

04-15-2005



ET

To the Director of the U.S. Patent and

102981689

documents or the new address(es) below.

1. Name of conveying party(ies)

- (1) Jui-Jung YAN
- (2) Chung-Min FU
- (3) Ricky YANG

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

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

Execution Date(s) (1) March 28, 2005; (2-3) March 15, 2005

- ☒ 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: Hsinchu

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)

04/08/2005 FMEBRAHT 00000005 11099834

Q1 FD-8021

(40.00 GP)

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, LLP

Street 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 07/05

b. Deposit Account Number

Authorized User Name

9. Signature:

Daniel R. McClure

Signature

April 6, 2005

Date

Daniel R. McClure

Name of Person Signing

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

4

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

PATENT
REEL: 016453 FRAME: 0085

ASSIGNMENT

WHEREAS, Jui-Jung Yan, Chung-Min FU and Ricky YANG
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: ALTERNATIVE METHODOLOGY FOR DEFECT SIMULATION AND SYSTEM
Filed: _____ Serial No. _____
Executed on: March 28, 2005

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.

Jui-Jung Yan
Jui-Jung YAN

3/28. 2005
Date:

Chung-Min FU

Date:

ASSIGNMENT

WHEREAS, Jui-Jung Yan, Chung-Min FU and Ricky YANG
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: ALTERNATIVE METHODOLOGY FOR DEFECT SIMULATION AND SYSTEM
Filed: _____ Serial No. _____
Executed on: March 15, 2005

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No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu,
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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.

Jui-Jung YAN

Date:

Chung-min Fu

Chung-Min FU

3/15, 2005

Date:

Ricky YANG
Ricky YANG

3/15/2005
Date:

TSMC2004-0778/0503-A31014US

RECORDED: 04/06/2005

PATENT
REEL: 016453 FRAME: 0088