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TS01-1143		30NLY 4/19/0) 2
To the Honorable Comn 1. Name of conveying party(102077633	d the attached original documents or copy to Name and address of receiving party(ie	
TIEN I. BAO, SYUN-MINO	G JANG	Name: Taiwan Semiconductor Manu Company	facturing
Additional name(s) or conveying pa	arty(ies) attached? Yes	Internal Address:	, PTO
3. Nature of conveyance		Street Address: 121 Park Ave. 3	s.C.
x Assignment	Merger	Science-Based Industrial Park City: Hsin-Chu Zip:	P. C.
Security Agreement	Change of Name	Country: Taiwan, R.O.C.	
other			
Execution Date: 3/1/02		Additional name(s) & address(es) attached?	Yes 2
4. Application number(s) or	patent number(s):	2 / /	
		ication, the execution date of the application is: 3/ B. Patent No.(s)	<u>/1/02</u>
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5. Name and address of party concerning document show Name: GEORGE O. S. Internal Address: 20 MCI	Additional numbers at to whom correspondence ld be mailed:	B. Patent No.(s) tached? Yes X No 6. Total no. of applications and patents inv 7. Total fee (37 CFR 3.41): \$ 40.00 Enclosed	olved:: 1
5. Name and address of party concerning document show Name: GEORGE O. S. Internal Address: 20 MCI City: POUGHKEEPSIE	Additional numbers at to whom correspondence ld be mailed: SAILE NTOSH DRIVE State: NY XIP: 12603	B. Patent No.(s) tached? Yes X No 6. Total no. of applications and patents inv 7. Total fee (37 CFR 3.41): \$ 40.00 Enclosed X Authorized to be charged to depo	olved:: 1
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5. Name and address of party concerning document show Name: GEORGE O. S. Internal Address: 20 MCI City: POUGHKEEPSIE 2002 TDIAZ1 00000086 190033 40.00 CH 9. Statement and signature To the best of my knowled	Additional numbers at to whom correspondence ald be mailed: SAILE NTOSH DRIVE State: NY XIP: 12603 10126417 NOT US	B. Patent No.(s) tached? Yes X No -6. Total no. of applications and patents inv 7. Total fee (37 CFR 3.41): \$ 40.00 Enclosed X Authorized to be charged to depo 8 .Deposit account number: 19-0033 (Attach duplicate copy of this page if paying by	sit acct.
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PATENT REEL: 012845 FRAME: 0721

TS01-1143	For x U.S. and/or x Foreign Rights			
	For X Application or U.S. Patent			
	By X Inventor(s) or Present Owner			
ASSIGNMENT OF INVENTION				
In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,				
ASSIGNOR:				
TIEN I BAO Type or print name of ASSIGNOR	SYUN-MING JANG Type or print name of ASSIGNOR			
NO 183, Nan-Kun Rd.	1F. 83 N. Kuan-Hua St Address			
Hin-Cha Taiwan	Hsin-Chu, Taiwan, ROC			
Republic of China Taiwan	Republic of China JaiNa			
ASSIGNEE:				
Taiwan Semiconductor Manufacturing Co 121 Park Ave. 3 Science-Based Industrial Park Hsin-Chu, Taiwan, R.O.C. Taiwan, R.O.C.	o. Ltd.			
and the successors, assigns and legal representatives of the ASSIGNEE				
(complete one of the following)				
L	interest for the United States and its territorial possessions gn rights are also to be assigned)			
in and to any and all improvements which are disclosed in the invention entitled:				
Via Bottom Copper/Barrier Interface Impro	ovement To Resolve Via Eletromigration And Stress			

PATENT REEL: 012845 FRAME: 0722

and which is found in			
(a) x U.S. patent application executed on ever	n date herewith		
(b) U.S. patent application executed on			
	filed on		
 	issued		
(also check (e) if fi	foreign application(s) is also being assigned)		
(e) and any legal equivalent thereof in a fore	eign country, including the right to clam priority		
	for said invention by the above application or any and as to letters patent any re-issue or re-examination		
ASSIGNOR hereby covenants that no assignment be made or entered into which would conflict with the	ent, sale, agreement or encumbrance has been or will his assignment.		
pertinent facts and documents relating to said inver- may be known and accessible to ASSIGNOR and will proceeding related thereto and will promptly execute any and all papers, instruments or affidavits required	E will, upon its request, be provided promptly with all ntion and said Letters Patent and legal equivalents as a testify as to the same in any interference, litigation or and deliver to ASSIGNEE or its legal representatives to apply for, obtain, maintain, issue and enforce said and said equivalents thereof which may be necessary		
WARNING Date of signing must be the same as the date of execution of the application if item (a) was checked above.			
	Frien I Bar Signature or ASSIGNOR(S)		
If ASSIGNOR is a legal entity complete the following info	ormation		
	Type or print the name of the above person authorized to sign on behalf of ASSIGNOR		
	Title		

___Notarization of Legalization Page Added.

PATENT
RECORDED: 04/19/2002 REEL: 012845 FRAME: 0723

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

Note:

261). Use next page if notarization is desired.