

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
HSING-HSIANG WANG	12/31/2019
YU-HSIANG LIN	12/31/2019
WEI-DA CHEN	12/31/2019
TOM PENG	12/31/2019
P.Y. CHIU	12/31/2019
MIAU-SHING TSAI	12/31/2019
CHEN-YI HUANG	12/31/2019
CHING-HORNG CHEN	12/31/2019
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Postal Code:	300-77
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16684438
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NAME OF SUBMITTER:	RICHARD C. KIM
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DATE SIGNED:	02/05/2020
Total Attachments: 3 source=N1085-02033 Assignment#page1.tif source=N1085-02033 Assignment#page2.tif source=N1085-02033 Assignment#page3.tif	

ASSIGNMENT AND AGREEMENT

For value received, we, **Hsing-Hsiang WANG, Yu-Hsiang LIN, Wei-Da CHEN, Tom Peng, P. Y. Chiu, Miao-Shing TSAI, Cheng-Yi HUANG, and Ching-Horng CHEN,** hereby transfer to **Taiwan Semiconductor Manufacturing Co., Ltd.**, with its principal place of business located at No. 8, Li-Hsin Road 6, Hsinchu Science Park, Hsin-Chu 300-77, Taiwan, Republic of China, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to **METAL ETCHING WITH IN SITU PLASMA ASHING**, described in non-provisional patent application S.N. 16/684,438 filed November 14, 2019, and under any and all Letters Patent and any divisions, continuations, continuations-in-part, reexamination certificates, reissues, and extensions thereof, or claiming priority therefrom that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to Taiwan Semiconductor Manufacturing Co., Ltd. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

We authorize Taiwan Semiconductor Manufacturing Co., Ltd. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Taiwan Semiconductor Manufacturing Co., Ltd. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to Taiwan Semiconductor Manufacturing Co., Ltd. in the United States and in all countries foreign to the United States, or to such nominees as Taiwan Semiconductor Manufacturing Co., Ltd. may designate.

ATTORNEY DOCKET NO.: P20182961US00/N1085-02033

We agree that, when requested, we shall, without charge to Taiwan Semiconductor Manufacturing Co., Ltd. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

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Dated: 2019.12.31

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