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To the Honorable Commissioner of Pate.

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Attached original documents or copy thereof.

MAR 5-6-98

1. Name of conveying party(ies): J. S. HSIEH,
B.H. YANG, F. J. FANG, J.J. WANG,
W.C. LEEA, T.D. CHANG, C.S. CHUNG
AND W. F. CHUANG
Additional names(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies):
TAIWAN SEMICONDUCTOR MANUFACTURING
COMPANY LTD.
No. 121 Park Avenue 3
Science-Based Industrial Park
Hsin-Chu, Taiwan
R.O.C.
Additional name(s) & address(es) attached? Yes No

3. Nature of conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Other:
Execution Date: March 20, 1998

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: 3-11-12-13-
16-20, 1998
A. Patent Application No(s). B. Patent No(s)
Additional numbers attached? Yes No

5. Name and address of party to whom correspondence
concerning document should be mailed:

RANDY W. TUNG
Tung & Associates
838 W. Long Lake Road
Suite 120
Bloomfield Hills, Michigan 48302

6. Total number of applications and patents involved: 1
7. Total fee (37 CFR 3.41) **\$40.00**
 Enclosed
 Authorized to be charged to deposit account
8. Deposit Account Number: 50-0484
(Attach duplicate copy of this page if paying by deposit
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9. Statement and signature.
FLOYD 00000010 09073500
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. 40.00 00
Randy W. Tung [Signature] 5-6-98
Name of Person Signing Signature Date
Registration No. 31,311

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
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PATENT
REEL: 9164 FRAME: 0779

67,200-093
TSMC 1-97-573

ASSIGNMENT

WHEREAS, we, J. S. HSIUE, B. H. YANG, T. J. FANG, J. J. WANG, W. C. LEE, T. D. CHANG, C. S. CHUNG and W. F. CHUANG, have invented certain improvements in METHOD AND APPARATUS FOR TREATING EXHAUST GAS FROM A SEMICONDUCTOR FABRICATION MACHINE for which we are about to make application for Letters Patent of the United States; and

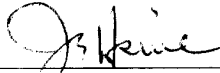
WHEREAS, TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD. of No. 121, Park Avenue 3, Science-Based Industrial Park, Hsin-Chu, Taiwan, R.O.C, is desirous of acquiring the entire right, title and interest in and to said invention;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, we, J. S. HSIUE, B. H. YANG, T. J. FANG, J. J. WANG, W. C. LEE, T. D. CHANG, C. S. CHUNG and W. F. CHUANG 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 20th day of March, 1978, 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

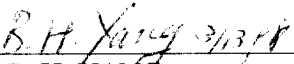
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TSMC 1-97-573

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.

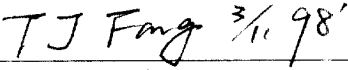
We further authorize said corporation to apply for foreign patents on said invention in its own name or through its designees, including subsidiaries, related companies or assignees, under the International Convention or otherwise, and we further agree to execute all papers, including those required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



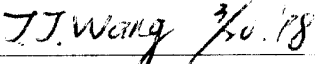
J. S. HSIUE



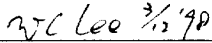
B. H. YANG



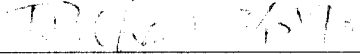
T. J. FANG



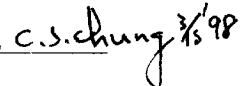
J. J. WANG



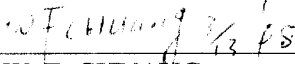
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T. D. CHANG



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