503462558 09/01/2015

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HAN-MIN TSAI	08/11/2015
CHI-FENG HUANG	08/11/2015
CHIA-CHUNG CHEN	08/11/2015
VICTOR CHIANG LIANG	08/11/2015
HSIAO-CHUN LEE	08/11/2015
SHOU-CHUN CHOU	08/11/2015
SHU-FANG FU	08/11/2015

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.	
Street Address:	NO.8, LI-HSIN RD.6	
Internal Address:	SCIENCE-BASED INDUSTRIAL PARK	
City:	HSINCHU	
State/Country:	TAIWAN	
Postal Code:	300	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	14814464	

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 4352521360

Email: trhone@mabr.com

Correspondent Name: R. BURNS ISRAELSEN

Address Line 1: MASCHOFF BRENNAN

Address Line 2: 1389 CENTER DR. SUITE 300
Address Line 4: PARK CITY, UTAH 84098

ATTORNEY DOCKET NUMBER:	T1516.10150US01	
NAME OF SUBMITTER:	R. BURNS ISRAELSEN	
SIGNATURE:	/R. Burns Israelsen, Reg. No. 42685/	

503462558 REEL: 036471 FRAME: 0844

PATENT

DATE SIGNED: 09/01/2015

Total Attachments: 2
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PATENT REEL: 036471 FRAME: 0845

ASSIGNMENT

The ASSIGNOR(S), in consideration of \$10.00 paid by the ASSIGNEE, and other good and valuable consideration, receipt of which is acknowledged, hereby assign(s) the following rights to the ASSIGNEE, its successors and assigns:

the full and exclusive right to the invention;

the entire right, title and interest in and to the PATENT RIGHTS;

the right to sue and recover for any past infringement; and

the right to claim priority under 35 USC 119, 35 USC 120, or any other applicable provisions, based on any earlier patent applications for this invention.

PATENT REEL: 036471 FRAME: 0846

THIS IS PAGE 2 OF AN ASSIGNMENT FROM THE INVENTOR(S) TO ASSIGNEE: TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD. INVENTION TITLE: BIPOLAR JUNCTION TRANSISTOR LAYOUT

As to all U.S. patent applications assigned under this agreement, the ASSIGNOR(S) hereby authorize(s) and request(s) the Commissioner of Patents and Trademark to issue all Letters Patent to the ASSIGNEE as the assignee of the entire right, title and interest, for the sole use and enjoyment of said ASSIGNEE, its successors and assigns.

Further, the ASSIGNOR(S) agree(s) to communicate to said ASSIGNEE, or its representatives, any fact known to the ASSIGNOR(S) with respect to said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause and all Letter Patent to be issued to said ASSIGNEE, make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for said invention.

The ASSIGNOR(S) authorize(s) the attorneys and agents who have the power of attorney in this application to check any appropriate boxes and to insert the Serial Number and filing date in this document after it has been executed.

and ming date in this document after	i it has been executed,	,
Han-Min TSAI	Han-Win TSAI	2015/8/11
Name of sole or first inventor	Signature	Date
Chi-Feng HUANG	Chi-Fenf which	fr 2011/8/11
Name of second inventor, if any	Signature (Date
Chia-Chung CHEN	Chee-Chuny Chou	- rolt/8/11
Name of third inventor, if any	Signature	Date '
Victor Chiang LIANG Name of fourth inventor, if any	Signature	v 2015/8/11 Date
Hsiao-Chun LEE Name of fifth inventor, if any	Hsiao-Chun Lee Signature	VOIS [8/1]
Shou-Chun CHOU Name of sixth inventor, if any	<u>Shuo-Chun CH</u> OV Signature	
Shu-Fang FU Name of seventh inventor, if any	Shin - Fang - Fu	$\frac{\sqrt{30/5/8/11}}{\text{Date}}$
radice of seventil inventor, it ally	Signature '	Dale

PATENT REEL: 036471 FRAME: 0847

RECORDED: 09/01/2015