506023263 04/21/2020

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
CHUNG-WEI HSU	03/20/2020
HOU-YU CHEN	03/20/2020
CHIH-HAO WANG	04/07/2020
CHING-WEI TSAI	04/01/2020
KUO-CHENG CHIANG	03/24/2020
KUAN-LUN CHENG	03/26/2020
MAO-LIN HUANG	03/20/2020
JIA-NI YU	03/20/2020
LUNG-KUN CHU	03/20/2020

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## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16819632

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506023263 PATENT REEL: 052448 FRAME: 0562

NAME OF SUBMITTER:	DAVID W. POTASHNIK
SIGNATURE:	/David W. Potashnik/
DATE SIGNED:	04/21/2020
Total Attachments: 11	
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PATENT REEL: 052448 FRAME: 0563

#### PATENT ASSIGNMENT

# PARTIES TO THE ASSIGNMENT

Assignor(s): Chung-Wei Hsu

Assignor(s): Hou-Yu Chen

Assignor(s): Chih-Hao Wang

Assignor(s): Ching-Wei Tsai

Assignor(s): Kuo-Cheng Chiang

Assignor(s): Kuan-Lun Cheng

Assignor(s): Mao-Lin Huang

Assignor(s): Jia-Ni Yu

Assignor(s): Lung-Kun Chu

Assignee:

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

### **AGREEMENT**

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

"TUNING THRESHOLD VOLTAGE IN NANOSHEET TRANSITOR DEVICES" for which:

a non-provisional application for United States Letters Patent:

was executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration); or

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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 held and enjoyed by 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 ASSIGNOR(S) agree to execute all

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PATENT REEL: 052448 FRAME: 0565 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.

1020/3/20

Date

ਿਰਜ਼ ਮੁਕ ਟੀ-ਕਰ Name 2<sup>nd</sup> Inventor Hou-Yu Chen

4/1/2020

Date

Name 3<sup>rd</sup> Inventor Chib-Han Wang

Name

4<sup>th</sup> Inventor Ching-Wei Tsa/

Date

Name 5th Inventor Kub-Cheng Chiang

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8-26-2 2000 SQN | 35-50-36.

TSMC Docket No. P20191471US00 Docket No. TSMCP1144US

<u>マロンクラ/アを</u> Date

Name 6th Inventor Kuan-Lun Cheng

2020.03.20

Date

Maslin Huang Name 7th Inventor Mao-Lin Huang

<u> 2020/03/20</u>

Date

Name 8th Inventor Jia-Ni Yu

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<u>>∕o >⁄o /3 />∕o</u> Date

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**PATENT** REEL: 052448 FRAME: 0574