#### 506434154 01/05/2021

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT6480921

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
WEI-CHING WU	03/05/2012
WEN-LONG LEE	03/05/2012
DING-I LIU	03/05/2012

### **RECEIVING PARTY DATA**

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.	
Street Address:	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:	17141974

### CORRESPONDENCE DATA

Fax Number: (703)518-5499

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.

7036841111 Phone: Email: tsmc@ipfirm.com

HAUPTMAN HAM, LLP (TSMC) **Correspondent Name:** 

Address Line 1: 2318 MILL ROAD Address Line 2: **SUITE 1400** 

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER: T5057-Y570B NAME OF SUBMITTER: RANDY A. NORANBROCK SIGNATURE: /Randy A. Noranbrock/ **DATE SIGNED:** 01/05/2021

**Total Attachments: 1** 

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**PATENT REEL: 054818 FRAME: 0460** 506434154

2011-1046

Docket No. T5057-Y570

# **ASSIGNMENT**

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

- 1) Wei-Ching WU
- 2) Wen-Long LEE
- 3) Ding-I LIU

RECORDED: 01/05/2021

•	
who has made a certain new and useful invention, hereby sells, a	ssigns and transfers unto
TAIWAN SEMICONDUCTOR MANUFACTURE	NG COMPANY, LTD. having a place of business at No.
8, Li-Hsin Rd. VI, Hsinchu Science Park, Hsinchu	
its successors and assigns (hereinafter designated "ASSIGNEE") that defined in 35 U.S.C. 100 in the invention entitled	he entire right, title and interest for the United States of America
ADJUSTABLE NOZZLE FOR PLASMA DEPOSI	ITION AND A METHOD OF CONTROLLING
THE ADJUSTABLE NOZZLE	
(a) for which an application for United States Letters Patent v United States Patent Application No. 13/328,474	was filed on $\frac{2011-12-16}{}$ , and identified by
(b) for which an application for United States Letters Patent v	was executed on,
and the undersigned hereby authorizes and requests the United Sta all United States Letters Patent which may be granted therefore a continuations-in-part thereof, and the right to all benefits under Property to the said ASSIGNEE, for its interest as ASSIGNEE, it agrees that the attorneys of record in said application shall hereafte  AND the undersigned hereby agrees to transfer a lik application for and obtaining original, divisional, reissued or exten ASSIGNEE, its successors, assigns and legal representatives, and applications for patent based thereon, growing out of or related ASSIGNEE, its successors, assigns and legal representatives, deer the invention hereby transferred.	and any and all extensions, divisions, reissues, continuations, or the International Convention for the Protection of Industrial its successors, assigns and legal representatives; the undersigned or act on behalf of said ASSIGNEE;  the interest, and to render all necessary assistance in making add Letters Patent of the United States, upon request of the said without further remuneration, in and to any improvements, and to the said invention; and to execute any papers by the said
SIGNED on the date indicated aside my signature:	
1) Weiching Wu Name: Wei-Ching WU  2) T T Wanlong Lee Name: Wen-Long LEE	2012/3/05 Date:
Name: Dings LIU	2012/03/05.

PATENT REEL: 054818 FRAME: 0461