505973187 03/18/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6019895

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHENG-CHUN YANG	03/03/2020
YI-MING LIN	03/03/2020
PO-WEI LIANG	03/04/2020
CHU-HAN HSIEH	03/03/2020
CHIH-LUNG CHENG	03/03/2020
PO-CHIH HUANG	03/03/2020

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16800220	

CORRESPONDENCE DATA

Fax Number: (703)205-8050

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: 703-205-8000

tu.t.tan@bskb.com, mailroom@bskb.com Email: BIRCH, STEWART, KOLASCH & BIRCH, LLP Correspondent Name: Address Line 1: 8110 GATEHOUSE ROAD, SUITE 100E

Address Line 4: FALLS CHURCH, VIRGINIA 22042

ATTORNEY DOCKET NUMBER:	2519-0526PUS1
NAME OF SUBMITTER:	TAN T. TU
SIGNATURE:	/TAN T. TU/
DATE SIGNED:	03/17/2020

Total Attachments: 2

PATENT REEL: 052152 FRAME: 0354

505973187

source=Assignment 2519-0526PUS1#page1.tif source=Assignment 2519-0526PUS1#page2.tif

PATENT REEL: 052152 FRAME: 0355

ASSIGNMENT

This assignment agreement is applicable to an invention entitled (Invention Title)
METHOD FOR MANUFACTURING SEMICONDUCTOR WAFER WITH WAFER
CHUCK HAVING FLUID GUIDING STRUCTURE
The PATENT RIGHTS referred to in this agreement are:
(check one) a patent application for this invention, executed by the ASSIGNOR(S)
concurrently with this assignment.
☑U.S. patent application Serial No. 16/800,220 , filed
February 25, 2020
a U.S. patent application based on PCT International Application
Nofiled on (date)(U.S. patent application
Serial No, if known).
U.S. patent No, issued
The PATENT RIGHTS also include all divisions, reissues, continuations and extensions of
the patents and patent applications identified above.
The PATENT RIGHTS assigned under this agreement are:
⊠U.S. patent rights only.
The ASSIGNOR(S) referred to in this agreement is (or are) the inventor(s) whose signatures
appear on page 2 of this Assignment and any Supplemental Sheet(s).
The ASSIGNEE referred to in this agreement is:
(Name of Assignee) TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.
(Address) NO.8, LI-HSIN RD.6, SCIENCE-BASED INDUSTRIAL PARK, HSINCHU,
<u>TAIWAN 300, R.O.C.</u>
The ASSIGNEE is:
(check one) ☐ An individual.
A Partnership.
☐ A Corporation of
(other)
The ASSIGNOR(S), in consideration of \$10.00 paid by the ASSIGNEE, and other good and
valuable consideration, receipt of which is acknowledged, hereby assign(s) the following
rights to the ASSIGNEE, its successors and assigns:

the full and exclusive right to the invention;

the entire right, title and interest in and to the PATENT RIGHTS;

the right to sue and recover for any past infringement; and

the right to claim priority under 35 USC 119, 35 USC 120, or any other applicable provisions, based on any earlier patent applications for this invention.

RECORDED: 03/18/2020

THIS IS PAGE 2 OF AN ASSIGNMENT FROM THE INVENTOR(S) TO
ASSIGNEE: TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.
INVENTION TITLE: METHOD FOR MANUFACTURING SEMICONDUCTOR
WAFER WITH WAFER CHUCK HAVING FLUID GUIDING STRUCTURE

As to all U.S. patent applications assigned under this agreement, the ASSIGNOR(S) hereby authorize(s) and request(s) the Commissioner of Patents and Trademark to issue all Letters Patent to the ASSIGNEE as the assignee of the entire right, title and interest, for the sole use and enjoyment of said ASSIGNEE, its successors and assigns.

Further, the ASSIGNOR(S) agree(s) to communicate to said ASSIGNEE, or its representatives, any fact known to the ASSIGNOR(S) with respect to said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause and all Letter Patent to be issued to said ASSIGNEE, make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for said invention.

The ASSIGNOR(S) authorize(s) the attorneys and agents who have the power of attorney in this application to check any appropriate boxes and to insert the Serial Number and filing date in this document after it has been executed.

Sheng-Chun YANG	Sheng Chua PANG	2020,03,03
Name of sole or first inventor	Signature	Date
Yi-Ming LIN Name of second inventor, if any	Signature Cin	2020,03,03 Date
Po-Wei LIANG	现份維 8-wei Lung.	2020.03.04.
Name of third inventor, if any	Signature	Date
Chu-Han HSIEH	新文翰 churtan HSIEH	7070, 03-33
Cha-Hall HoleH	9/0-2/19	
Name of fourth inventor, if any	Signature	Date
· · · · · · · · · · · · · · · · · · ·		Date
Name of fourth inventor, if any	Signature	Date
Name of fourth inventor, if any Chih-Lung CHENG	Signature Signature Chrh-Lung	Date Noy- 2020_ 3.3

PATENT REEL: 052152 FRAME: 0357