

11-15-2004

Form PTO-1595 (Rev. 09/04)  
OMB No. 0651-0027 (exp. 6/30/2005)U.S. DEPARTMENT OF COMMERCE  
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PATENTS ONLY

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)/Execution Date(s):

Jian-Hong LIN (10/18/2004), Ying-Jen KAO  
(10/18/2004), and Jye-Yen CHENG (10/18/2004)

Execution Date(s): in parentheses after inventor name

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

## 3. Nature of Conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ 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, Republic of China Zip: 300-77

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

## 4. Application or patent number(s):

A. Patent Application No.(s)  
NEW☒ This document is being filed together with a new application.

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

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

Name: Joe McKinney Muncy  
BIRCH, STEWART, KOLASCH & BIRCH,  
LLP

Internal Address: Atty. Dkt.: 0941-1065PUS1

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Suite 100 East  
P.O. Box 747

City: Falls Church

State: VA Zip: 22040-0747

Phone Number: (703) 205-8000

Fax Number: (703) 205-8050

Email Address: mailroom@bskb.com

## 6. Total number of applications and patents involved:

1

## 7. Total fee (37 CFR 1.21(h) &amp; 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 \_\_\_\_\_  
Expiration Date \_\_\_\_\_b. Deposit Account Number \_\_\_\_\_  
Authorized User Name \_\_\_\_\_

## 9. Signature:

Signature

November 9, 2004

Date

Joe McKinney Muncy - 32,334

Name of Person Signing

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

3

KM/kkv

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17858 U.S. PTO  
10/983681  
110904PATENT  
REEL: 015975 FRAME: 0014

## ASSIGNMENT

WHEREAS, Jian-Hong LIN, Ying-Jen KAO and Jye-Yen CHENG  
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: METHOD FOR DAMASCENE FORMATION USING PLUG MATERIALS HAVING  
VARIED ETCHING RATES

Filed: 11/09/2004 Serial No. NEW

Executed on: October 18, 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.

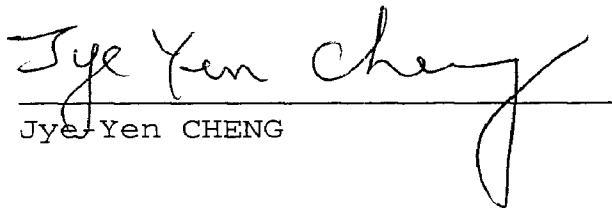
IN TESTIMONY WHEREOF, Assignor has/have signed his/her/their name(s) on the  
date(s) indicated.

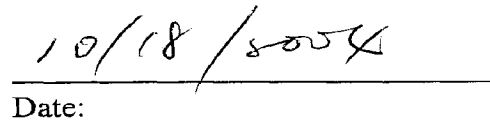
Jian-Hong Lin  
Jian-Hong LIN

10/18/2004  
Date:

Ying-jen Kao  
Ying-Jen KAO

10/18/2004  
Date:

  
Jye-Yen CHENG

  
Date: