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

OMB No. 0651-0027 (exp. 6/30/2005) RE 103238901 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): 2. Name and address of receiving party(ies) TAIWAN SEMICONDUCTOR MANUFACTURING CO., Yi-Chun LIN (4/17/2006), Kuo-Ming WU Name: (4/17/2006), and Ruey-Hsin LIU (4/17/2006) Internal Address: Additional name(s) of conveying party(ies) attached? x No Street Address: 3. Nature of conveyance/Execution Date(s): No. 8, Li-Hsin Rd. 6 Science-Based Industrial Park Execution Date(s): in parentheses after inventor name Hsin-Chu, Taiwan 300-77, R.O.C. Merger x Assignment Change of Name Security Agreement Joint Research Agreement City:_ Government Interest Assignment State: Executive Order 9424, Confirmatory License Country: Additional name(s) & address(es) Yes x No attached: 4. Application or patent number(s): X This document is being filed together with a new application. A. Patent Application No.(s) B. Patent No.(s) NEW Additional numbers attached? Yes 5. Name and address to whom correspondence 6. Total number of applications and concerning document should be mailed: patents involved: Name: Joe McKinney Muncy BIRCH, STEWART, KOLASCH & BIRCH, 40.00 LLP 7. Total fee (37 CFR 1.21(h) & 3.41) \$ Internal Address: Atty. Dkt.: 0941-1611PUS1 Authorized to be charged by credit card Street Address: 8110 Gatehouse Road Authorized to be charged to deposit account Suite 100 East P.O. Box 747 Enclosed Х None required (government interest not affecting title) City: Falls Church 8. Payment Information Zip: 22040-0747 a. Credit Card State: Last 4 Numbers (703) 205-8026 **Expiration Date** Phone Number: (703) 205-8050 b. Deposit Account Number Fax Number: Authorized User Name mailroom@bskb.com Email Address: 9. Signature: May 9, 2006 Signature Date Joe McKinney Muncy /32,334 Total number of pages including cover 3

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Name of Person Signing

KM/sns

sheet, attachments, and documents:

ASSIGNMENT

WHEREAS, Yi-Chun LIN, Kuo-Ming WU and Ruey-Hsin LIU 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:_	SEMICONDUCTOR	DEVICE,	METHOD	OF	FABRICATI	NG I	HE	SAME,	AND	PATTERNING
	MASK UTILIZI	ED BY TH	E METHOI)						
Filed:	5/9/2006				Serial No.	NEV	Į .			
Executed on:		Aj	oril 17, 2	2006	· · · · · · · · · · · · · · · · · · ·	****				

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.

Assigner 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.

TSMC2004-1262/0503-A31418US

PATENT REEL: 017848 FRAME: 0514

Yī-Chun	UIN
Yi-Chun	LIN

5006, 4, 17 Date:

Kuo-Ming WU (

Date:

Ruey-Hsin LIU

2006, 4. M Date:

RECORDED: 05/09/2006

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