PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TA-PEN GUO	09/01/2015
CARLOS H. DIAZ	09/01/2015
JEAN-PIERRE COLINGE	09/01/2015
YI-HSIUNG LIN	09/01/2015

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
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Internal Address:	HSINCHU SCIENCE PARK
City:	HSINCHU
State/Country:	TAIWAN
Postal Code:	300-78

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16220148

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	2015-0444/24061.3164US03	
NAME OF SUBMITTER:	MARCY OGADO	
SIGNATURE:	/Marcy Ogado/	
DATE SIGNED:	12/14/2018	

Total Attachments: 2

PATENT 505237026 REEL: 047775 FRAME: 0209

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PATENT REEL: 047775 FRAME: 0210

Docket No.: 20150444US0/24061.3164US1

Customer No.: 42717

ASSIGNMENT

WHEREAS, we,			
(1)	Ta-Pen Guo	of	No. 18, Ln. 21, Dahu Shanzhuang St., Neihu Dist. Taipei City 114, Taiwan, R.O.C.
(2)	Carlos H. Diaz	of	1451 Todd Street Mountain View, California 94040, US
(3)	Jean-Pierre Colinge	of	No. 50, Dasyue Road, Apartment 4F-2 Hsinchu City, Taiwan, R.O.C.
(4)	Yi-Hsiung Lin	of	Hsin-Chu, Taiwan, R.O.C.

have invented certain improvements in

MONOLITHIC 3D INTEGRATION INTER-TIER VIAS INSERTION SCHEME AND ASSOCIATED LAYOUT STRUCTURE

for which we have filed an application for Letters Patent of	the United States of America on
08/31/2015 , and assigned U.S. Serial number 14/840,364	; and
Wighten	
WHEREAS, we authorize the attorney of record to update this	document to include Patent Office
nformation 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, 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.

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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 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:	Ta-Pen Guo	
Residence Address:	No. 18, Ln. 21, Dahu Shanzhur Taipei City 114, Taiwan, R.O.	
Dated: 9/1/z	015	Inventor Signature
Inventor Name:	Carlos H. Diaz	
Residence Address:	1451 Todd Street Mountain View, California 940	940, US
Dated: 9/1/20	»/S	Inventor Signature Political
Inventor Name:	Jean-Pierre Colinge	
Residence Address:	No. 50, Dasyue Road, Apartme Hsinchu City, Taiwan, R.O.C.	ent 4F-2
Dated: 2015/05	9/01	Inventor Signature
Inventor Name:	Yi-Hsiung Lin	
Residence Address:	Hsin-Chu, Taiwan, R.O.C	
Dated: 9/1/20	15	Inventor Signature
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