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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KUO-CHENG CHING	08/28/2015
JEAN-PIERRE COLINGE	08/28/2015
ZHIQIANG WU	09/01/2015

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	NO. 8, LI-HSIN RD. 6
Internal Address:	SCIENCE-BASED INDUSTRIAL PARK
City:	HSIN-CHU
State/Country:	TAIWAN
Postal Code:	300-77

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	14683877	

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 20120620 / 24061.2995US03		
NAME OF SUBMITTER:	JANIE MARTINEZ-HOLM	
SIGNATURE:	/Janie Martinez-Holm/	
DATE SIGNED:	02/19/2016	

Total Attachments: 2

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> **PATENT REEL: 037774 FRAME: 0487** 503700128

Docket No.: P20120620US02/24061.2995US03

Customer No.: 000042717

ASSIGNMENT

WHEREAS, we,

(1)	Kuo-Cheng Ching	of	5F., No. 8-3, Guangming 9th Rd., Zhubeï City, Hsinchu County 302, Taiwan, R.O.C.	
(2)	Jean-Pierre Colinge	of	Hsinchu City, Dasyue Road, No 50, Apartment 4F-2, Taiwan, R.O.C.	
(3)	Zhiqiang Wu]	of	22F, No. 533 Hsin Long Rd Section 1, Chubei,	

have invented certain improvements in

ALIGNED GATE-ALL-AROUND STRUCTURE

for which	we have executed an application for Letters Patent of the Unite	d States of Americ	a,
X	of even date filed herewith; and filed on04-10-2015 and assigned application number_	14/683,877	_; and

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, 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

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PATENT REEL: 037774 FRAME: 0488

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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:

Kuo-Cheng Ching

Residence Address:

5F., No. 8-3, Guangming 9th Rd., Zhubei City, Hsinchu County 302,

Taiwan, R.O.C.

Dated: 70 (5)

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Inventor Name:

Jean-Pierre Colinge

Residence Address:

Hsinchu City, Dasyue Road, No 50, Apartment 4F-2,

Taiwan, R.O.C.

Dated: 2015/08/28

Inventor Signature

Inventor Name:

Zhinqiang Wu

Residence Address:

22F, No. 533 Hsin Long Rd Section 1, Chubei, Hsinchu County,

Taiwan, R.O.C.

Inventor Signature

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RECORDED: 02/19/2016

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