

10-07-1998



Y

TS97-446

100845467

To the Honorable Commissioner of Patents

Original documents or copy thereof.

1. Name of conveying party(ies):

JHON-JHY LIAW, DUN-NIAN YAUNG AND JIN-YUAN LEE

9.28.98

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

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

Name: Taiwan Semiconductor Manufacturing Company

Internal Address:

Street Address:

121 Park Ave. 3
Science-Based Industrial Park
City: Hsin-Chu Zip:
Country: Taiwan, R.O.C.

3. Nature of conveyance

- Assignment Merger
- Security Agreement Change of Name
- other _____

Execution Date: 7/9/98

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: 7/9/98

A. Patent Application No(s)

B. Patent No.(s)

09/161426

Additional numbers attached? Yes No

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

Name: GEORGE O. SAILE

Internal Address: _____

Street Address: 20 MCINTOSH DRIVE

City: POUGHKEEPSIE State: NY ZIP: 12603

6. Total no. of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 40.00

Enclosed

Authorized to be charged to deposit acct.

8. Deposit account number: 19-0033

(Attach duplicate copy of this page if paying by deposit account)

10/06/1998 JSHABRZZ 00000009 190033 09161406

DO NOT USE THIS SPACE

01 FC:581 40.00 CH

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 B. ACKERMAN

Name of Person Signing

Signature

9/25/98

Date

Total number of pages comprising cover sheet: 3

JCB41 U.S. PTO 09/161406 09/26/98

For U.S. and/or Foreign Rights

For Application or U.S. Patent

By Inventor(s) or Present Owner

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR:

JHON-JHY LIAW
Type or print name of ASSIGNOR
No-11 Chang Long ST.
Address
Sang Chong, Taipei, Taiwan
Republic of China.
Nationality

Jin-Yuan Lee
Type or print name of ASSIGNOR
No.11, Lane 4, An-Ho Street.
Address
Hsin-Chu, Taiwan
Republic of China
Nationality

DUN-NIAN YALNG
Type or print name of ASSIGNOR
47, No 15, Lane 130, Wan-Lan
Address
Steel, Taipei, Taiwan
Republic of China
Nationality

ASSIGNEE:

Taiwan Semiconductor Manufacturing Co. Ltd.
121 Park Ave. 3
Science-Based Industrial Park
Hsin-Chu, Taiwan, R.O.C.
Taiwan, R.O.C.
Nationality

and the successors, assigns and legal representatives of the ASSIGNEE

(complete one of the following)

- the entire right, title and interest
 an undivided _____ percent (___%) interest for the United States and its territorial possessions
(check the following box if foreign rights are also to be assigned)
 and in all foreign countries

in and to any and all improvements which are disclosed in the invention entitled:

Using An Extra Boron Implant To Improve The NMOS Reverse Narrow Width Effect In Shallow Trench Isolation Process

and which is found in

- (a) U.S. patent application executed on even date herewith
- (b) U.S. patent application executed on _____
- (c) U.S. application serial no. _____ filed on _____
- (d) U.S. patent no. _____ issued _____
(also check (e) if foreign application(s) is also being assigned)
- (e) and any legal equivalent thereof in a foreign country, including the right to claim priority

and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute, thereof, and as to letters patent any re-issue or re-examination thereof.

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, I / We have signed this
July - 9 1998 (Date of signing)

WARNING Date of signing must be the same as the date of execution of the application if item (a) was checked above.

Jhon-Jhy Lian
Signature of ASSIGNOR(S)

Shun-Nuan Yang
Jin-Yuan Lee

If ASSIGNOR is a legal entity complete the following information

Type or print the name of the above person authorized to sign on behalf of ASSIGNOR

Title

Note: No witnessing, notarization or legalization is necessary, if the assignment is notarized or legalized then it will only be prima facie evidence (35 USC 261). Use next page if notarization is desired.

___Notarization of Legalization Page Added.