505405408 04/02/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5452202

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LI-HUI CHENG	02/22/2019
SZU-WEI LU	02/22/2019
PING-YIN HSIEH	02/22/2019
CHIH-HAO CHEN	02/22/2019

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.
Street Address:	NO.8, LI-HSIN RD. 6, HSINCHU SCIENCE PARK,
City:	HSINCHU
State/Country:	TAIWAN
Postal Code:	300-78

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16283851

CORRESPONDENCE DATA

Fax Number: (949)391-4699

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: 886223692800 Email: usa@jcipgroup.com

Correspondent Name: JCIPRNET

Address Line 1: P.O. BOX 600 TAIPEI GUTING Address Line 4: TAIPEI CITY, TAIWAN 10099

ATTORNEY DOCKET NUMBER:	83843-US-PA
NAME OF SUBMITTER:	BELINDA LEE
SIGNATURE:	/Belinda Lee/
DATE SIGNED:	04/02/2019

Total Attachments: 3

source=83843_dcl-asm#page1.tif source=83843 dcl-asm#page2.tif source=83843_dcl-asm#page3.tif

> **PATENT REEL: 048760 FRAME: 0839** 505405408

DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

□ Declaration Submitted With Initial Filing
OR
☐ Declaration Submitted After Initial Filing (surcharge 37 CFR 1.16(f) required)
(Title of the Invention)
PACKAGE STRUCTURE AND MANUFACTURING METHOD THEREOF
As a below named inventor (hereinafter designated as the undersigned), I hereby
declare that:
This declaration is directed to:
∑ The attached application,
OR
☐ United States Application Number or PCT International application number
Filed on
The above identified application was made or authorized to be made by me

The above-identified application was made or authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

The undersigned hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

> **PATENT REEL: 048760 FRAME: 0840**

DECLARATION AND ASSIGNMENT

FOR UTILITY OR DESIGN PATENT APPLICATION

WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.

WHEREAS, 1. Taiwan Semiconductor Manufacturing Co., Ltd.

No.8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu, Taiwan 300-78, of R.O.C.

hereinafter referred to as ASSIGNEE, is desirous of acquiring the undersigned's interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same:

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by the undersigned, the undersigned has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights, title and interest in and to the said invention and application and all future improvements thereon, and in and to any Letters Patent which may hereafter be granted on the same in the United States, the said rights, title and interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said the undersigned had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

The undersigned further agrees/agree that he/she/they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee Lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

> PATENT REEL: 048760 FRAME: 0841

P20181772US00 83843-US-PA

DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

Signature: Li -turi Cunt Date: 2019, 02. 22
Legal Name of Sole or First Inventor: Li-Hui Cheng
Residence: New Taipei City, Taiwan
Mailing Address: c/o No.8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu, Taiwan 300-78, R.O.C.
Signature: Syn-Wei Lu Date: 2019.2.22
Legal Name of Additional Joint Inventor, if any: Szu-Wei Lu
Residence: Hsinchu City, Taiwan
Mailing Address: c/o No.8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu, Taiwan 300-78, R.O.C.
Signature: Prof (in High Date: >019,02,22
Signature: Ping (in Hiseh Date: >0(9,0). >> Date: >0(9,0). >> Date: >> Date
-
Legal Name of Additional Joint Inventor, if any: Ping-Yin Hsieh
Legal Name of Additional Joint Inventor, if any: Ping-Yin Hsieh Residence: Hsinchu, Taiwan Mailing Address: c/o No.8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu, Taiwan 300-78, R.O.C.
Legal Name of Additional Joint Inventor, if any: Ping-Yin Hsieh Residence: Hsinchu, Taiwan Mailing Address: c/o No.8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu, Taiwan 300-78, R.O.C.
Legal Name of Additional Joint Inventor, if any: Ping-Yin Hsieh Residence: Hsinchu, Taiwan Mailing Address: c/o No.8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu, Taiwan 300-78, R.O.C. Signature:

- 3 -