Office U!-2!	HEET U.S. DEPT. OF COMMERCE Patent and Trademark
ome,	-2004
TS03-281 / / J U /	1 AMER APPEN BANDO AMER (MAR (MAR)
To the Honorable Commissioner of Patent. 10265	ginal documents or copy thereof.
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
SHIH-YEN TSAI, PO-HSIUNG LEU, CHIA-MING YANG, TSANG-YU LIU, YUH-DA FAN, CHEN-PENG FAN	Name: Taiwan Semiconductor Manufacturing Company
Additional name(s) or conveying party(ies) attached? Yes X	Internal Address:
	Street Address:
3. Nature of conveyance X Assignment Merger Security Agreement Change of Name	No. 8, Li-Hsin Rd. 6 Science-Based Industrial Park Hsin-Chu, Taiwan 300-77 Taiwan, R.O.C.
Security Agreement Change of Name	
other	
Execution Date: <u>12/11/03</u>	Additional name & address attached? Yes X No
1.57	ra215
4. Application number(s) or patent number(s):	583/5
If this document is being filed together with a new application No(s)	cation, the execution date of the application is: 12/11/03 B. Patent No.(s)
Additional numbers atta	ached? Yes X No
 Name and address of party to whom correspondence concerning document should be mailed: Name: GEORGE O. SAILE 	6. Total no. of applications and patents involved:: 1
Internal Address:	7. Total fee (37 CFR 3.41): \$ 40.00
	, , , , , , , , , , , , , , , , , , , ,
	Enclosed
Street Address: 28 DAVIS AVENUE	Enclosed X Authorized to be charged to deposit acct.
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City: POUGHKEEPSIE State: NY ZIP: 12603	X Authorized to be charged to deposit acct. 8 .Deposit account number: 19-0033 (Attach duplicate copy of this page if paying by deposit account
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TS03-281	For X Application or U.S. Patent	
	By x Inventor(s) or Present Owner	
ASSIGNMENT OF INVENTION		
In consideration of the payment by ASSIGNEI receipt of which is hereby acknowledged, and	E to ASSIGNOR of the sum of One Dollar (\$1.00), the I for other good and valuable consideration,	
ASSIGNOR:		
SHIN-YEU TSAI SHIH-YEN TSAI Type or print name of ASSIGNOR Shih - Yen Tsai Address F No 46-2 2 Sanmin Rd, Sinying City Tainan Country)30 Taiwan Nationality Revolution Stainan	PO-HSIUNG LEU Type or print name of ASSIGNOR Wo 495, 3 17n, changsing village, Address Lujhy Township, Tabyuan County 338. Taiwan Republic of China Yawain	
CHIA-MING YANG Type or print name of ASSIGNOR 9F-Y No 113 Knang-hwa 2 St. Address Hsin-Chu City Taiwan, ROC Asperblic of Nationality ASSIGNEE:	TSANG-YU LIU Type or print name of ASSIGNOR No [4, 10f] changle foliage. Address Kanshing city Taiwan, ROC, Royellic of China Nationality	
Taiwan Semiconductor Manufacturing Co No. 8, Li-Hsin Rd. 6 Science Based Industrial Park Hsin-Chu Taiwan 300-77 R.O.C.	· >.	
	entatives of the ASSIGNEE one of the following)	
the entire right, title and interest		
an undivided percent (%) inter (check the following box/f foreig and in all foreign countries	rest for the United States and its territorial possessions in rights are also to be assigned)	
in and to any and all improvements which are	disclosed in the invention entitled:	
	nermal Strain With Buffer Zone For Strain Relaxation	

