04/13/04

04-19-2004 Form PTO-1595 U.S. DEPARTMENT OF COMMERCE REC((Rev. 10/02) U.S. Patent and Trademark Office OMB No. 0651-0027 (exp. 6/30/2005) 102724711 TSM03-0454 To the honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. Name and address of receiving party(ies) 1. Name of conveying party(ies): Name: Taiwan Semiconductor Manufacturing Company, Chung-Shi Liu Chen-Hua Yu Internal Address: Horng-Huei Tseng 59 Additional name(s) of conveying party(ies) attached? Yes X No 3. Nature of conveyance: X Assignment Merger Street Address: No. 6, Li-Hsin Rd. 6 Security Agreement Change of Name Science-Based Industrial Park Other City: Hsin-Chu State: Taiwan Zip: 300-77 Execution Date: CSL-4/8/04; CHY-4/9/04; HHT-4/12/04 Additional name(s) & address(es) attached? Yes X No 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: __CSL-4/8/04; CHY-4/9/04; HHT-4/12/04 Patent Application No.(s) B. Patent No.(s) Additional numbers attached? No 5. Name and address of party to whom correspondence concerning document should be mailed: 6. Total number of applications and patents involved: Name: Steven H. Slater 7. Total fee (37 CFR 3.41). \$ _ 40.00 Slater & Matsil, L.L.P. **Enclosed** Internal Address: Authorized to be charged to deposit account Street Address:17950 Preston Rd. 8. Deposit account number: **Suite 1000** 50-1065 State: Texas Zip: 75252-5793 City: Dallas (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and signature.

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

Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy

Total number of pages including cover sheet, attachments, and documents: 2

Commissioner of Patents & Trademarks, Mail Stop Assignments

04/16/2004 GTDH11 00000162 501065 10823159

Is a true copy of the original document.

Barry W. Dove, Reg. No. 45,862

Name of Person Signing

P.O. Box 1450, Alexandria, VA 22313-1450.

PATENT REEL: 015204 FRAME: 0549

April 13, 2004

Date

ATTORNEY DOCKET NO. TSM03-0454

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at No. 6, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C., is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TSMC, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TSMC, as assignee of my entire right, title and interest. I declare that I have not executed and will not execute any agreement in conflict herewith.

I also hereby sell and assign to TSMC, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TSMC, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention or the file history thereof, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TSMC, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year,

TITLE OF INVENTION	Via Recess in UnderlyIng Conductive Line			
SIGNATURE OF INVENTOR AND NAME	Chung Shi Liu Chung-Shi Liu	Yn Con- Chen-Hua Yu	HOZNG-HULE T36NG Horng-Huei Tseng	
DATE	4/9/2004	4/9/2004	APTil 12, 2004	
RESIDENCE (City, County, State)	Hsin-Chu, Taiwan R.O.C.	Hsìn-Chu, Taiwan R.O.C.	Hsin-Chu, Taiwan R.O.C.	

TSM03-0454

Page 1 of 1

Assignment

PATENT TOTAL P. 03

REEL: 015204 FRAME: 0550

RECORDED: 04/13/2004