503914214 07/13/2016

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YI-CHENG CHAO	03/08/2016
CHE-CHENG CHANG	03/08/2016
PO-CHI WU	03/08/2016
JUNG-JUI LI	03/08/2016

RECEIVING PARTY DATA

Name:	Taiwan Semiconductor Manufacturing Company, Ltd.	
Street Address:	Address: No. 8, Li-Hsin Rd. 6	
Internal Address:	nternal Address: Science-Based Industrial Park	
City:	ity: Hsin-Chu	
State/Country:	tate/Country: TAIWAN	
Postal Code:	300-77	

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	14975525		

CORRESPONDENCE DATA

Fax Number: (214)200-0853

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: 214-651-5000

Email: sidney.buchanan@haynesboone.com

Correspondent Name: HAYNES AND BOONE, LLP.
Address Line 1: 2323 VICTORY AVENUE

Address Line 2: SUITE 700

Address Line 4: DALLAS, TEXAS 75219

ATTORNEY DOCKET NUMBER:	24061.3096US01
NAME OF SUBMITTER:	DAVID M. O'DELL
SIGNATURE:	/David O'Dell/
DATE SIGNED:	07/13/2016
<u>'</u>	

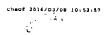
Total Attachments: 2

PATENT REEL: 039151 FRAME: 0053

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PATENT REEL: 039151 FRAME: 0054



Docket No.: P20141445US00/24061.3096US01

Customer No.: 000042717

ASSIGNMENT

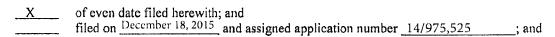
WHEREAS, we,

(1)	Yi-Cheng Chao	of	Hsin-Chu, Taiwan, R.O.C.
(2)	Che-Cheng Chang	of	New Taipei City, Taiwan, R.O.C.
(3)	Po-Chi Wu	of	Hsinchu County, Taiwan, R.O.C.
(4)	Jung-Jui Li	of	Hsinchu City, Taiwan, R.O.C.

have invented certain improvements in

METHOD OF SEMICONDUCTOR FABRICATION WITH HEIGHT CONTROL THROUGH ACTIVE REGION PROFILE

for which we have executed an application for Letters Patent of the United States of America,



WHEREAS, we authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China. is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue

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applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

Inventor Name:

Yi-Cheng Chao

Residence Address:

No. 8, Li-Hsin Road. 6, Science-Based Industrial Park Hsin-Chu

Taiwan 300-77, R.O.C.

Dated: 03-08-2016

Ti-Cheng Chew Inventor Signature

Inventor Name:

Che-Cheng Chang

Residence Address:

8F., No.17, Xinxing Street, Danshui District

New Taipei City 251, Taiwan, R.O.C.

Inventor Name:

Po-Chi Wu

Residence Address:

No.33, Alley 16, Lane 11, Zhonghua Road

Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

Dated: 0} - 08 - >0/6

Inventor Name:

Jung-Jui Li

Residence Address:

10F., No.107, Lane 16, Guanxin Road, East District

Hsinchu City 300, Taiwan, R.O.C.

Dated: 03-08-2016

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