# 505083578 09/07/2018

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGN	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT			
CONVEYING PARTY DA	ΑΤΑ					
	Name	Name		Execution Date		
CHIEN HUNG LIN				07/03/2018		
CHUN-CHIEH MO				07/03/2018		
RECEIVING PARTY DA	ТА					
Name:	TAIWAN SMICONDUCTOR MANUFACTURING CO., LTD.					
Street Address:	NO. 8, LI-HSIN ROAD 6					
Internal Address:	HSINCHU SCIENCE PARK					
City:	HSIN-CHU					
State/Country:	TAIWAN					
Postal Code:	300-77					
Property Type		Numb	er			
Property Type Application Number:		Numb 16032601	er	-		
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Application Number:	ΑΤΑ	16032601	er			
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#### ATTORNEY DOCKET NO.: P20170349US00-N1085-01706

#### ASSIGNMENT AND AGREEMENT

For value received, we, Chien Hung Lin, Chun-Chieh Mo, and Shih-Chi Kuo, 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 METHOD OF MAKING SEMICONDUCTOR DEVICE COMPRISING FLASH MEMORY AND RESULTING DEVICE, described in non-provisional and provisional patent application S.N. 62/592,660 filed November 30, 2017, 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.

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### ATTORNEY DOCKET NO.: P20170349US00-N1085-01706

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.

**Inventor No. 1** 

Dated: 2018, 7, 3

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Inventor No. 2 Dated: 2018, 7, 3

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Inventor No. 3 Dated: 2018.7.12

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PATENT REEL: 046816 FRAME: 0071

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