507793009 03/10/2023

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7840137

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
XINXIN ZHANG	02/17/2023
JIANYONG QIN	02/17/2023

#### **RECEIVING PARTY DATA**

Name:	CHANGXIN MEMORY TECHNOLOGIES, INC.
Street Address:	NO. 388 XINGYE AVENUE, ECONOMIC AND TECHNOLOGICAL DEVELOPMENT AREA
City:	HEFEI CITY, ANHUI PROVINCE
State/Country:	CHINA

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	18180018

#### **CORRESPONDENCE DATA**

**Fax Number:** (704)444-1111

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:** 6508382000

Email: usptomail@alston.com

Correspondent Name: ALSTON & BIRD

Address Line 1: 101 SOUTH TRYON STREET, SUITE 4000

Address Line 2: BANK OF AMERICA PLAZA

Address Line 4: CHARLOTTE, NORTH CAROLINA 28280-4000

ATTORNEY DOCKET NUMBER:	070183/586209
NAME OF SUBMITTER:	JESSICA SAMPSON
SIGNATURE:	/Jessica Sampson/
DATE SIGNED:	03/10/2023

#### **Total Attachments: 4**

source=2023-03-07 586209 Fully executed Assignment#page1.tif

source=2023-03-07 586209 Fully executed Assignment#page2.tif

source=2023-03-07 586209 Fully executed Assignment#page3.tif

source=2023-03-07 586209 Fully executed Assignment#page4.tif

PATENT REEL: 062950 FRAME: 0151

507793009

# DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

Title of Invention	Delay Circuits and Semiconductor Devices
As the belo	w named inventor, I, hereinafter referred to as the undersigned, hereby declare that:
This declar	ation is directed to:
☐ Unit 図 Clai 16,	attached application, or ted States Application or PCT International Application No; ms priority to Chinese Application No. CN 202211127975.1 and filed on 2022-09-with Access Code COBF, all applications listed above being hereinafter referred to as 'application(s)";

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.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Whereas, I have invented certain new and useful improvements in the application identified above; and

Whereas,

ChangXin Memory Technologies, Inc.
No. 388 Xingye Avenue, Economic and Technological Development Area
Hefei City, Anhui Province, China

hereinafter referred to as Assignee, is desirous of acquiring the entire right, title, and interest in and to said invention as described in the application identified above, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned has sold and assigned, and by these presents hereby sells and assigns, unto said assignee its successors and assigns, the entire right, title and interest, so far

Page 1 of 2

LEGAL02/40509655v1

as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the invention identified above, including said application for United States Letters Patent, all divisional, renewal, substitute, continuation, nonprovisionals, continuation-inparts, and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues, reexaminations, and extensions of Letters Patent granted for said inventions or upon said applications and every priority right that is or may be predicated upon or arise from said inventions, said applications, and said Letters Patent; said Assignce being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said Assignee or otherwise as said Assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America being hereby authorized to issue or transfer all said Letters Patent to said Assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right theretofore given, and that the undersigned will do all acts reasonably serving to ensure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, declarations, and lawful affidavits in form and substance which may be requested by said Assignee, to furnish said Assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may embody said inventions, and to testify in any proceedings relating to said inventions, patent applications, and/or Letters Patent.

This Assignment is deemed to be effective at least as early as the earliest priority date. The undersigned hereby grant(s) an authorized representative of Assignee the power to insert in this Assignment the application number and filing date and any further identification that may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

THANG, Xinxin			
DIMINOT MIXIN	(Clare reference)	p. [1	
	(Signature)	Date: Tehruary	163.

Inventor: ZHANG, Xinxin

LEGAL NAME OF INVENTORS:

### DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

Title of Invention	Delay Circuits and Semiconductor Devices	
		ŧ

As the below named inventor, I, hereinafter referred to as the undersigned, hereby declare that:

This declaration is directed to:

□ the attached application, or
□ United States Application or PCT International Application No;
□ Claims priority to Chinese Application No. CN 202211127975.1 and filed on 2022-0916, with Access Code C0BF, all applications listed above being hereinafter referred to as the "application(s)";

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.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Whereas, I have invented certain new and useful improvements in the application identified above; and

Whereas,

ChangXin Memory Technologies, Inc.
No. 388 Xingye Avenue, Economic and Technological Development Area
Hefei City, Anhui Province, China

hereinafter referred to as Assignee, is desirous of acquiring the entire right, title, and interest in and to said invention as described in the application identified above, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned has sold and assigned, and by these presents hereby sells and assigns, unto said assignee its successors and assigns, the entire right, title and interest, so far

Page 3 of 4

LEGAL02/40509655v1

as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the invention identified above, including said application for United States Letters Patent, all divisional, renewal, substitute, continuation, nonprovisionals, continuation-inparts, and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues, reexaminations, and extensions of Letters Patent granted for said inventions or upon said applications and every priority right that is or may be predicated upon or arise from said inventions, said applications, and said Letters Patent; said Assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said Assignee or otherwise as said Assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America being hereby authorized to issue or transfer all said Letters Patent to said Assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right theretofore given, and that the undersigned will do all acts reasonably serving to ensure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, declarations, and lawful affidavits in form and substance which may be requested by said Assignee, to furnish said Assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may embody said inventions, and to testify in any proceedings relating to said inventions, patent applications, and/or Letters Patent.

This Assignment is deemed to be effective at least as early as the earliest priority date. The undersigned hereby grant(s) an authorized representative of Assignee the power to insert in this Assignment the application number and filing date and any further identification that may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

QIN, Jian yong (Signature) Date: February 17, w?

Page 4 of 4

LEGAL02/40509655v1

RECORDED: 03/10/2023

LEGAL NAME OF INVENTORS: