501949623 06/08/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Cheng Hung LEE	09/19/2006

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.	
Street Address:	No. 8, Li-Hsin Rd. VI, Hsinchu Science Park	
City:	Hsinchu	
State/Country:	TAIWAN	
Postal Code:	300	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13492469

CORRESPONDENCE DATA

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via US Mail.

Correspondent Name: Lowe Hauptman Ham & Berner, LLP (TSMC)

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ATTORNEY DOCKET NUMBER: T5057-777A

NAME OF SUBMITTER: Randy A. Noranbrock

Total Attachments: 2

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> PATENT REEL: 028346 FRAME: 0940

6977678 137657868

Patent Attorney Docket No.: TSMC2005-0909 Attorney Reference No.: 52604-00162

ASSIGNMENT AND AGREEMENT

For value received, I/we Cheng Hung Lee 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 POWER LINE LAYOUT TECHNIQUES FOR INTEGRATED CIRCUITS HAVING MODULAR CELLS described in an application for Letters Patent of the United States filed September 28 , 2006 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 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.

Assignment and Agreement - Page 1

Inventor No. 1:

Patent Attorney Docket No.: TSMC2005-0909

Attorney Reference No.: 52604-00162

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

Dated: 4/19 x006'

Cheng Hung Lee (Hsinchu)

Mailing and Residence: Ming-shen str. Honko, Hinchu County, Taiwan,

CITIZENSHIP: Taiwan, ROC

Assignment and Agreement - Page 2

PATENT REEL: 028346 FRAME: 0942

RECORDED: 06/08/2012