

1/31/05

02-14-2005

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To the Honorable Commissioner of Patents Attached original documents or copy thereof.

1 Name of conveying party(ies): WEN-CHUAN CHIANG CHENG-KU CHEN	2 Name and address of receiving party(ies): Taiwan Semiconductor Manufacturing Co. Ltd. No. 8. Li-Hsin Rd. 6 Science-Based Industrial Park Hsin-Chu, Taiwan, R.O.C.
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113010 U.S. PTO
11/048485



3 Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: <u>05/17/04</u>	Additional name(s) & address(es) attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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4 Application number(s) or patent number(s):
 If this document is being filed together with a new application, the execution date of the application is: 05/17/04

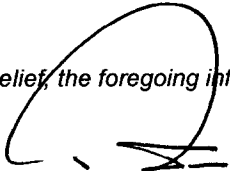
A. Patent Application No(s).	B. Patent No(s)
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Additional numbers attached? Yes No

5 Name and address of party to whom correspondence concerning document should be mailed:	6 Total number of applications and patents involved: <u>1</u>
RANDY W. TUNG Tung & Associates 838 W. Long Lake Road Suite 120 Bloomfield Hills, Michigan 48302	7 Total fee (37 CFR 3.41) \$1,640.00 <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to charge credit card (w/filing fee)
	8 Deposit Account Number: (Attach duplicate copy of this page if paying by deposit account)

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9 Statement and signature.
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Randy W. Tung  1/31/05
 Name of Person Signing Signature Date
 Registration No. 31,311

Total number of pages including cover sheet, attachments, and document : 3

67,200-1309

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

02/08/2005 HALI11 00000023 11048485

01 FC:8021 40.00 DP

PATENT
REEL: 016260 FRAME: 0501

ASSIGNMENT

WHEREAS, we, WEN-CHUAN CHIANG, CHENG-KU CHEN, MU-CHI CHIANG, and MIN-HWA CHI, have invented certain improvements in:

AMORPHOUS CARBON CONTACT FILM FOR CONTACT HOLE ETCH PROCESS

for which we are about to make application for Letters Patent of the United States; and

WHEREAS, TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD. of No. 8, Li-Hsin Rd. 6, 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, WEN-CHUAN CHIANG, CHENG-KU CHEN, MU-CHI CHIANG, and MIN-HWA CHI, 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 17th day of May, 2004 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 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.

Wen-Chuan Chiang
WEN-CHUAN CHIANG

Cheng-Ku Chen
CHENG-KU CHEN

MU-CHI CHIANG

MIN-HWA CHI

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