#### 502628961 01/10/2014

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2675569

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
NAI-WEI LIU	06/07/2010
ZHEN-CHENG WU	06/07/2010
CHENG-LIN HUANG	06/07/2010
PO-HSIANG HUANG	06/07/2010
YUNG-CHIH WANG	06/07/2010
SHU-HUI SU	06/07/2010
DIAN-HAU CHEN	06/07/2010
YUH-JIER MII	06/08/2010

# **RECEIVING PARTY DATA**

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.	
Street Address:	NO. 8, LI-HSIN RD. VI	
Internal Address:	HSINCHU SCIENCE PARK	
City:	HSINCHU	
State/Country:	TAIWAN	
Postal Code:	300	

# PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14151857

## **CORRESPONDENCE DATA**

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Correspondence will be sent via US Mail when the email attempt is unsuccessful.

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**PATENT** 

REEL: 031934 FRAME: 0699 502628961

Address Line 4: ALEXANDRIA, VIRGINIA 22314		
ATTORNEY DOCKET NUMBER:	T5057-B078UA	
NAME OF SUBMITTER:	TER: RANDY A. NORANBROCK	
Signature:	/Randy A. Noranbrock/	
Date:	01/10/2014	
Total Attachments: 2 source=efiledassgn#page1.tif source=efiledassgn#page2.tif		

PATENT REEL: 031934 FRAME: 0700

# **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)	Nai-Wei LIU	5)	Yung-Chih WANG
2)	Zhen-Cheng WU	6)	Shu-Hui SU
3)	Cheng-Lin HUANG	7)	Dian-Hau CHEN
4)	Po-Hsiang HUANG	8)	Yuh-Jier MII
	e a certain new and useful invention, here	•	•
			RING COMPANY, LTD. having a place of business at No
8, Li-Hsin	Rd. VI, Hsinchu Science Park, H	Isinen	u 300, Taiwan R.O.C.
	and assigns (hereinafter designated "ASSI 35 U.S.C. 100 in the invention entitled	GNEE"	) the entire right, title and interest for the United States of America
BARRIER	LAYERS FOR COPPER INTE	RCO	NNECT
(a) for w	which an application for United States Letters Patent Application No. $12/832,7$	ers Pater 90	ant was filed on $7-8-10$ , and identified by United ; or
(b) for w	which an application for United States Lette	ers Pate	nt was executed on,
all United Sta continuations Property to th agrees that the AND	tes Letters Patent which may be granted to in-part thereof, and the right to all bend to said ASSIGNEE, for its interest as ASS to attorneys of record in said application shall be undersigned hereby agrees to train	therefor efits und IGNEE all herea asfer a	States Commissioner of Patents and Trademarks to issue any and e and any and all extensions, divisions, reissues, continuations, or der the International Convention for the Protection of Industrial, its successors, assigns and legal representatives; the undersigned after act on behalf of said ASSIGNEE; like interest, and to render all necessary assistance in making tended Letters Patent of the United States, upon request of the said
ASSIGNEE, in applications of ASSIGNEE, in a	its successors, assigns and legal representation patent based thereon, growing out of	itives, a or relat	nd without further remuneration, in and to any improvements, and ted to the said invention; and to execute any papers by the said leemed essential to ASSIGNEE's full protection and title in and to
SIGNED on t	he date indicated aside my signature:		
Name:/Nai- 2) 21e	Wei LIU  Wei LIU  M-Chang Wu  n-Chang Wu  n-Chang Wu		Date: 6/1/2010  Date:
3)(	MOUNT (Many	/	Date: 6/1/20/0

PATENT REEL: 031934 FRAME: 0701

4) Po-Haing Huang	6/1/2010
Name: Po-Hsiang HUANG	Date:
5) Yung-Wik WANG Name: Yung-Chih WANG	6/1/1010
Name: Yung-Chih WANG	Date:
6) Shu-Hui Su	6/1/2010
Name: Shu-Hui SU	Date:
7) Dran-Han Chen	6/7/2010
Name: Dian-Hau CHEN	Date:
8) Juliju Mic	6/8/20/0
Name: Yuh-Jier/MII	Date:
V	

PATENT REEL: 031934 FRAME: 0702

**RECORDED: 01/10/2014**