506546586 03/10/2021

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6593365

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
QING YANG	01/14/2021
JIACHENG HUANG	12/02/2020
GANG ZHANG	01/13/2021
MENG ZHANG	01/13/2021
LINGLING LIU	12/02/2020
TINGFEI WANG	12/02/2020
QIANG ZHU	02/03/2021
YUNYUN ZHANG	12/02/2020

#### **RECEIVING PARTY DATA**

Name:	HEFEI BOE OPTOELECTRONICS TECHNOLOGY CO., LTD.
Street Address:	NO.2177 TONGLINGBEI ROAD
City:	HEFEI, ANHUI
State/Country:	CHINA
Postal Code:	230012
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:	17274920

#### **CORRESPONDENCE DATA**

**Fax Number:** 

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.

**Email:** docketing@dority-manning.com **Correspondent Name:** DORITY & MANNING P.A.

Address Line 1: PO BOX 1449

Address Line 4: GREENVILLE, SOUTH CAROLINA 29602

506546586 REEL: 055548 FRAME: 0316

PATENT

ATTORNEY DOCKET NUMBER:	ZBSD-132-PCT-US	
NAME OF SUBMITTER:	ANAND K. PATEL	
SIGNATURE:	/anand k. patel/	
DATE SIGNED:	03/10/2021	
Total Attachments: 16		
source=ZBSD-132-PCT-US_Combined_Declaration_and_Assignment#page1.tif		
source-7BSD-132-PCT-US Combined Declaration and Assignment#page2 tif		

source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page1.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page2.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page3.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page4.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page5.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page6.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page8.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page9.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page10.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page11.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page12.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page13.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page14.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page15.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page15.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page15.tif source=ZBSD-132-PCT-US\_Combined\_Declaration\_and\_Assignment#page16.tif

# 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	
As a below	rnamed inventor, I hereby declare that:
This decla	ration
is directed	to: F The attached application, or
	United States application or PCT international application numberfiled on
The above-	identified application was made or authorized to be made by me.
believe than the application	at I am the original inventor or an original joint inventor of a claimed invention cation.
hereby act 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) ofth.

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 Helei BOE Optoelectronics Technology Co., Ltd. having a place of business at No.2177 Tonglingbei Road Hefei Anhai 230012. P.R.China , and BOE TECHNOLOGY GROUP CO., LTD. , having a place of business at No.10 Jiuxianqian 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/CN2020/097396 filed on Jun.22.2020; which in turn claims priority to CN201910561816.4 filed on Jun 26,2019; 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 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 INVENTOR	
Inventor: Qing YANG	Date: Jan. 14, 2021
Signature: QLY YANG	

# 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	
As a below	rnamed inventor, I hereby declare that:
This decla	ration
is directed	to: F The attached application, or
	United States application or PCT international application numberfiled on
The above-	identified application was made or authorized to be made by me.
believe than the application	at I am the original inventor or an original joint inventor of a claimed invention cation.
hereby act 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) ofth.

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 Helei BOE Optoelectronics Technology Co., Ltd. having a place of business at No.2177 Tonglingbei Road Hefei Anhai 230012. P.R.China , and BOE TECHNOLOGY GROUP CO., LTD. , having a place of business at No.10 Jiuxianqian 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/CN2020/097396 filed on Jun.22.2020; which in turn claims priority to CN201910561816.4 filed on Jun 26,2019; 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 berein 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 \_\_\_\_\_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 INVENTOR	w has a
Inventor Jacheng HUANG	0000_Del_2.2.2020
Lsonown Jackerg MUANG	

#### Docket No. X180469403

## COMBINED DECLARATION (37 CFR L63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR L76) AND ASSIGNMENT

ł	
Title of Invention	
As a below named	inventor, I hereby declare that:
This declaration	
is directed to:	▼ The attached application, or
	United States application or PCT international application numberfiled on
The above-identifier	d application was made or authorized to be made by me.
believe that I am ti n the application.	ne original inventor or an original joint inventor of a claimed invention
hereby acknowled punishable under 18 years, or both.	ge that any willful false statement made in this declaration is 8 U.S.C. 1001 by fine or imprisonment of not more than five (5)

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 Hefei BOE Optoelectronics Technology Co. Ltd. having a place of business at No.2177 Tonglingbei Road, Hefei, Anhai, 230612, P.R. China and BOE TECHNOLOGY GROUP CO., LTD. having a place of business at No.10 Jiuxiangian 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/CN2020/097396 filed on Jun.22,2020; which in turn claims priority to CN201910561816.4 filed on Jun.26,2019; 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 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 NA	ME OF	INVENTO	₹.		
Inventor:	Gang	ZHANG		Date:	Jan. 13, 2021
Signature	G and	24/11/			
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	vanna provinciale	www.www.	······		

# 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	
As a below	rnamed inventor, I hereby declare that:
This decla	ration
is directed	to: F The attached application, or
	United States application or PCT international application numberfiled on
The above-	identified application was made or authorized to be made by me.
believe than the application	at I am the original inventor or an original joint inventor of a claimed invention cation.
hereby act 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) ofth.

