Form PTO-1595 (Rev. 10/02)  OMB No. 0651-0027 (exp. 6/30/2005,  Tab settings ⇒ ⇒ ▼  10257728	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office	
To the Honorable Commissioner of Patents and Trademarks:	Please record the attached original documents or copy thereof.	1
1. Name of conveying party(ies):  Tsai-Sheng Gau Jaw-Jung Shin Jan-Wen You Burn-Jeng Lin	2. Name and address of receiving party(ies)  Name: Taiwan Semiconductor Manufacturing Co., Ltd.  Internal Address:	g
Additional name(s) of conveying party(ies) attached? Yes V		
3. Nature of conveyance:		
Assignment Merger  Security Agreement Change of Name	Street Address: No. 8, Li-Hsin Road 6	
Other	Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77	
	City: Hsin-Chu State: Zip: 300-77	
Execution Date: October 2, 2003	Additional name(s) & address(es) attached? Yes V No	
	ication, the execution date of the application is:	
A. Patent Application No.(s)	B. Patent No.(s)	
Additional numbers at		
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1	
Name: David M. O'Dell	7. Total fee (37 CFR 3.41)\$\_\$40.00	
Internal Address:	<b>✓</b> Enclosed	:
	Authorized to be charged to deposit account	
Street Address: Haynes and Boone, LLP	8. Deposit account number:	
901 Main Street, Suite 3100	08-1394	88 40.00 0P
City: <u>Dallas</u> State: <u>TX</u> Zip: <u>75202</u>		00000045 10678788
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9. Signature.	$\sim$	00000
David M. O'Dell	Stall 10-3-03	0/09/2003 HMARZI1 4 FC:8021
Name of Person Signing	Signature Date	<b>83</b> 23
	er sheet, attachments, and documents: 4	ୢୢୗୡୢୖ
Mail Stop Assignment, Comr	required cover sheet information to: missioner of Patent, P.O. Box 1450 VA 22313-1450	/10/09/2003 04 FC:8021

R-56765.1

Cust. No. 27683

PATENT REEL: 014586 FRAME: 0575

## ASSIGNMENT

WHEREAS, we,

(1) Tsai-Sheng Gau of

(2) Jaw-Jung Shin of

(3) Jan-Wen You of

(4) Burn-Jeng Lin of

have invented certain improvements in

## METHOD TO IMPROVE THE CRITICAL DIMENSION UNIFORMITY OF PATTERNED FEATURES ON WAFERS

for which we have executed an application for Letters Patent of the United States of America, of even date herewith; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Inc., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China. is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United

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## Patent / Docket No. Customer No. 27683

States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

First	Inven	tor	Name:
To	J	A .1	

Tsai-Sheng Gau

Residence Address:

Dated: 10/1, 2003

Inventor Signature

Second Inventor Name:

Jaw-Jung Shin

Residence Address:

Dated: 10/01/2003

Inventor Signature

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## Patent / Docket No. Customer No. 27683

Third Inventor Name: Residence Address:	Jan-Wen You		
Dated: 10/01/2603		Jan-Wen You Jan-Wen yes Inventor Signature	ı
Fourth Inventor Name: Residence Address:	Burn-Jeng Lin		
Dated: <u>Got</u> 2,	200 3	Inventor Signature	
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RECORDED: 10/03/2003 REEL: 014586 FRAME: 0578