

07-16-2001

U.S. DEPARTMENT OF COMMERCE



HEET

Patent and Trademark Office
Docket No. 2045552020700

101777091

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

1. Name of conveying party(ies): *07/05/01*
 Yasuaki HIRANO

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

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

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

SHARP KABUSHIKI KAISHA
 22-22, Nagaike-cho, Abeno-ku
 Osaka, Japan

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

J11040 U.S. PTO
 09/098022
 07/05/01

3. Nature of conveyance:

Assignment Merger
 Security Agreement Change of Name
 Other:

Execution Date: June 27, 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: January 27, 2001

A. Patent Application No.(s) *09/898022* B. Patent No.(s)

Additional numbers attached? Yes No

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

Barry E. Bretschneider
 Morrison & Foerster LLP
 2000 Pennsylvania Avenue, N.W.
 Washington, D.C. 20006-1888

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 2045552020700

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: Barry E. Bretschneider *[Signature]* July 5, 2001
 Registration No: 28,055 Signature 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

07/13/2001 LNUELLER 00000115 098022
 01 FD:581 40.00 OP

dc-269781

PATENT
REEL: 011963 FRAME: 0066

MORRISON & FOERSTER LLP

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby assign(s), transfer(s) and set(s) over to:

SHARP KABUSHIKI KAISHA of

22-22, Nagaike-cho, Abeno-ku, Osaka, Japan

(hereinafter designated as the "ASSIGNEE"), its successors and assigns, the entire right, title, and interest for the United States in the invention, and all applications for patent and any Letters Patent which may be granted therefor, including said application, and all United States Letters Patent which may be granted thereof, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of said Letters Patent when granted to be held by said ASSIGNEE, its successors, assigns or their legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been and enjoyed by Assignor(s) if this assignment had not been made, the application being known by the title:

ERASE METHOD FOR NONVOLATILE SEMICONDUCTOR MEMORY DEVICE

Attorney Docket No.:

for which the undersigned has/have executed an application for patent in the United States of America on the same day herewith. Where this instrument is not filed concurrently with the application, the following identifying information may be added after execution:

Serial No.:

Filing Date:

1. The undersigned hereby agree(s) to sign and execute any further documents and instruments which may be necessary, lawful and proper in the prosecution of said above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reexamination or reissue application or in any amendments, extension of interference proceedings, or otherwise to secure the title thereto to the ASSIGNEE.

Page 1 of 2

PATENT
REEL: 011963 FRAME: 0067

2. The undersigned agree(s) 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 of similar agreements.

3. The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the ASSIGNEE.

4. The undersigned hereby authorize(s) and request(s) the Commissioner of Patents in the United States to issue any and all Letters Patent resulting from said application or any division or divisions or continuing applications thereof to the said ASSIGNEE.

5. The undersigned hereby grant(s) to the firm of Morrison & Foerster LLP the power to insert on this assignment any further identification which 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 WHEREBY, executed by the undersigned on the date(s) opposite the undersigned name(s).

June, 27, 2001
Date

Yasuaki Hirano
Typed Name: Yasuaki HIRANO

Date

Typed Name:

Date

Typed Name:

Date

Typed Name:

Date

Typed Name:

This assignment may be signed before a U.S. Notary Public or before at least two witnesses who also sign here:

June 27, 2001
Date

Keiko Tanemoto
Typed Name: Keiko TANEMOTO

June 27, 2001
Date

Kyoko Hata
Typed Name: Kyoko HATA