

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5948478

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
CHIH-WEI HU	01/30/2020
TENG-HAO YEH	01/30/2020
YU-WEI JIANG	01/30/2020
RECEIVING PARTY DATA	
Name:	MACRONIX INTERNATIONAL CO., LTD.
Street Address:	NO. 16 LI-HSIN ROAD
Internal Address:	SCIENCE-BASED INDUSTRIAL PARK
City:	HSINCHU
State/Country:	TAIWAN
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16782953
CORRESPONDENCE DATA	
Fax Number:	(650)712-0263
<i>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.</i>	
Phone:	650-712-0340
Email:	KMARLEY@hmbay.com
Correspondent Name:	MACRONIX C/O HAYNES BEFFEL & WOLFELD LLP
Address Line 1:	P. O. BOX 366
Address Line 2:	MARK A. HAYNES
Address Line 4:	HALF MOON BAY, CALIFORNIA 94019
ATTORNEY DOCKET NUMBER:	MXIC 2290-1
NAME OF SUBMITTER:	MARK A. HAYNES
SIGNATURE:	/MARK A. HAYNES/
DATE SIGNED:	02/05/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 3	
source=oath_assign#page1.tif	
source=oath_assign#page2.tif	

MXIC 2290-1
(P1080062US)**DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN
APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT**Title of Invention: **DUMMY VERTICAL STRUCTURES FOR ETCHING IN 3D NAND MEMORY
AND OTHER CIRCUITS**

As a below named inventor, I hereby declare that:

This declaration is directed to the attached application, or (if following box is checked):

 United States application or PCT international application number _____ filed on _____.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, the undersigned inventor(s) has/have made certain inventions, improvements, and discoveries disclosed in the above-identified patent application and further identified by the Docket Number provided above in the header of this document (hereinafter "the Invention");

Whereas, Macronix International Co., Ltd., a corporation of Taiwan having a place of business at No. 16 Li-Hsin Road, Science-Based Industrial Park, Hsinchu, Taiwan (herein referred to as "Macronix"), desires to acquire, and each undersigned inventor desires to grant to Macronix, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to Macronix (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to Macronix, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by Macronix, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in Macronix, its successors, legal representatives, and assigns, whenever requested by Macronix, its successors, legal representatives, or assigns.

(00731195.DOC)

MXIC 2290-1
(P1080062US)

Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to Macronix and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grants Macronix, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

(1) Legal Name of Inventor: Chih-Wei HU 胡志璋

Signature: Chih-Wei Hu Date: 2020/1/30

(2) Legal Name of Inventor: Teng-Hao YEH 葉騰豪

Signature: Teng-Hao Yeh Date: 2020/1/30

(3) Legal Name of Inventor: Yu-Wei JIANG 江昱維

Signature: _____ Date: _____

MXIC 2290-1
(P1080062US)

and applications, in Macronix, its successors, legal representatives, and assigns, whenever requested by Macronix, its successors, legal representatives, or assigns.

Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to Macronix and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grants Macronix, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

(1) Legal Name of Inventor: Chih-Wei HU 胡志璋

Signature: _____ Date: _____

(2) Legal Name of Inventor: Teng-Hao YEH 葉騰豪

Signature: _____ Date: _____

(3) Legal Name of Inventor: Yu-Wei JIANG 江昱維

Signature: Yu-Wei JIANG Date: Jan. 30, 2020