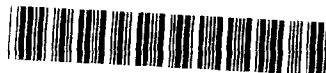


03-21-2002

U.S. DEPARTMENT OF COMMERCE



R SHEET

Patent and Trademark Office  
Docket No. 299002054200

102025693

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

1. Name of conveying party(ies):  
Yoshinao MORIKAWA

Individual(s)       Association  
 General Partnership       Limited Partnership  
 Corporation-State       Other

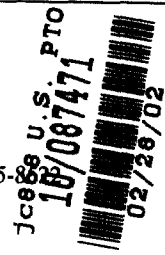
Additional name(s) of conveying party(ies) attached?  Yes  No

*02/28/02*

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

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

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



3. Nature of conveyance:

Assignment       Merger  
 Security Agreement       Change of Name  
 Other:

Execution Date: February 19, 2002

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: February 19, 2002

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:

Madeline I. Johnston  
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 299002054200

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**

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: Madeline I. Johnston      *Madeline I. Johnston*      2/28/02  
Registration No: 36,174      Signature      Date

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

03/20/2002 AAHMED1 00000084 031952 10067471  
01 FC:581 40.00 CH

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

pa-670834

**ASSIGNMENT**

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

1. Yoshinao MORIKAWA;  
607-38, Ichibucho, Ikoma-shi, Nara Japan

has invented and owns a certain invention entitled:

REFERENCE VOLTAGE GENERATION CIRCUIT FOR SEMICONDUCTOR MEMORY  
DEVICE, MEMORY READING CIRCUIT INCLUDING THE SAME, AND  
ELECTRONIC INFORMATION DEVICE INCLUDING THE SAME

for which application for Letters Patent of the United States was executed on even date herewith,  
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 19<sup>th</sup> day of February, 2002.

1. Yoshinao Morikawa  
Yoshinao MORIKAWA