## 505748832 10/30/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5795645

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
ZHICAI XU	08/08/2019
JIA SUN	08/08/2019
LIJUN XIAO	08/08/2019

## **RECEIVING PARTY DATA**

Name:	CHONGQING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD.
Street Address:	NO. 7 YUNHAN RD., SHUITU HI-TECH INDUSTRIAL ZONE, BEIBEI DISTRICT
City:	CHONGQING
State/Country:	CHINA
Postal Code:	400714
Name:	BOE TECHNOLOGY GROUP CO., LTD.
Name: Street Address:	BOE TECHNOLOGY GROUP CO., LTD.  NO. 10 JIUXIANQIAO RD., CHAOYANG DISTRICT
	·
Street Address:	NO. 10 JIUXIANQIAO RD., CHAOYANG DISTRICT

## **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	16609574	

## **CORRESPONDENCE DATA**

**Fax Number:** (248)358-3351

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:** 2483584400

**Email:** mkatirtzidakis@brookskushman.com

Correspondent Name: BROOKS KUSHMAN
Address Line 1: 1000 TOWN CENTER

Address Line 2: 22ND FLOOR

Address Line 4: SOUTHFIELD, MICHIGAN 48075

ATTORNEY DOCKET NUMBER:	BOED1085PUSA
NAME OF SUBMITTER:	MARK E. STUENKEL

PATENT 505748832 REEL: 050864 FRAME: 0252

SIGNATURE: /Mark E. Stuenkel/		
DATE SIGNED:	10/30/2019	
Total Attachments: 6		
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PATENT REEL: 050864 FRAME: 0253

# COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

Title of Invention	SHIFT REGISTER GATE DRIVING O	UNIT, DR CIRCUIT	IVING METI	IOD THEI	REOF AND
	/ named inventor, I he	****************	***************************************		

This declaration

is directed to:

The attached application, or

United States application or PCT international application number 16/609,574 filed on Oct. 30, 2019

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

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

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.

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, each undersigned inventor (hereinafter referred to as "ASSIGNOR"), do hereby:

SELL, ASSIGN AND TRANSFER to Chongging BOE Optoelectronics Technology Co., Ltd. having a place of business at No.7 Yunhan Rd., Shuitu Hi-tech Industrial Zone, Beibei District, Chongqing, 400714, P.R. China , and BOE TECHNOLOGY GROUP CO., LTD. , having a place of business at No.10 Juxiangiao Rd., Chaoyang District, Beijing 100015, P.R. China (each hereinafter referred to as "ASSIGNEE"), the entire right, title and interest for the United States and all foreign countries in and to any and all inventions which are disclosed in the above-identified application for United States Letters Patent, which has been executed by the undersigned concurrently herewith, which claims priority to PCT/CN2019/077817 filed on Mar 12,2019; which in turn claims priority to CN201810223962.1 filed on Mar.19.2018; such applications and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such inventions; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such inventions to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such inventions; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such inventions and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such inventions in the Assignee, and for securing, maintaining and enforcing proper patent protection for such inventions;

TO BE BINDING on the heirs; assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the agents and attorneys of <u>Brooks Kushman P.C.</u> the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

The assignment of said invention is effective as of the earlier of (1) the date of execution shown below or (2) the filing date of the first filed of said patent applications.

### **STATEMENTS**

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

I acknowledge the duty to disclose to the United States Patent Office all information known to me to be material to patentability as defined in 37 C.F.R. 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.

LEGAL NAME OF INVENTO	R		
Inventor: Zhicai XU	Date:	AUX, 8. 28 9	
Signature: Zhi (0: X	V		

# COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

Title of Invention	SHIFT REGISTER UNIT, DRIVING METHOD THEREOF AND GATE DRIVING CIRCUIT
As a belov	named inventor, I hereby declare that:
This decla	ration
is directed	to: The attached application, or
	United States application or PCT international application number 16/609,574 filed on Oct. 30, 2019
The above-	identified application was made or authorized to be made by me.
l believe the in the applic	at I am the original inventor or an original joint inventor of a claimed invention cation.
i hereby ac	knowledge that any willful false statement made in this declaration is

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, each undersigned inventor (hereinafter referred to as "ASSIGNOR"), do hereby:

punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5)

years, or both.

SELL, ASSIGN AND TRANSFER to Chonsging BOE Optoelectronics Technology Co., Ltd. having a place of business at No.7 Yunhan Rd. Shuitu Hi-tech Industrial Zone, Beibei District, Chongging, 400714, P.R. China , and BOE TECHNOLOGY GROUP CO., LTD. , having a place of business at No.10 Juxiangiao Rd., Chaoyang District, Beijing 100015, P.R. Ching (each hereinafter referred to as "ASSIGNEE"), the entire right, title and interest for the United States and all foreign countries in and to any and all inventions which are disclosed in the above-identified application for United States Letters Patent, which has been executed by the undersigned concurrently herewith. which claims priority to PCT/CN2019/077817 filed on Mar.12.2019; which in turn claims priority to CN201810223962.1 filed on Mar,19,2018; such applications and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such inventions; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such inventions to the Assignee;

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PATENT REEL: 050864 FRAME: 0256

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignce, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such inventions; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such inventions and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such inventions in the Assignee, and for securing, maintaining and enforcing proper patent protection for such inventions;

TO BE BINDING on the heirs; assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

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I acknowledge the duty to disclose to the United States Patent Office all information known to me to be material to patentability as defined in 37 C.F.R. 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.

LEGAL NAME OF INVENTOR	A o mais
Inventor: Lijun XIAO	Date: 449.8.2011
Signature X M XAO	

# COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

Title of Invention	SHIFT REGISTER UNIT, DRIVING METHOD THEREOF AND GATE DRIVING CIRCUIT
As a below	named inventor, I hereby declare that:
This decla	ration
is directed	to: The attached application, or
	United States application or PCT international application number 16/609,574 filed on Oct. 25, 2019
The above-	identified application was made or authorized to be made by me.
I balleve the in the applic	at I am the original inventor or an original joint inventor of a claimed invention cation.
l hereby ac punishable years, or bo	knowledge that any willful false statement made in this declaration is under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) oth.
	<b>*************************************</b>

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, each undersigned inventor (hereinafter referred to as "ASSIGNOR"), do hereby:

SELL, ASSIGN AND TRANSFER to Chongqing BOE Optoelectronics Technology Co., Ltd. , having a place of business at No.7 Yunhan Rd., Shuitu Hi-tech Industrial Zone, Beibei District, Chongging, 400714, P.R. China, and BOE TECHNOLOGY GROUP CO., LTD. , having a place of business at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P.R. China (each hereinafter referred to as "ASSIGNEE"), the entire right, title and interest for the United States and all foreign countries in and to any and all inventions which are disclosed in the above-identified application for United States Letters Patent, which has been executed by the undersigned concurrently herewith, which claims priority to PCT/CN2019/077817 filed on Mar.12.2019; which in turn <u>CN201810223962.1</u> filed on <u>Mar.19.2018</u>; such claims priority to applications and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such inventions; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such inventions to the Assignee;

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PATENT REEL: 050864 FRAME: 0258 WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such inventions; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such inventions and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such inventions in the Assignee, and for securing, maintaining and enforcing proper patent protection for such inventions;

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LEGAL NAME OF INVENTOR			
Inventor: _ Jia SUN	Dete:	444.8.7011	
Signature: NASOV		<b>₩</b> 3	