PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Ka-Hing FUNG	09/13/2010
Wei-Yuan LU	09/13/2010
Han-Ting TSAI	09/13/2010

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.	
Street Address:	Iress: 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:	13274558

CORRESPONDENCE DATA

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

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ATTORNEY DOCKET NUMBER: T5057-R320A

NAME OF SUBMITTER: Randy A. Noranbrock

Total Attachments: 1

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PATENT

REEL: 027070 FRAME: 0471

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ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

- 1) Ka-Hing FUNG
- 2) Wei-Yuan LU
- 3) Han-Ting TSAI

who has made a certain new and useful invention, hereby sells, assigns and transfers unto

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD. having a place of business at No.

8, Li-Hsin Rd. VI, Hsinchu Science Park, Hsinchu 300, Taiwan R.O.C.

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

METHODS OF FORMING INTEGRATED CIRCUITS

(a)	for which an application for United States Letters Patent was filed on	9-21-2010	and	identified	by	United
	States Patent Application No. 12/886, 743; or				-	

(Ъ)	for which an application for United States Letters Patent was executed on	
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and the undersigned hereby authorizes and requests the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefore and any and all extensions, divisions, reissues, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agrees that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agrees to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the date indicated aside my signature:

1) V Ka-Iting FUNG	V 9/13/2010
Name: Ka-Hing FUNG	Date:
2) V Wh- Yuan Ch	√ 9/13/20/0.
Name: Wei-Yuan LU	Date:
3) V Han-Try Isni	V 9/13/20/0
Name: Han-Ting TSAI	Date:

PATENT REEL: 027070 FRAME: 0472

RECORDED: 10/17/2011