506135667 07/02/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6182394

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
ZHIWEI LIANG	06/01/2020	
WENQIAN LUO	06/01/2020	
YINGWEI LIU	06/01/2020	
ZHANFENG CAO	06/01/2020	
KE WANG	06/01/2020	

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:	16917921

CORRESPONDENCE DATA

Fax Number: (253)295-9447

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: 301-637-2202

Email: info@lingandyang.com

Correspondent Name: LING WU

Address Line 1: 11618 SORREL RUN NW

Address Line 4: GIG HARBOR, WASHINGTON 98332

ATTORNEY DOCKET NUMBER:	US2000977
NAME OF SUBMITTER:	LING WU
SIGNATURE:	/Ling Wu/
DATE SIGNED:	07/01/2020

Total Attachments: 10 source=Assignment#page1.tif

PATENT REEL: 053117 FRAME: 0527

source=Assignment#page2.tif	
1 ' '	
source=Assignment#page3.tif	
source=Assignment#page4.tif	
source=Assignment#page5.tif	
source=Assignment#page6.tif	
source=Assignment#page7.tif	
source=Assignment#page8.tif	
source=Assignment#page9.tif	
source=Assignment#page10.tif	

Title of Invention	Display Substrate, Preparation Method Thereof, and Display Device
As a below	named inventor, I hereby declare that:
This declar	ration
is directed	United States application or PCT international application
The above-i	number
believe than the applic	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	Jiuxianqiao Rd., Chaoyang District,
Beijing 100015, P.R. China	
"ASSIGNEE"), the entire right, title and interes	t 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	s priority to <u>CN201910720376.2</u>
filed on Aug.06,2019; such applications and	l all divisional, continuing, substitute,
renewal, reissue and all other applications for pate	ent which have been or shall be filed in
the United States and all foreign countries on an	ry of such inventions; all original and
reissued patents which have been or shall be issu-	ed 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 convent	ion 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

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 95957the 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: Zhiwei LIANG	Date: <u>(4.8 </u>	
Signature: Ziji ve i LIANG		

Title of Invention	Display Substrate, Preparation Method Thereof, and Display Device
As a below	named inventor, I hereby declare that:
This declar	ration
is directed	
The above-i	United States application or PCT international application number filed on dentified application was made or authorized to be made by me.
l believe tha in the applic	it I am the original inventor or an original joint inventor of a claimed invention ation.
	knowledge that any wiltful 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	Jiuxianqiao Rd., Chaoyang District,
Beijing 100015, P.R. China	
"ASSIGNEE"), the entire right, title and interes	t 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	s priority to <u>CN201910720376.2</u>
filed on Aug.06,2019; such applications and	l all divisional, continuing, substitute,
renewal, reissue and all other applications for pate	ent which have been or shall be filed in
the United States and all foreign countries on an	ry of such inventions; all original and
reissued patents which have been or shall be issu-	ed 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 convent	ion 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

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 95957 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 filling date of the prior application and the national or PCT international filing date of the continuation-in-part.

LEGAL NAME OF INVENTOR				
Inventor: Wenglan LUO	Date:	<u>Jan. i,</u>	2020	
Signature: Wesqian LV				

Title of Invention	Display Substrate, Preparation Method Thereof, and Display Device
As a below	named inventor, I hereby declare that:
This declar	to: ☐ The attached application, or
The above-i	United States application or PCT international application number, filed on, 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.
	cknowledge that any wiltful 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.</u>

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 <u>CN201910720376.2</u> filed on <u>Aug.06,2019</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

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 95957the 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: Yingwei LIU	Date:	Jun.], .	1010	
Signature: Yingiye; L2	7				

Title of Invention	Display Substrate, Preparation Method Thereof, and Display Device
As a below	named inventor, I hereby declare that:
This declar	ration
is directed	
The above-i	United States application or PCT international application number
l believe tha in the applic	it I am the original inventor or an original joint inventor of a claimed invention ation.
	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	BOE Technology Group Co., Ltd.
, having a place of business atNo.10	Jiuxianqiao Rd., Chaoyang District.
Beijing ,100015, P.R. China	
"ASSIGNEE"), the entire right, title and interes	
countries in and to any and all inventions which	are disclosed in the above-identified
application for United States Letters Patent, undersigned concurrently herewith, which claim	
filed on Aug.06,2019; such applications an	d all divisional, continuing, substitute,
renewal, reissue and all other applications for pate	ent which have been or shall be filed in
the United States and all foreign countries on at	ny of such inventions; all original and
reissued patents which have been or shall be issu	ed 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 convent on such application in the United States;	tion or treaty and claim priority based
anner to the annered made annered to the contract of the contr	

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

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 95957the 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				7270		
Inventor: Zhanfeng CAO	Date:	Charle !),	Market Start See		
signature: Zhantana CAO					300 10000	
J /						

Title of Invention	Display Substrate, Preparation Method Thereof, and Display Device
As a below	named inventor, I hereby declare that:
This declar	ration
is directed	
The above-i	United States application or PCT international application number
l believe tha in the applic	it I am the original inventor or an original joint inventor of a claimed invention ation.
	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	BOE Technology Group Co., Ltd.
_ ,having a place of business atNo.10_J	iuxianqiao Rd., Chaoyang District,
Beijing ,100015, P.R. China	
"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, undersigned concurrently herewith, which claims	
filed on <u>Aug 06,2019</u> ; such applications and renewal, reissue and all other applications for paten	
the United States and all foreign countries on any reissued patents which have been or shall be issued	f in the United States and all foreign
countries on such inventions; and specifically applications under the provisions of any conventic	
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

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 95957 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	AME OF INVENTOR			iiiga.			
	Ke WANG	***************************************	_ Date:	Jun.	1,20	20	
Signature	Ze WAN	Â				**********	

PATENT REEL: 053117 FRAME: 0538

RECORDED: 07/02/2020