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 Helei BOE Optoelectronics Technology Co., Ltd. having a place of business at No.2177 Tonglingbei Road Hefei Anhai 230012. P.R.China , and BOE TECHNOLOGY GROUP CO., LTD. , having a place of business at No.10 Jiuxianqian 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/CN2020/097396 filed on Jun.22.2020; which in turn claims priority to CN201910561816.4 filed on Jun 26,2019; 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 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 INVENTOR	
Inventor: Meng ZHANG	Date: Jan. 13, 202
Signature: Meng ZHAVG	
, , , , , , , , , , , , , , , , , , , ,	

## 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	
As a below	named inventor, I hereby declare that:
This declar	ation
is directed	to: F The attached application, or
	United States application or PCT international application numberfiled on
The above-i	dentified application was made or authorized to be made by me.
believe tha	t I am the original inventor or an original joint inventor of a claimed invention ation.
hereby ack punishable years, or bo	snowledge 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) th.

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 Helei BOE Optoelectronics Technology Co., Ltd. having a place of business at No.2177 Tonglingbei Road Hefei Anhai 230012. P.R.China , and BOE TECHNOLOGY GROUP CO., LTD. , having a place of business at No.10 Jiuxianqian 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/CN2020/097396 filed on Jun.22,2020; which in turn claims priority to CN201910561816.4 filed on Jun.26,2019; 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, ussign, 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 \_\_\_\_\_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 filling 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 INVENTOR	3
Inventor: Lingling L/U	Oate: 17ec . 2 · 2020
sonstore Lingling LIV	
- 3:039:012 - 51;4 x. [] - 2:3	······································

### Docket No. X1804694131

# COMBINED DECLARATION (37 CFR L63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR L76) AND ASSIGNMENT

Title of Invention	
As a below	named inventor, I hereby declare that:
This decla	ration
is directed	to: F The attached application, or
	United States application or PCT international application numberfiled on
The above-	dentified application was made or authorized to be made by me.
believe than the applic	it I am the original inventor or an original joint inventor of a claimed invention ation.
	mowledge 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) th.

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 Hefei BOE Optoelectronics Technology Co., Ltd. having a place of business at No.2177 Tonglingbei Road Hefei Anhui 230012, P.R.Chins 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 berewith, which claims priority to PCT/CN2020/097396. filed on Jun.22,2020; which in turn claims priority to CN201910561816.4. filed on Jun.26,2019; 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;

ŧ

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 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.

۳	······	******************	***************************************	***************************************
	LEGAL NAME OF INVENTOR			
	inventor:Tinglei WANG	Date:	Pec. 2 2020	
	Signature Trag & WANG			
۳		·····	······	***************************************

## Docket No. X1804694113

## COMBINED DECLARATION (37 CFR L63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR L76) AND ASSIGNMENT

Title of Invention	
As a below named	inventor, I hereby declare that:
This declaration	
is directed to:	F The attached application, or
	United States application or PCT international application numberfiled on
The above-identified	application was made or authorized to be made by me.
I believe that I am then the application.	re original inventor or an original joint inventor of a claimed invention
I hereby acknowledg punishable under 18 years, or both.	ge that any willful false statement made in this declaration is I U.S.C. 1001 by fine or imprisonment of not more than five (5)

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 Hefei BOE Optoelectronics Technology Co., Ltd. having a place of business at No.2177 Tonglingbei Road, Hefei, Anhui, 230012, P.R.China , and BOE TECHNOLOGY GROUP CO., LTD. , having a place of business at No.10 Jiuxiangiao 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/CN2020/097396 filed on Jun.22,2020; which in turn claims priority to CN201910561816.4 filed on Jun.26,2019; 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;

1

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 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 INVENTOR	*	
Inventor Qiang ZHU	Date	Leb. 03. 2021
Signature Warg 2HU		

# 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	
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
The above-	identified application was made or authorized to be made by me.
I believe tha in the applic	at I am the original inventor or an original joint inventor of a claimed invention cation.
	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) th.

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 Hefei BOE Optoelectronics Technology Co., Ltd. having a place of business at No.2177 Tonglingbei Road, Hefei, Anhui, 230012, P.R.China, and BOE TECHNOLOGY GROUP CO., LTD., having a place of business at No.10 Jiuxiangiao 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/CN2020/097396 filed on Jun.22,2020; which in turn claims priority to CN201910561816.4 filed on Jun.26,2019; 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 \_\_\_\_\_the power and authority to insent 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 INVENTOR	
	Inventor Yunyun ZHANG	Date <u>D&amp;C \ 2 \ 2020</u>
	Signature Yungun 7HANG	

3