PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6503304

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HIDEHIRO FUJIWARA	11/27/2020
CHIH-YU LIN	11/26/2020
WEI-CHANG ZHAO	11/25/2020
HSIEN-YU PAN	11/27/2020
HIROKI NOGUCHI	11/27/2020
YEN-HUEI CHEN	11/27/2020

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:	16657284

CORRESPONDENCE DATA

Fax Number: (612)332-9081

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.

Phone: 612-332-5300
Email: jwilliams@merchantgould.com
Correspondent Name: MERCHANT & GOULD P.C.
Address Line 1: P.O. BOX 2903
Address Line 4: MINNEAPOLIS, MINNESOTA 55402-0903

ATTORNEY DOCKET NUMBER:	17829.0066USU1
NAME OF SUBMITTER:	JENNIFER A. WILLIAMS
SIGNATURE:	/Jennifer A. Williams/
DATE SIGNED:	01/19/2021

Total Attachments: 12

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Atty. Docket No.: 17829.0066USU1/P20180776US00

PATENT ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("Assignee"), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at 8, Li-Hsin Rd. 6 Hsinchu Science Park, Hsinchu 300-78 Taiwan, R.O.C., is desirous of acquiring my entire right, title and interest in and to said invention, and to said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to said Assignee, its successors and assigns, my entire right, title and interest in and to said invention and in and to said application and all patents which may be granted therefor, and all future non-provisional applications including divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to said Assignee, as assignee of my entire right, title and interest. I declare that I have not executed and will not execute any agreement in conflict herewith.

I also hereby sell and assign to Assignee, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications, and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said Assignee, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention or the file history thereof, and at the expense of said Assignee, its legal representatives, successors, or assigns, will testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said Assignee, its legal representatives, successors, and assigns, to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	Memory Device	
SIGNATURE OF INVENTOR AND NAME	Hidehiro Fujiwara Hidehiro Fujiwara	
DATE	2020/11/27	
RESIDENCE	78-11-5, Cixian Rd., Hsin-chu, 300, ROC, Japan	

Atty. Docket No.: 17829.0066USU1/P20180776US00

PATENT ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("Assignee"), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at 8, Li-Hsin Rd. 6 Hsinchu Science Park, Hsinchu 300-78 Taiwan, R.O.C., is desirous of acquiring my entire right, title and interest in and to said invention, and to said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

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IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	Memory Device	
SIGNATURE OF INVENTOR AND NAME	Chih-Yu Lin	Chih-Yu Lin
DATE	2020/11/26	
RESIDENCE	7F.-1, No.61, Dazhong S. St., West Dist., Taichung City 403, Taiwan	

Atty. Docket No.: 17829.0066USU1/P20180776US00

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IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	Memory Device	
SIGNATURE OF INVENTOR AND NAME	Wei-Chang Zhao	Wei-Chang Zhao
DATE	2020 11 25	
RESIDENCE	Taiwan	

Atty. Docket No.: 17829.0066USU1/P20180776US00

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IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	Memory Device	
SIGNATURE OF INVENTOR AND NAME	Hsien-Yu Pan	Hsien-Yu Pan
DATE	2020/11/27	
RESIDENCE	2F., No.229, Guandong Rd., East District, Hsinchu City 300, Taiwan	

JC2P ⑤

Atty. Docket No.: 17829.0066USU1/P20180776US00

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IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	Memory Device	
SIGNATURE OF INVENTOR AND NAME	Hiroki Noguchi	Hiroki Noguchi
DATE	2020 / 11 / 27	
RESIDENCE	Japan	

Atty. Docket No.: 17829.0066USU1/P20180776US00

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IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	Memory Device	
SIGNATURE OF INVENTOR AND NAME	Yen-Huei Chen Yen-Huei Chen	
DATE	11/27/2020	
RESIDENCE	No.21, Lane 335, Syuefu E. Rd., Jhudong, Township, Hsinchu County 31055, Taiwan	