504864001 04/11/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHIHY-YUAN CHENG	03/15/2018
CHUN-CHANG WU	03/15/2018
SHUN-SHING YANG	03/15/2018
CHING-SEN KUO	03/15/2018
FENG-JIA SHIU	03/15/2018
CHUN-CHANG CHEN	03/15/2018

RECEIVING PARTY DATA

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Internal Address:	HSINCHU SCIENCE PARK
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State/Country:	TAIWAN
Postal Code:	300-78

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15918623

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ATTORNEY DOCKET NUMBER:	2016-0121/24061.3364US02
NAME OF SUBMITTER:	DAVID M. O'DELL
SIGNATURE:	/David M. O'Dell/
DATE SIGNED:	04/11/2018

504864001 REEL: 045509 FRAME: 0168

Total Attachments: 3

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PATENT REEL: 045509 FRAME: 0169

Docket No.: P20160121US01/24061,3364US02 Customer No.: 000042717

Tainan City, Taiwan, Republic of China

ASSIGNMENT

WHEREAS, we,

(1)	Chihy-Yuan Cheng	of	Tainan City, Taiwan, Republic of China
(2)	Chun-Chang Wu	of	Nantou County, Taiwan, Republic of China
(3)	Shun-Shing Yang	of	Tainan City, Taiwan, Republic of China
(4)	Ching-Sen Kuo	of	Taipei City, Taiwan, Republic of China
(5)	Feng-Jia Shiu	of	Hsinchu County, Taiwan, Republic of China

have invented certain improvements in

Chun-Chang Chen

(6)

INTEGRATED CIRCUIT STRUCTURE WITH GUARD RING

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

of

	of even date filed herewith; and
<u>X</u>	filed on March 12, 2018, and assigned application number 15/918.623; 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 Co., 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.

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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 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:	Chihy-Yuan Cheng	
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Dated: <u>>0/% - 3 -</u>	<u>15</u>	Chiny - Ywan Cheng Inventor Signature
nanananananananananananananananananana		
Inventor Name:	Chun-Chang Wu	
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Dated: ユの18 。ラ	<u>} -, (5 </u>	Chun Chang Wix Inventor Signature
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Dated: <u>>ウ/// . ろ .</u>	<u>/5</u>	Shun-Shing Yang Inventor Signature
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Docket No.: P20160121US01/24061.3364US02

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RECORDED: 04/11/2018

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