Form PTO-1595

OMB No. 0651-0027 (exp. 6.30.2005)

1. Name of conveying party(ies):

□ Merger

☐ Change of Name

Yu-Hung Chu and

Shao-Chuang Huang

3. Nature of conveyance: ★ Assignment

□ Other ___

☐ Security Agreement

Execution Date: 01/09/06

4. Application number(s) or patent number(s):

5. Name and address of party to whom correspondence

Internal Address:

55 Second Street, Suite 1700

Street Address: Preston Gates & Ellis LLP

City: San Francisco State: CA Zip: 94105

concerning document should be mailed: Name: Howard Chen, Esq.

A. Patent Application No.(s)

(Rev. 10/02)

01-19-2006



103160597

U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies) Name: Taiwan Semiconductor Manufacturing Co., Ltd. Additional name(s) of conveying party(ies) attached? ☐ Yes ☒No Internal Address: ___ Street Address: No. 8, Li-Hsin Road 6 Science Based Industrial Park City: Hsin-Chu State: Taiwan Zip: 300-77 Additional name(s) & address(es) attached? **⊠** No ☐ Yes If this document is being filed together with a new application, the execution date of the application is: 01/10/2006 B. Patent No.(s) Additional numbers attached? ☐ Yes X No 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:

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9. Signature:

Howard Chen, Reg. 46,615

Name of Person Signing

Signature

50-3414

Date

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Washington, D.C. 20231

PATENT

REEL: 017466 FRAME: 0252

PATENT ATTY DOCKET NO.: TSMC2005-0217 Attorney Reference: 52604-00084

Express Mail Label: EV 689735143 US

ASSIGNMENT AND AGREEMENT

For value received, I/we Yu Hung Chu and Shao-Chuang Huang, hereby sell, assign and transfer to Taiwan Semiconductor Manufacturing Co., Ltd., with its principal place of business located at No. 8, Li-Hsin Road 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, Republic of China, 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 RESISTOR STRUCTURE FOR ESD PROTECTION CIRCUITS described in an application for Letters Patent of the United States filed on

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 I/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.

I/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 me/us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

I/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.

I/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.

I/We agree that, when requested, I/we shall, without charge to Taiwan Semiconductor Manufacturing Co., Ltd. but at its expense, sign all papers, and do all acts

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PATENT ATTY DOCKET NO.: TSMC2005-0217

Attorney Reference: 52604-00084

which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Inventor No. 1:

Dated: Jan, 9, 2006

Yu-Hung Chu

Yu-Hung Ch

Inventor No. 2:

Dated: 1/2 1 2006

Shao-Chuang Huang

Mailing and Residence: 4F. - 2 No 247 Nioupu E.R.d. Hsinchu City 300,
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