For	x U.S. and/or x Foreign Rights	
For	X Application or U.S. Patent	
Ву	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:		
14-6 Mm-Tru Rd. Moton.	I-CHI CHAO  The or print name of ASSIGNOR  NO. 173 San -ming Rd  Iddress  Yang -mei , Taiwan	
Nationality Nationality	Republic of China	
ASSIGNEE:  Taiwan Semiconductor Manufacturing Co. Ltd. 121 Park Ave. 3 Science-Based Industrial Park Hsin-Chu, Taiwan, R.O.C. Taiwan, R.O.C. Nationality		
and the successors, assigns and legal representatives of the ASSIGNEE		
(complete one of the following)		
x the entire right, title and interest		
an undivided percent (%) interest for the United States and its territorial possessions (check the following box/f foreign rights are also to be assigned)		

in and to any and all improvements which are disclosed in the invention entitled:

Film Stack And Etching Sequence For Dual Damascene

x and in all foreign countries

	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:			
	Address Powerhias, Taison		
Taiwan, Republic of Chiman Nationality	VX. U. C.		
Type or print name of ASSIGNOR  3 F No Sun flavor town Shung - Hsi Address  Willage Pao - Shah wountry Hsim-Chu Tainan  Nationality Republic 6 f Chima  ASSIGNEE:  Taiwan Semiconductor Manufacturing Co. Ltd. 121 Park Ave. 3  Science-Based Industrial Park Hsin-Chu, Taiwan, R.O.C.  Taiwan, R.O.C.  Nationality			
and the successors, assigns and legal representatives of the ASSIGNEE  (complete one of the following)			
x the entire right, title and interest			
an undivided percent (%) interest for the United States and its territorial possessions (check the following box/f foreign rights are also to be assigned)  x and in all foreign countries			
<u>-</u>	in and to any and all improvements which are disclosed in the invention entitled:		

Film Stack And Etching Sequence For Dual Damascene

and which is found in		
(a) x U.S. patent application executed on even de	ata herewith	
(b) U.S. patent application executed on		
	filed on	
(d) U.S. patent no issued issued (also check (e) if foreign application(s) is also being assigned)		
(e) and any legal equivalent thereof in a foreign country, including the right to clam priority		
and any logal oquivalent triologi in a foreign obtainty, mercaning the right to stam proving		
and, in and to, all Letters Patent to be obtained for continuation, division, renewal, or substitute, thereof, and thereof.		
ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.		
ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.  IN WITNESS WHEREOF, I / We have signed this  (Date of signing)  WARNING Date of signing must be the same as the date of execution of the application if item/(a) was checked above.		
Chao - Cha Cha		
	Signature of ASSIGNOR(S)  Chia Shiring Tgai  Jen - Chry Lii  RA +	
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	

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

Title

261). Use next page if notarization is desired.

**RECORDED: 09/15/1999** 

\_\_\_Notarization of Legalization Page Added.