	07-17-2001					
	ro-1595 R	10177055	III =15, 1==.	SHEET U.S. DEPARTMENT OF COMMER Patent and Trademark Of	≀CE fice	
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.						
1	Name of conveying party(ies):  Ming-Hsing Tsai Ching-Hua Hsieh Shau-Lin Shue Chen-Hau Yu	105/01	Taiwan S No. 121 Science	d address of receiving party(ies):  Semiconductor Manufacturing Co. Lt. Park Avenue 3 -Based Industrial Park u, Taiwan, R.O.C.		
3	Nature of conveyance:  ■ Assignment □ Mergon □ Security Agreement □ Chart □ Other:  Execution Date: April 28, 2001	ger nge of Name	Additional n	name(s) & address(es) attached □ Yes ⊠ No □		
4	Application number(s) or patent number (s) or patent number (s) or patent number (s).  If this document is being filed together.  A. Patent Application No(s).		execution d	late of the application is: 04-28-01  No(s)		
Additional numbers attached? □ Yes ⊠ No						
5	Name and address of party to whom correspondence concerning document should be mailed:		6 Total number of applications and patents involved:			
	RANDY W. TUNG Tung & Associates 838 W. Long Lake Road Suite 120 Bloomfield Hills, Michigan 48302	8	⊠ E □ A  Deposit Ac  (Attach du	\$40.00 Enclosed Authorized to be charged to deposit account count Number: 50-0484 uplicate copy of this page if paying by deposit		
	DO NOT USE THIS SPACE					
9	Statement and signature.  To the best of my knowledge and be the original document.  Randy W. Tung Name of Person Signing Registration No. 31,311		-	correct and any attached copy is a true copy  July 5 , 2001  Date	of -	
	Total number of pages including cover sheet, attachments, and document : 3  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks, Box Assignments					

Washington, D.C. 20231

67,200-427

**PATENT** REEL: 011971 FRAME: 0699

## **ASSIGNMENT**

WHEREAS, we, MING-HSING TSAI, CHING-HUA HSIEH, SHAU-LIN SHUE AND CHEN-HUA YU have invented certain improvements in DUAL DAMASCENE STRUCTURE EMPLOYING NITROGENATED SILICON CARBIDE AND NON-NITROGENATED SILICON CARBIDE ETCH STOP LAYERS or which we are about to make application for Letters Patent of the United States; and

WHEREAS, TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD. of No. 121, Park Avenue 3, Science-Based Industrial Park, Hsin-Chu, Taiwan, R.O.C, is desirous of acquiring the entire right, title and interest in and to said invention;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, we, MING-HSING TSAI, CHING-HUA HSIEH, SHAU-LIN SHUE AND CHEN-HUA YU, by these presents, do hereby sell, assign and transfer unto the said corporation and its assigns, for the territory of the United States of America and all foreign countries, the entire right, title and interest, including all priority rights under the International Convention associated with each country of the Union, in and to said invention as described in the patent application executed by us on the 28<sup>th</sup> day of 10<sup>th</sup>, 2001, preparatory to obtaining Letters Patent of the United States thereon, and in and to said application and any Letters Patent that may be granted in pursuance of said application

1

PATENT REEL: 011971 FRAME: 0700

and any divisional, continuation or continuation-in-part application thereof, and in and to any reissue of any such patent, and in and to any patent applications which may be filed on said invention in countries foreign to the United States and any Letters Patent granted thereon.

We further authorize said corporation to apply for foreign patents on said invention in its own name or through its designees, including subsidiaries, related companies or assignees, under the International Convention or otherwise, and we further agree to execute all papers. including those required for the United States and foreign applications, and to perform such other proper acts as said corporation or its designees the rights herein assigned.

Minghising Trai 4/10 roof Ching-Hug Hold 4/10 roof
MING-HSING TSAI

CHING-HIIA HSIEH

HAU-LIN SHUE (10, 200) CHEN-HILA VII 4/18/200,

TUNG & ASSOCIATES 838 W. Long Lake Road Suite 120 Bloomfield Hills, Michigan 48302

RECORDED: 07/05/2001

REEL: 011971 FRAME: 0701