

12/29/04

01-12-2005

FORM PTO-1595  
(Rev. 10/02)

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

**Docket No.: 50099-304**



102917964

To the Honorable Commissioner for Patents

Please record the attached original documents or copy thereto:

1. Name of Conveying Party(ies):  
Hiroshi SAKATA, Tomofumi TANAKA

2. Name and address of receiving party(ies):  
Name: MITSUBISHI DENKI KABUSHIKI KAISHA  
Address: 2-3, Marunouchi 2-chome,  
Chiyoda-ku  
Tokyo 100-8310 JAPAN

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

3. Nature of Conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other

Execution Date: November 16, 2004, November 16, 2004

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

112963 U.S. PTO  
11/023590  
122904

4. Application number(s) or patent number(s):  
If the document is being filed together with a new application, the execution date of the application is: November 16, 2004,  
November 16, 2004

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:  
Name: MCDERMOTT WILL & EMERY LLP  
Internal Address:  
Street Address: 600 13th Street, N.W.  
City: Washington State: D. C. Zip: 20005-3096

6. Total number of applications and patents involved: 1  
7. Total fee (37 CFR 3.41) \$40.00  
 Enclosed  
 Authorized to be charged to deposit account  
8. Deposit account number:  
500417

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.*

Stephen A. Becker, 26,527

December 29, 2004

Name and Registration No. of Person Signing

Signature

Date

Total number of pages including cover sheet: 2

OMB No. 0651-0027 (exp. 6/30/2005)

01/11/2005 ECOOPER 00000209 500417 11023590  
01 FC:8021 40.00 BA

PATENT  
REEL: 016137 FRAME: 0113

**ASSIGNMENT**

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

- (1) Hiroshi SAKATA (4) \_\_\_\_\_
- (2) Tomofumi TANAKA (5) \_\_\_\_\_
- (3) \_\_\_\_\_ (6) \_\_\_\_\_

who have made a certain new and useful invention, hereby sell, assign and transfer unto  
    MITSUBISHI DENKI KABUSHIKI KAISHA    

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled  
    SEMICONDUCTOR DEVICE AND SEMICONDUCTOR DEVICE MODULE    

(a) for which an application for United States Letters Patent was filed on \_\_\_\_\_, and identified by United States Serial No. \_\_\_\_\_; or

(b) for which an application for United States Letters Patent was executed on November 16, 2004

and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and any and all extensions, divisions, reissues, substitutes, renewals, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives; the undersigned agree that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agree to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

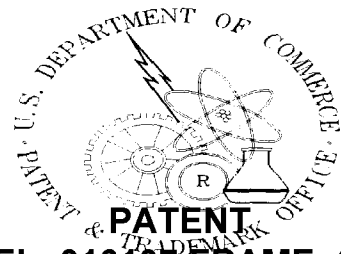
SIGNED on the dates indicated aside our signatures:

INVENTORS

DATE SIGNED

- 1) Hiroshi Sakata  
Name: HIROSHI SAKATA
- 2) Tomofumi Tanaka  
Name: TOMOFUMI TANAKA
- 3) \_\_\_\_\_  
Name: \_\_\_\_\_
- 4) \_\_\_\_\_  
Name: \_\_\_\_\_
- 5) \_\_\_\_\_  
Name: \_\_\_\_\_
- 6) \_\_\_\_\_  
Name: \_\_\_\_\_

- November 16, 2004
- November 16, 2004
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



**ASSIGNMENT**

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

- (1) Hiroshi SAKATA (4) \_\_\_\_\_
- (2) Tomofumi TANAKA (5) \_\_\_\_\_
- (3) \_\_\_\_\_ (6) \_\_\_\_\_

who have made a certain new and useful invention, hereby sell, assign and transfer unto  
MITSUBISHI DENKI KABUSHIKI KAISHA

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

SEMICONDUCTOR DEVICE AND SEMICONDUCTOR DEVICE MODULE

(a) for which an application for United States Letters Patent was filed on \_\_\_\_\_, and identified by United States Serial No. \_\_\_\_\_; or

(b) for which an application for United States Letters Patent was executed on November 16, 2004

and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and any and all extensions, divisions, reissues, substitutes, renewals, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives; the undersigned agree that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agree to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the dates indicated aside our signatures:

INVENTORS

DATE SIGNED

- 1) Hiroshi Sakata \_\_\_\_\_  
Name: HIROSHI SAKATA \_\_\_\_\_  
November 16, 2004
- 2) Tomofumi Tanaka \_\_\_\_\_  
Name: TOMOFUMI TANAKA \_\_\_\_\_  
November 16, 2004
- 3) \_\_\_\_\_  
Name: \_\_\_\_\_
- 4) \_\_\_\_\_  
Name: \_\_\_\_\_
- 5) \_\_\_\_\_  
Name: \_\_\_\_\_
- 6) \_\_\_\_\_  
Name: \_\_\_\_\_