	SHEET U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
o the Honorable Commissioner of Patents and Traver	414375 attached original documents or copy thereof.
Name of conveying party(ies):	2 Name and address of receiving party(ies):
Hsien-Ming Lee Hung-We Su 7-78-03	Taiwan Semiconductor Manufacturing Co. Ltd. No. 121 Park Avenue 3 Science-Based Industrial Park Hsin-Chu, Taiwan, R.O.C.
 Nature of conveyance: Assignment Merger Security Agreement Change of Name Other: 	Additional name(s) & address(es) attached □ Yes ⊠ No
Execution Date: September 20, 2002	
Application number(s) or patent number(s): If this document is being filed together with a new application of the second second second second second second	application, the execution date of the application is: <u>09-20-02</u>
A. Patent Application No(s).	B. Patent No(s)
10402545	
Additional nu	umbers attached? □ Yes ⊠ No
Name and address of party to whom correspondence concerning document should be mailed:	ce 6 Total number of applications and patents involved: <u>1</u>
RANDY W. TUNG Tung & Associates 838 W. Long Lake Road Suite 120 Bloomfield Hills, Michigan 48302 03 EAREGAY1 00000054 10402545 21 40.00 0P	 7 Total fee (37 CFR 3.41) \$40.00 □ Enclosed ∞ Authorized to charge credit card (w/filing fee) 8 Deposit Account Number: 50-0484
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the original document. Randy W. Tung Name of Person Signing Registration No. 31,311	ing information is true and correct and any attached copy is a true copy of <u>March 28, 2003</u> nature Date
TT	Total number of pages including cover sheet, attachments, and document : 3

PATENT REEL: 013921 FRAME: 0214 •

ASSIGNMENT

WHEREAS, we, <u>HSIEN-MING LEE and HUNG-WEN SU</u> have invented certain improvements in

METHOD OF FORMING A ROBUST COPPER

INTERCONNECT BY DILUTE METAL DOPING

for 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, <u>HSIEN-MING LEE and HUNG-WEN SU</u>, 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 <u>soth</u> day of <u>September</u>, 2002, 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 and any divisional, continuation or continuation-in-part application

PATENT REEL: 013921 FRAME: 0215

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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.

) sien - Ming Lee HUNG-WEN SU HSIEN-MING LEE HUNG-WE SU

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