502181559 01/02/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jhon Jhy Liaw	12/26/2012

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13732980

CORRESPONDENCE DATA

Fax Number: 2142000853

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 972-739-8635

Email: ipdocketing@haynesboone.com

Correspondent Name: HAYNES AND BOONE, LLP IP Section

Address Line 1: 2323 Victory Avenue

Address Line 2: Suite 700

Address Line 4: Dallas, TEXAS 75219

NAME OF SUBMITTER: 24061.2212

David M. O'Dell

Total Attachments: 2

source=2212_Assignment#page1.tif source=2212_Assignment#page2.tif

PATENT REEL: 029557 FRAME: 0969 OF \$40.00 15/52980

Docket No.: 2012-0467 / 24061.2212

Customer No.: 000042717

ASSIGNMENT

WHEREAS, I,

Jhon Jhy Liaw of No. 15, Ln. 447, Xuefu E. Road

Zhudong Township

Hsinchu County 310, Taiwan R.O.C.

have invented certain improvements in

DUAL-PORT SRAM CONNECTION STRUCTURE

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

of even date filed herewith; and
filed on January 2, 2013, and assigned application number 13/732,980; and

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

R-322228_1.docx - 1 -

Docket No.: 2012-0467 / 24061.2212

Customer No.: 000042717

AND I HEREBY further covenant and agree that I 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:

jjliew 2012/12/24 07:54:44

Jhon Jhy Liaw

Residence Address:

No. 15, Ln. 447, Xuefu E. Road, Zhudong Township

Hsinchu County 310, Taiwan R.O.C.

Dated: Dec. 2019

Thon Thy Law
Inventor Signature

R-2212 - Assignment

RECORDED: 01/02/2013

PATENT REEL: 029557 FRAME: 0971