



To the Honorable Commissioner of Patents .

101824825

and original documents or copy thereof.

1. Name of conveying party(ies):  
 Takayuki KAWAHARA, Takehiro SHIMIZU, Fumio ARAKAWA, Hiroyuki MIZUNO, Takao WATANABE, Koichiro ISHIBASHI  
*8-2001*

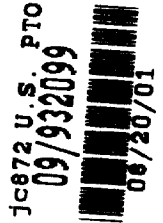
Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies):  
 Name: Hitachi, Ltd.  
 Street Address: 6, Kanda Surugadai 4-chome, Chiyoda-ku

3. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_  
 Execution Date: July 23,24,26,27, 2001

City: Tokyo:  
 Country: Japan

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



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: July 23,24,26,27, 2001

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: ANTONELLI, TERRY, STOUT & KRAUS, LLP  
 Internal Address:  
 Street Address: 1300 North Seventeenth Street Suite 1800  
 City: Arlington State: VA Zip: 22209

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$40.00  
 Enclosed  
 Any deficiencies may be charged to deposit account  
 Authorized to be charged to deposit account

8. Deposit account number: 01-2135  
 (Attach duplicate copy of this page if paying by deposit account)

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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.*

Alan E. Schiavelli  
 Name of Person Signing  
 Attorney Registration No. 32,087  
 Total number of pages including cover sheet, attachments, and document: 2

*[Signature]*  
 Signature  
 August 20, 2001  
 Date

# ASSIGNMENT

(讓渡証)

As a below named inventor, I hereby declare that:

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me citizen of Japan by HITACHI, LTD., a corporation organized under the laws of Japan, located at 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo, Japan, receipt of which is hereby acknowledged I do hereby sell and assign to said HITACHI, LTD., its successors and assigns, all my right, title and interest, in and for the United States of America, in and to

## SEMICONDUCTOR DEVICE

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed on even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by said HITACHI, LTD., its successors, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made:

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said HITACHI, LTD.

Signed on the date(s) indicated aside our signatures:

INVENTOR(S)

(発明者フルネームサイン)

Date Signed

(署名日)

1) Takayuki Kawahara

7/27/2001

2) Takehiro Shimizu

7/24/2001

3) Yumio Andou

7/24/2001

4) Hiroyuki Azuma

7/24/2001

5) Takao Watanabe

7/23/2001

6) Koichiro Ishibashi

7/26/2001

7) \_\_\_\_\_

8) \_\_\_\_\_

9) \_\_\_\_\_

10) \_\_\_\_\_

PATENT

RECORDED: 08/20/2001

REEL: 012097 FRAME: 0513