

09-19-2005

Form PTO-1595 (Rev. 03/05)
CMB No. 0651-0027 (exp. 6/30/2005)U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office103083790
PATENTS ONLY

T

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Kuo-Chi TU

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

3. Nature of conveyance/Execution Date(s):

Execution Date(s) December 22, 2003

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

2. Name and address of receiving party(ies)

Name: Taiwan Semiconductor Manufacturing Co, Ltd.

Internal Address: _____

Street Address: No. 8, Li-Hsin Rd. 6

Science-Based Industrial Park

City: Hsin-Chu

State: _____

Country: Taiwan, R.O.C. Zip: 300-77

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

4. Application or patent number(s):

☒ This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☐ No

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

Name: Daniel R. McClure

Internal Address: Thomas, Kayden, Horstemeyer &
Risley, LLPStreet Address: 100 Galleria Parkway
Suite 1750

City: Atlanta

State: Georgia Zip: 30339

Phone Number: 770-933-9500

Fax Number: 770-951-0933

Email Address: dan.mcclure@tkhr.com

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00

- ☒ Authorized to be charged by credit card
☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers 1009
Expiration Date 07/09

b. Deposit Account Number _____

Authorized User Name _____

9. Signature:

Signature

Sept 8, 2005
Date

Daniel R. McClure

Name of Person Signing

Total number of pages including cover
sheet, attachments, and documents:

3

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

09/14/2005 SSESHE1 00000016 11223287

05 FC:8021

40.00 OP

PATENT
REEL: 016991 FRAME: 0493

TS03-265

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:

KUO-CHI TU

Type or print name of ASSIGNOR

No. 51, Lane 150, Sec. 1,

Address

Wufu Rd., Hsin-Chu

Taiwan 300, R.O.C., Republic of China

Nationality

do hereby sell, assign and transfer to

ASSIGNEE:

Taiwan Semiconductor Manufacturing Co.

No. 8, Li-Hsin-Road 6

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:

A Novel Random Access Memory (Ram) Capacitor In Shallow Trench Isolation With Improved Electrical Isolation To Overlying Gate Electrodes

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 _____
(e) ☒ and any legal equivalent thereof in a foreign country, including the right to claim priority
(also check (e) if foreign application(s) is also being assigned)

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

12/22/03

(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.

Kuo - Chi Tu.
Signature of ASSIGNOR(S)

12/22/03

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 or Legalization Page Added.