506275953 09/28/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6322700

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YU-CHU LIN	09/21/2020
CHI-CHUNG JEN	09/21/2020
YEN-DI WANG	09/21/2020
JIA-YANG KO	09/21/2020
MEN-HSI TSAI	09/21/2020

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.	
Street Address:	8, LI-HSIN RD. 6	
Internal Address:	HSINCHU SCIENCE PARK	
City:	HSINCHU	
State/Country:	TAIWAN	
Postal Code:	300-78	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16746631	

CORRESPONDENCE DATA

Fax Number:

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.

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ATTORNEY DOCKET NUMBER:	T1516.10658US01
NAME OF SUBMITTER: R. BURNS ISRAELSEN	
SIGNATURE: /R. Burns Israelsen, Reg. No. 42685/	
DATE SIGNED:	09/28/2020

PATENT REEL: 053908 FRAME: 0776

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Total Attachments: 2

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PATENT REEL: 053908 FRAME: 0777

ASSIGNMENT

This assignment agreement is applicable to an invention entitled (Invention Title)				
MEMORY DEVICE AND METHOD FOR MANUFACTURING THE SAME				
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. 16/746,631, filed January 17, 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) 8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu 300-78, Taiwan, R.O.C.				
The ASSIGNEE is:				
$(check\ one)$ An individual.				
☐A Partnership.				
(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

provisions, based on any earlier patent applications for this invention.

the right to claim priority under 35 USC 119, 35 USC 120, or any other applicable

PATENT REEL: 053908 FRAME: 0778

RECORDED: 09/28/2020

THIS IS PAGE 2 OF AN ASSIGNMENT FROM THE INVENTOR(S) TO ASSIGNEE: TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD. INVENTION TITLE: MEMORY DEVICE AND METHOD FOR MANUFACTURING THE SAME

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.

Yu-Chu LIN	Yu-chy Lin	15.90,000
Name of sole or first inventor	Signature	Date
Chi-Chung JEN	Chi-Chung Jen	2020. P. 71
Name of second inventor, if any	Signature	Date
Yen-Di WANG	Yon-Di Wang	21/9/4
Name of third inventor, if any	Signature	Date
Jia-Yang KO	Jia Yang Ko	12/p/0x0x
Name of fourth inventor, if any	Signature 🗘	Date
Men-Hsi TSAI	Men-Ha Tsar	-2026/og/21
Name of fifth inventor, if any	Signature	Date

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