikecho, Abeno-ku
City: Osaka State: JAPAN ZIP: 545-8522

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

3. Nature of conveyance:

- Assignment
- Security Agreement
- Other:
- Merger
- Change of Name

Execution Date: February 16, 2001

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:

- A. Patent Application No.: 09/703,193
- B. Patent No.(s)

Additional numbers attached? Yes No

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

Thomas E. Ciotti
Morrison & Foerster LLP
755 Page Mill Road
Palo Alto, California 94304-1018

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, referencing Attorney Docket 299002051400.

8. Deposit account number: 03-1952

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. § 1.21 that may be required by this paper, or to credit any overpayment to Deposit Account No. 03-1952.

DO NOT USE THIS SPACE

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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.

Name: Thomas E. Ciotti
Registration No: 21,013

Thomas E. Ciotti
Signature

March 1, 2001
Date

Total number of pages comprising cover sheet, attachments and document: 3

Mail documents to be recorded with required cover sheet information to:
U.S. Patent and Trademark Office
Office of Public Records
Box Assignments
Crystal Gateway 4, Room 335
Washington, D.C. 20231

ASSIGNMENT

WHEREAS, The ASSIGNOR, comprising the following named inventor(s):

1. Yasuaki HIRANO; 10-42, Nakamachi,
Tenri-shi, Nara Japan

has invented and owns a certain invention entitled:

METHOD AND CIRCUIT FOR WRITING DATA TO A NON-VOLATILE
SEMICONDUCTOR MEMORY DEVICE

for which application for Letters Patent of the United States was filed on October 31, 2000, and assigned Serial No. 09/703,193, and

WHEREAS, the ASSIGNEE:

SHARP KABUSHIKI KAISHA
22-22, Nagaikecho, Abeno-ku, Osaka 545-8522 Japan

is desirous of acquiring the entire interest in, to and under said invention and the United States Letters Patent to be obtained therefor;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR of the sum corresponding to One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the full and exclusive right, title and interest to said invention and all Letters Patent of the United States to be obtained therefor on said application or any continuation, division, renewal, substitute or reissue thereof for the full term or terms for which the same may be granted.

ASSIGNOR hereby covenants that no assignment sale agreement charge or other encumbrance has been or will be entered into which would conflict with this assignment and sale;

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to ASSIGNOR and will testify as to the same

in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seal

this 16th day of February, 2001.

1. Yasuaki Hirano
(Yasuaki HIRANO)