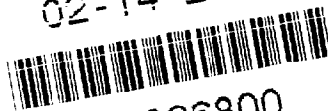


02-14-2003

U.S. DEPARTMENT OF COMMERCE

IEET

Patent and Trademark Office  
Docket No. 492322008400

102366800

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

J1135 U.S. PTO  
10/359251  
02/06/03

## 1. Name of conveying party(ies):

1. Koichi HIRATA
2. Osamu ISAKI
3. Tsutomu AONO
4. Toshikazu HIRAI
5. Tetsuro ASANO

- ☒ 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):

Name: **SANYO ELECTRIC CO., LTD.**  
Address: 2-5-5, Keihanhondori, 2-chome  
Moriguchi-shi, Osaka 570-8677  
JAPAN

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

## 3. Nature of conveyance:

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

Execution Date: January 17, 2003

## 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 6, 2003

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

1035 9751

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

Barry E. Bretschneider  
Morrison & Foerster LLP  
1650 Tysons Boulevard  
Suite 300  
McLean, Virginia 22102

## 6. Total number of applications and patents involved: 1

## 7. Total fee (37 C.F.R. § 3.41): \$40.00

☒ Authorized to be charged to deposit account, transmittal  
form is attached to this submission in duplicate or fee processing:  
Attorney Docket No. 492322008400

8. Deposit account number: 03-1952The 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  
Registration No: 28,055

Signature

Date

2/6/03

02/14/2003 EC80PER 00000091 031952 10359251

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va-23929

**PATENT**  
**REEL: 013747 FRAME: 0944**

# MORRISON & FOERSTER<sub>LLP</sub>

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:

**SANYO ELECTRIC CO., LTD.**  
2-5-5, Keihanhondori, 2-chome  
Moriguchi-shi, Osaka 570-8677 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:

## **SEMICONDUCTOR DEVICE**

Attorney Docket No.: 49232-20084.00

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.
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).

'03 Jan. 17

Date

平田 耕一

Typed Name: Koichi HIRATA

'03 Jan. 17

Date

伊佐木 治

Typed Name: Osamu ISAKI

'03 Jan. 17

Date

青野 勉

Typed Name: Tsutomu AONO

'03 Jan. 17

Date

平井 利和

Typed Name: Toshikazu HIRAI

'03 Jan. 17

Date

浅野 哲郎

Typed Name: Tetsuro ASANO