

09/22/04

09-30-2004

FORM PTO-1595

F

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

(Rev. 10/02)

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



102848639

nal documents or copy thereof.

To the Honorable Commissioner of Patent.

13441 U.S. PTO
10/947092

092204

1. Name of conveying part(ies):

- (1) Mu-Tsang LIN
- (2) Yi-Yu WU
- (3) Chia-Hung CHUNG
- (4) Jian-Hong CHEN
- (5) Chon-Hwa CHU
- (6) Ie-Fun LAI
- (7) Wen-Sheng CHIEN

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

2. Name and address of receiving party(ies)

Name: Taiwan Semiconductor Manufacturing Co., Ltd.

Street Address: No. 8, Li-Hsin Rd. 6,
Science-Based Industrial Park
Hsin-Chu, Taiwan 300-77,
R.O.C.

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

3. Nature of conveyance:

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

Execution Date: (1-5, 7) August 2, 2004; (6) August 13, 2004

4. Application number(s) or patent number(s): 10/947092

If this document is being filed together with a new application, the execution date of the application is:
(1-5, 7) August 2, 2004; (6) August 13, 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:

Daniel R. McClure
Thomas, Kayden, Horstemeyer & Risley, L.L.P.
100 Galleria Parkway, Suite 1750
Atlanta, Georgia 30339-5948

6. Total number of applications/patents involved: [1]

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

- Enclosed
- Authorization to charge credit card (attached)

8. Deposit Account Number:

20-0778
(Attach duplicate copy of this page if paying by Deposit Account)

09/24/2004 HTECKLU1 00000012 10947092
03 FC 8021 40.00 DP

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.

Daniel R. McClure

Sept 22, 2004

Typed Name

Signature

Date

Docket #: 252011-2640

Total number of pages including cover sheet, attachments, and document: [3]

Mail documents to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services
Director of U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

PATENT
REEL: 015830 FRAME: 0026

ASSIGNMENT

WHEREAS, Mu-Tsang LIN, Yi-Yü WU, Chia-Hung CHUNG,
Jian-Hong CHEN, Chon-Hwa CHU, Ie-Fun LAI and Wen-Sheng CHIEN
hereafter referred to as ASSIGNOR, has/have invented certain new and useful improvements as
described and set forth in the below identified application for United States Letters Patent:

Title: FAULT DETECTION AND CLASSIFICATION (FDC) SPECIFICATION
MANAGEMENT APPARATUS AND METHOD THEREOF

Filed: _____ Serial No. _____

Executed on: August 2, 2004, August 13, 2004

WHEREAS, Taiwan Semiconductor Manufacturing Co., Ltd. of
No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu,
Taiwan 300-77, R.O.C. hereinafter referred to as ASSIGNEE, is desirous of
acquiring ASSIGNOR'S interest in the said invention and application and in any U.S. Letters
Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for
good and valuable consideration, receipt of which is hereby acknowledged by Assignor,
Assignor has/have sold, assigned and transferred, and by these presents does/do sell, assign and
transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights,
title and interest in and to the said invention and application and all future improvements
thereon, and in and to any Letters Patent which may hereafter be granted on the same in the
United States, the said interest to be held and enjoyed by said Assignee as fully and exclusively
as it would have been held and enjoyed by said Assignor had this Assignment and transfer not
been made, to the full end and term of any Letters Patent which may be granted thereon, or of
any division, renewal, continuation in whole or in part, substitution, conversion, reissue,
prolongation or extension thereof.

Assignor further agrees/agree that he/she/they will, without charge to said
Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said
application and/or applications, execute, verify, acknowledge and deliver all such further
papers, including applications for Letters Patent and for the reissue thereof, and instruments of
assignment and transfer thereof, and will perform such other acts as Assignee lawfully may
request, to obtain or maintain Letters Patent for said invention and improvement, and to vest
title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has/have signed his/her/their name(s) on the
date(s) indicated.

Mu-Tsang Lin

Mu-Tsang LIN

August 2, 2004

Date:

Yi-Yü Wu

Yi-Yü WU

August 2, 2004

Date:

TSMC2003-0734/0503-A30080US

PATENT
REEL: 015830 FRAME: 0027

Chia-Hung Chung
Chia-Hung CHUNG


August 2, 2004
Date:

Jian-Hong CHEN
Jian-Hong CHEN

August 2, 2004
Date:

Chon-Hwa chu
Chon-Hwa CHU

August 2, 2004
Date:


Ie-Fun LAI

Aug. 13, 2004
Date:

Wen-Sheng CHIEN
Wen-Sheng CHIEN

August 2, 2004
Date:

TSMC2003-0734/0503-A30080US