05-29-2003

Docket No. N1085-00148

Form PTO-1595 (Rev. 03/01)  OMB No. 0651-0027 (exp. 5/31/2002)  Tab settings ⇔ ⇔ ▼ 1024596	
1. Name of conveying party(ies):  Zhen-Cheng Wu Yung-Cheng Lu Syun-Ming Jang	Please record the attached original documents or copy thereof.  2. Name and address of receiving party(ies)  Name: _Taiwan Semiconductor Manufacturing Co., La.  Internal Address:
Additional name(s) of conveying party(ies) attached? Yes V No  3. Nature of conveyance:  Assignment Merger  Security Agreement Change of Name  Other	Street Address:121 Park Avenue 3  Science-Based Industrial Park, Hsin-Chu Taiwan, R.O.C.
May 19, 2003 Execution Date:	City:State:Zip:  Additional name(s) & address(es) attached? Yes V No
A. Patent Application No.(s)	lication, the execution date of the application is: 05/19/03  B. Patent No.(s)
Additional numbers a  5. Name and address of party to whom correspondence concerning document should be mailed:  Name:Richard A. Paikoff  Internal Address:	
Street Address:Duane Morris LLP  1650 Market Street  City: PhiladelphiaState: PA _Zip:19103-7396	8. Deposit account number:  04-1679
DO NOT USE THIS SPACE	
Total number of pages including cov	May 19, 2003 Signature Date  ver sheet, attachments, and documents:
Total number of pages including cov Mail documents to be recorded wit Commissioner of Patents &	<b>万</b>

05/22/2003 EFLORES 00000009 10441511

60 FC:8021

**PATENT REEL: 014099 FRAME: 0280** 

## ASSIGNMENT AND AGREEMENT

For value received, we, Zhen-Cheng Wu, Yung-Cheng Lu, and Syun-Ming Jang, hereby sell, assign and transfer to Taiwan Semiconductor Manufacturing Co., Ltd., with its principal place of business located at 121 Park Avenue 3, Science-Based Industrial Park, Hsin-Chu Taiwan, R.O.C., and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to STRUCTURE FOR IMPROVING INTERLEVEL **CONDUCTOR CONNECTIONS** described in an application for Letters Patent of the United States executed on even date herewith, and all the rights and privileges in said application and under any and all Letters Patent and any divisions, continuations, continuations-in-part, reexamination certificates, reissues, and extensions thereof that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to Taiwan Semiconductor Manufacturing Co., Ltd. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

We authorize Taiwan Semiconductor Manufacturing Co., Ltd. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Taiwan Semiconductor Manufacturing Co., Ltd. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to Taiwan Semiconductor Manufacturing Co., Ltd. in the United States and in all countries foreign to the United States, or to such nominees as Taiwan Semiconductor Manufacturing Co., Ltd. may designate.

PATENT REEL: 014099 FRAME: 0281

## Express Mail Label: EV068584778US

Docket No. N1085-00148 [TSMC 2002-1053]

We agree that, when requested, we shall, without charge to Taiwan Semiconductor Manufacturing Co., Ltd. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Dated: 5/19/03

Zhen-Cheng Wu

Residence: 3 Fil., No. 136, Lane 160, Gantsuei Rd. Hindu 300 Taiwan.

Dated:  $\frac{1}{\sqrt{9}} \sqrt{6}$ 

yly-Cly Lu

Residence: 2F, No.4, Ln. 114, Sec. 7, Chungshan N. Rd., Taipei, Taiwan

Dated: 5/19/0}

Syun Ming Jang

7F. 83 N. Kuan-Hua St., Hsin-Chu, Taiwan. Roc

PH1\1088782.1

RECORDED: 05/19/2003