### 505804164 12/04/2019

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5850993

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
LING WANG	10/11/2019
YICHENG LIN	10/11/2019
CUILI GAI	10/11/2019
PAN XU	10/11/2019

#### **RECEIVING PARTY DATA**

Name:	BOE TECHNOLOGY GROUP CO., LTD.	
Street Address:	NO.10 JIUXIANQIAO RD., CHAOYANG DISTRICT	
City:	BEIJING	
State/Country:	CHINA	
Postal Code:	100015	

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

Property Type	Number
Application Number:	16619446

#### **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.

**Phone:** 202-672-5300

Email: ipdocketing@foley.com

Correspondent Name: FOLEY & LARDNER LLP

Address Line 1: 3000 K STREET N.W.

Address Line 2: SUITE 600

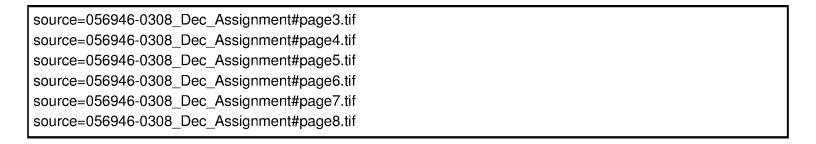
Address Line 4: WASHINGTON, D.C. 20007-5109

ATTORNEY DOCKET NUMBER:	056946-0308
NAME OF SUBMITTER:	GEORGE GRAY
SIGNATURE:	/George Gray/
DATE SIGNED:	12/04/2019

### **Total Attachments: 8**

source=056946-0308\_Dec\_Assignment#page1.tif source=056946-0308\_Dec\_Assignment#page2.tif

PATENT 505804164 REEL: 051182 FRAME: 0867



Title of Invention	THIN FILM TRANSISTOR AND FABRICATING METHOD THEREOF, ARRAY SUBSTRATE AND DESPLAY DEVICE	
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 numberfiled on	
The above-i	dentified application was made or authorized to be made by me.	
believe that in the applic	at I am the original inventor or an original joint inventor of a claimed invention eation.	
	cknowledge 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 <u>BOE Technology Group Co., Ltd.</u>
,having a place of business atNo.10 Jiuxianqiao Rd., Chaoyang District.
Beijing ,100015, P.R. China (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/CN2019/087785 filed on Msv.21,2019; which in turn claims priority to
CN201810487978.3 filed on May.21,2018; 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 Assignce;

}

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: Ling WANG	Date: 000.11, 2019
Signature Lange WANG	85
~ )	

2

t salenda ook iil	THIN FILM TRANSISTOR AND FABRICATING METHOD THEREOF, ARRAY SUBSTRATE AND DESPLAY DEVICE
As a below	named inventor, I hereby declare that:
This declar	ration
is directed	to:   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.
l believe than the applic	at I am the original inventor or an original joint inventor of a claimed invention ation.
	cknowledge 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 <u>BOE TECHNOLOGY GROUP CO., LTD.</u>, having a place of business at <u>No.10 Jiuxianqiao Rd., Chaoyang District, Beijing, 100015, P. R. China</u>, (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 <u>PCT/CN2019/087785</u> filed on <u>May 21, 2019</u>; which in turn claims priority to <u>201810487978.3</u> filed on <u>May 21, 2018</u>; 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

į

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: Yicheng LIN	Date: 096194274
Signeture: Yikken & UN	

3 0 1 1 8 8 5 5 5 8 5	THIN FILM TRANSISTOR AND FABRICATING METHOD THEREOF, ARRAY SUBSTRATE AND DESPLAY DEVICE
As a below	named inventor, I hereby declare that:
This declar	₩ The attached annlication, or
	United States application or PCT international application numberfiled ondentified application was made or authorized to be made by me.  It I am the original inventor or an original joint inventor of a claimed invention ation.
	cknowledge 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 BOE Technology Group Co., Ltd.
, having a place of business atNo.10_liuxiangiao_Rd., Chaoyang District.
Beijing ,100015, P.R. China (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/CN2019/087785 filed on May.21,2019; which in turn claims priority to
CN201810487978.3 filed on May 21, 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;

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: Cuili GAI	Date: Ool .	[1, 2019]	
Signature: Cua l'a C x-1		1	

2

**********	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Title of Invention	THIN FILM TRANSISTOR AND FABRICATING METHOD THEREOF, ARRAY SUBSTRATE AND DESPLAY DEVICE
As a below	named inventor, I hereby declare that:
This decla	ration
is directed	
The above-i	United States application or PCT international application numberfiled on dentified application was made or authorized to be made by me.
believe than the applic	at I am the original inventor or an original joint inventor of a claimed invention ation.
	cknowledge 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.
38	- 1

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 BOE Technology Group Co., Ltd
, having a place of business atNo.10_Jiuxianqiao_Rd., Chaoyang_District
Beijing ,100015, P.R. China (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/CN2019/087785 filed on May 21 2019; which in turn claims priority to
CN201810487978.3 filed on May.21,2018; 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;

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.

44 44444	INVENTOR
Inventor: Pan	U Date: <u>Oct. 11, 2018</u>
Signature: Paw	Xu

2