

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT7114624

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JUN LIU	07/02/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	YANGTZE MEMORY TECHNOLOGIES CO., LTD.
<b>Street Address:</b>	18 GAOXIN 4TH ROAD
<b>Internal Address:</b>	EAST LAKE HIGH-TECH DEVELOPMENT ZONE
<b>City:</b>	WUHAN, HUBEI
<b>State/Country:</b>	CHINA
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17509195
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)371-2540
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<b>Correspondent Name:</b>	STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
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<b>ATTORNEY DOCKET NUMBER:</b>	4123.0680002
<b>NAME OF SUBMITTER:</b>	BRIAN G. BURKE REG. NO. 75,349
<b>SIGNATURE:</b>	/Brian G. Burke #75,349/
<b>DATE SIGNED:</b>	01/11/2022
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 4</b>	
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source=Assignment-4123-0680002#page4.tif	

**COMBINED DECLARATION AND ASSIGNMENT**

**DECLARATION**

As the below named inventor, I hereby declare that:

This declaration is directed to:

- The attached application, or
- United States application or PCT international application number 16/419,825
- filed on May 22, 2019

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 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.

**ASSIGNMENT**

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to the undersigned inventor: **Jun LIU**, hereby sells and assigns to **Yangtze Memory Technologies Co., Ltd.**, a corporation formed under the laws of China, whose mailing address is 18 Gaixin 4th Road, East Lake High-Tech Development Zone, Wuhan, Hubei, China (hereafter referred to as the Assignee), his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages, for the United States of America (as defined in 35 U.S.C. § 100) and throughout the world,

(a) in the invention(s) known as **CHANNEL HOLE AND BITLINE ARCHITECTURE AND METHOD TO IMPROVE PAGE OR BLOCK SIZE AND PERFORMANCE OF 3D NAND** for which application(s) for patent in the United States of America is identified above, in any and all applications thereon, in any and all Letters Patent(s) therefor, and in each of the patents and patent applications that are listed in Schedule A, which is annexed hereto and made a part hereof, and

(b) in any and all applications that claim the benefit of the patent application identified above in part (a) and the patents and patent applications listed in Schedule A, including non-provisional applications, continuing (continuation,

divisional, or continuation-in-part) applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a) and the patents and patent applications listed in Schedule A, to the full extent of the term or terms for which Letters Patents issue, and

(c) in any and all inventions described in the patent application identified above in part (a) and the patents and patent applications listed in Schedule A, and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the undersigned inventor had this assignment and sale not been made.

The undersigned inventor agrees to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventor agrees to execute all papers necessary in connection with any judicial or administrative proceeding, including but not limited to an interference, derivation, post-grant proceeding, or patent enforcement action (judicial or otherwise) related to the application(s) or any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof or Letters Patent(s) therefor and to cooperate with the Assignee in every way possible in obtaining evidence and assisting with such judicial or administrative proceeding.

The undersigned inventor hereby represents that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventor hereby represents that he/she understands that the patent practitioners associated with **CUSTOMER NUMBER 26111** are the legal representatives of, and attorneys for, the assignee, and are NOT the legal representatives of, and attorneys for, the inventor.

IN WITNESS WHEREOF, executed by the undersigned inventor on the date opposite his/her name.

LEGAL NAME OF INVENTOR

Inventor: Jun LIU Date: 2019/07/02

Signature of Inventor: 刘俊 Jun Liu

**SCHEDULE A**

**UNITED STATES PATENTS, UNITED STATES PATENT APPLICATIONS AND  
INTERNATIONAL APPLICATIONS THAT DESIGNATE THE UNITED STATES**

<u>Application No.</u>	<u>Filing Date</u>	<u>Patent No.</u>	<u>Issue Date</u>
PCT/CN2019/075359	February 18, 2019		

**OTHER INTERNATIONAL APPLICATIONS AND PATENTS**

<u>Country</u>	<u>Application No.</u>	<u>Filing Date</u>
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