506440311 01/08/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6487079

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAI-I YANG	12/18/2013
CHENG-CHI CHUANG	12/18/2013
YUNG-CHIH WANG	12/18/2013
TIEN-LU LIN	12/18/2013

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17144592

CORRESPONDENCE DATA

Fax Number: (216)502-0601

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: 216-502-0600

Email: docketing@eschweilerlaw.com **Correspondent Name:** ESCHWEILER & POTASHNIK, LLC

Address Line 1: ROSETTA CENTER

Address Line 2: 629 EUCLID AVE., SUITE 1000
Address Line 4: CLEVELAND, OHIO 44114

ATTORNEY DOCKET NUMBER:	TSMCP384USF	
NAME OF SUBMITTER: JAMES R. POTASHNIK		
SIGNATURE:	/James R. Potashnik/	
DATE SIGNED:	01/08/2021	

Total Attachments: 6

U.S. Patent Appln. No. Filing Date

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s):

Tai-I Yang 14F-2, No. 28, Wu Lin Rd. North Dist. Hsinchu City 300 Taiwan (R.O.C.)

Assignor(s):

Cheng-Chi Chuang 7F-1, No. 48-1, Deguang Rd. Zhonghe District New Taipel City 235 Taiwan (R.O.C.)

Assignor(s):

Yung-Chih Wang 3, Alley 16, Lane 239, Ping-tung Rd. Ping-Tseng County Taoyuan Taiwan (R.O.C.)

Assignor(s):

Tien-Lu Lin No. 116, Jinshan N. 2nd St. East Dist. Hsinchu City 300 Taiwan (R.O.C.)

Assignee:

Taiwan Semiconductor Manufacturing Co., Ltd. No. 8, Li-Hsin Rd. 6, Hsin-Chu Science Park Hsin-Chu, Taiwan 300-77 Republic of China

<u>AGREEMENT</u>

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled

"AIR-GAP FORMING TECHNIQUES FOR INTERCONNECT STRUCTURES" for

which:

U.S. Patent Appln. No. Filing Date

a n	on-provisional application for United States Letters Patent:
\boxtimes	was executed on even date preparatory to filling (each inventor should sign this
	Assignment on the same day as he/she signs the Declaration and Power of
	Attorney); or
	was filed on and accorded U.S. Serial No; or
	I hereby authorize and request my attorney associated with Customer No.
	107476, to insert on the designated lines below the filing date and application
	number of said application when known:
	U.S. Serial No.
	filed on

WHEREAS, ASSIGNEE (listed above), a corporation of the Republic of China is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE its successors and assigns, the entire right, title and interest in and to said invention and improvements, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues, re-examinations and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be help arrespiped by

REEL: 054860 FRAME: 0361

U.S. Patent Appln. No. Filing Date

ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

√ 2013, 12.18 Date V Tai - I Jan y
Name 1st Inventor Tak Dyang

U.S. Patent Appln. No. Filing Date

12013, 12.18.

Date

Name 2nd Inventor Cheng-Ohi Chuang

U.S. Patent Appln. No. Filing Date

1 2073 1218

Name 3rd Inventor Yung-Chih Wang

U.S. Patent Appln. No. Filing Date

Date

Name 4th Inventor Tid

PATENT REEL: 054860 FRAME: 0365

RECORDED: 01/08/2021