12-13-2000 **REC** IEET U.S. DEPARTMENT OF COM PTO-1595 Patent and Trademark To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy ther 1 Name of conveying party(ies): Name and address of receiving party(ies): Taiwan Semiconductor Manufacturing Co. Ltd. Shao-Yu Wang No. 121 Park Avenue 3 Wen-Hsiang Huang Science-Based Industrial Park Hsiao-Pin Su Hsin-Chu, Taiwan, R.O.C. Jun-Jyeh Hsiao Nature of conveyance: Additional name(s) & address(es) attached □ Yes

No Assignment Merger 9/725825 □ Security Agreement Change of Name Other: Execution Date: August 4, 2000 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: 08-04-00 A. Patent Application No(s). B. Patent No(s) Additional numbers attached? □ Yes No Total number of applications and patents involved: Name and address of party to whom correspondence concerning document should be mailed: \$40.00 7 Total fee (37 CFR 3.41) RANDY W. TUNG Tung & Associates 838 W. Long Lake Road Enclosed Suite 120 Bloomfield Hills, Michigan 48302 Authorized to be charged to deposit account 50-0484 Deposit Account Number: 12/04/2000 BHABTEW 00000026 09725825 (Attach duplicate copy of this page if paying by deposit 40.00 OP 02 FC:581 account) DO NOT USE THIS SPACE 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

> November 29, 2000 Signature

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

Mail documents to be recorded with required cover sheet information to:

the original document.

Name of Person Signing Registration No. 31,311

Randy W. Tung

ASSIGNMENT

WHEREAS, we, SHAO-YU WANG, WEN-HSIANG HUANG, HSIAO-PIN SU and JUN-JYEH HSIAO, have invented certain improvements in

LOW LEAKAGE ANTENNA DIODE INSERTION FOR INTEGRATED CIRCUITS 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, SHAO-YU WANG, WEN-HSIANG HUANG, HSIAO-PIN SU and JUN-JYEH HSIAO, 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 8th day of August , 2000, 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

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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.

SHAO-YUWANG WEN-HSIANG HUANG

HSIAO-PIN SU JUN-JYEH F

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

RECORDED: 11/29/2000

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