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TS03-281	For X Application or U.S. Patent	
	By X Inventor(s) or Present Owner	
ASSIGNMENT OF INVENTION		
	IGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the d, and for other good and valuable consideration,	
ASSIGNOR:		
YUN-DA FAN	CHEN-PENG FAN Type or print name of ASSIGNOR	
Type or print name of ASSIGNOR 2F. No 101 Sanmin Fd. Hein Address T		
Crty laiwan R-O-C	Hsinchu county 304	
Tatwan R.O.C. Paperble	a TaiWan R.O.C. Roperblie of China	
ASSIGNEE:		
Taiwan Semiconductor Manufacturii No. 8, Li-Hsin Rd. 6 Science-Based Industrial Park Hsin-Chu, Taiwan 300-77 Taiwan, R.O.C.	ng Co. Ltd	
and the successors, assigns and legal re	epresentatives of the ASSIGNEE	
——————————————————————————————————————	plete one of the following)	
x the entire right, title and interest		
an undivided percent ((check the following box/f	%) interest for the United States and its territorial possessions foreign rights are also to be assigned)	
x and in all foreign countries	ioloigii ngina ara alaa ta ba assignedj	
in and to any and all improvements whic	ch are disclosed in the invention entitled:	
Solution For Copper Hillock Induced By Thermal Strain With Buffer Zone For Strain Relaxation		

and which is found in	
(a) x U.S. patent application executed on every	en date herewith
(b) U.S. patent application executed on	
(c) U.S. application serial no.	filed on
(d) U.S. patent no.	issued
(also check (e) i	if foreign application(s) is also being assigned) preign country, including the right to clam priority
and, in and to, all Letters Patent to be obtained continuation, division, renewal, or substitute, thereof.	ed for said invention by the above application or any of, and as to letters patent any re-issue or re-examination
ASSIGNOR hereby covenants that no assign be made or entered into which would conflict with	nment, sale, agreement or encumbrance has been or will n this assignment.
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IN WITNESS WHEREOF, I / We have signed this / \(\frac{1}{2}\sqrt{1}\) \(\frac{2}{2}\omegas\) \(\frac{2}{2}\omegas\) (D. WARNING Date of signing must be the same as the date	
	Signature of ASSIGNOR(S) Chen-peng Form
If ASSIGNOR is a legal entity complete the following	g information
	Type or print the name of the above person authorized to sign on behalf of ASSIGNOR
	Title

No witnessing, notarization or legalization is necessary, if the assignment is notarized or legalized then it will only be prima facie evidence (35 USC

__Notarization of Legalization Page Added.

Note:

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and which is found in		
(a) X U.S. patent application executed on every	en date herewith	
(b) U.S. patent application executed on		
(c) U.S. application serial no.	filed on	
(d) U.S. patent no.	issuedissuedif foreign application(s) is also being assigned)	
	if foreign application(s) is also being assigned) preign country, including the right to clam priority	
and, in and to, all Letters Patent to be obtained continuation, division, renewal, or substitute, thereof.	ed for said invention by the above application or any of, and as to letters patent any re-issue or re-examination	
ASSIGNOR hereby covenants that no assign be made or entered into which would conflict with	nment, sale, agreement or encumbrance has been or will this assignment.	
pertinent facts and documents relating to said inversely be known and accessible to ASSIGNOR and or proceeding related thereto and will promptly exercise any and all papers, instruments or affidavits require	MEE will, upon its request, be provided promptly with all vention and said Letters Patent and legal equivalents as d will testify as to the same in any interference, litigation ecute and deliver to ASSIGNEE or its legal representatives red to apply for, obtain, maintain, issue and enforce said nt and said equivalents thereof which may be necessary	
IN WITNESS WHEREOF, I / We have signed this 12/ 1 2003 (Date of circles must be the series as the date		
VVARINING Date of signing must be the same as the date	Shih - Yen Tsai Signature of ASSIGNOR(S) Po - Hstung Lou Chia-ming Going Tsay-Ju Liu	
If ASSIGNOR is a legal entity complete the following information		
	Type or print the name of the above person authorized to sign on behalf of ASSIGNOR	
	Title	

No witnessing, notarization or legalization is necessary, if the assignment is notarized or legalized then it will only be prima facie evidence (35 USC

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