505686823 09/24/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5733633

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PENGCHENG LU	08/11/2017
XUE DONG	08/11/2017
XIAOCHUAN CHEN	08/11/2017
WENQING ZHAO	08/11/2017
LEI WANG	08/11/2017
MING YANG	08/11/2017
QIAN WANG	08/11/2017
RUI XU	08/11/2017
JIAN GAO	08/11/2017
XIAOCHEN NIU	08/11/2017
HAISHENG WANG	08/11/2017
SHENGJI YANG	08/11/2017
CHANGFENG LI	08/11/2017

RECEIVING PARTY DATA

Name:	BOE TECHNOLOGY GROUP CO., LTD.
Street Address:	NO. 10 JIUXIANQIAO RD.
Internal Address:	CHAOYANG DISTRICT
City:	BEIJING
State/Country:	CHINA
Postal Code:	100015
Name:	BEIJING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD.
Street Address:	NO. 8 XIHUANZHONGLU, BDA
City:	BEIJING
State/Country:	CHINA
Postal Code:	100176

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16579936

CORRESPONDENCE DATA

Fax Number: (216)241-0816

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: 216-622-8674

Email: ipdocket@calfee.com, kbuzinski@calfee.com

Correspondent Name: KENNETH J. SMITH

Address Line 1: CALFEE, HALTER & GRISWOLD LLP

Address Line 2: THE CALFEE BUILDING, 1405 EAST SIXTH ST.

Address Line 4: CLEVELAND, OHIO 44114-1607

ATTORNEY DOCKET NUMBER:	31411/04759
NAME OF SUBMITTER:	KENNETH J. SMITH
SIGNATURE:	/ken smith/
DATE SIGNED:	09/24/2019

Total Attachments: 26

source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed_Oath_and_assignment_from_parent_application_as_filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from_parent_application_as_filed_-_fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20_-_31411-04759_-_executed_Oath_and_assignment_from_parent_application_as_filed_-_fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag source=2019-09-20 - 31411-04759 - executed Oath and assignment from parent application as filed - fpph1#pag

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure
As a below	named inventor, I hereby declare that:
This decla	ration
is directed	to: For 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 the 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) with.

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 at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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;

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>CALFEE</u>. HALTER & GRISWOLD <u>LLP</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 INVENTOR	
Inventor:	Pengcheng LU	Date: AUG. 11. 201)
Signature:	Pengcheng LU	

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure		
As a below	As a below named inventor, I hereby declare that:		
This decla	₩ The attached application, or		
io directos	United States application or PCT international application number		
The above-	dentified application was made or authorized to be made by me.		
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.			
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			

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 at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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

PATENT

Docket No. X1501752B1-FPPH16130359US

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>CALFEE</u>, <u>HALTER & GRISWOLD LLP</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 C	F INVENTOR	
Inventor:	Xuc DONG	Date: AUG.//. 201)
Signature:	Xme DONG	
MARKET AND ADDRESS OF THE PARTY		

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure		
As a below	As a below named inventor, I hereby declare that:		
This decla	₩ The attached application, or		
io directos	United States application or PCT international application number		
The above-	dentified application was made or authorized to be made by me.		
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.			
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			

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 at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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;

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>CALFEE</u>, <u>HALTER & GRISWOLD LLP</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 INVENTOR	
Inventor:	Xiaochuan CHEN	Date: AUG, 11. 2017
Signature:	Sianchuan CHBN	

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure		
As a below	As a below named inventor, I hereby declare that:		
This decla	₩ The attached application, or		
io directos	United States application or PCT international application number		
The above-	dentified application was made or authorized to be made by me.		
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.			
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			

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 at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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

PATENT

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>CALFEE</u>. HALTER & GRISWOLD <u>LLP</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 O	OF INVENTOR	
Inventor:	Wenging ZHAO	Date: <u>A[X; 11, 201)</u>
Signature:	Wenging ZHAD	

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure
As a below	named inventor, I hereby declare that:
This decla	₩ The attached application, or
io directos	United States application or PCT international application number
The above-	dentified application was made or authorized to be made by me.
I believe that 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 BOE TECHNOLOGY GROUP CO., LTD., having a place of business at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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

PATE

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>CALFEE</u>, <u>HALTER & GRISWOLD LLP</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 O	F INVENTOR	
Inventor:	Lei WANG	Date: AUG. 11-201)
Signature:	Lei WANG	A Report of a 1 A A A A A Report of the second of the seco

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure		
As a below	As a below named inventor, I hereby declare that:		
This decla	₩ 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 that 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) oth.		

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 at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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;

Docket No.X1501752B1-FPPH16130359US

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>CALFEE</u>, <u>HALTER & GRISWOLD LLP</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 O	OF INVENTOR	1717 755 DAY PARTIES DAY PARTI
Inventor:	Ming YANG	Date: AUG.11. 201)
Signature:	Ming YANG	

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure
As a below	named inventor, I hereby declare that:
This decla	₩ The attached application, or
io directos	United States application or PCT international application number
The above-	dentified application was made or authorized to be made by me.
I believe that 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 BOE TECHNOLOGY GROUP CO., LTD., having a place of business at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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;

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>CALFEE</u>, <u>HALTER & GRISWOLD LLP</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 INVENTOR	
Inventor:	Qian WANG	Date: <u>AUG. H. 201)</u>
Signature:	Qian WANG	

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure
As a below	named inventor, I hereby declare that:
This decla	₩ The attached application or
is uncoled	United States application or PCT international application number
The above-	dentified application was made or authorized to be made by me.
I believe thain the applic	at I am the original inventor or an original joint inventor of a claimed invention eation.
	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 at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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

PATENT

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>CALFEE</u>, <u>HALTER & GRISWOLD LLP</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 C	OF INVENTOR	
Inventor:	Rui XU	Date: AU6, 11. 201)
Signature:	Ruy XU	

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure
As a below	named inventor, I hereby declare that:
This decla	₩ 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.
I believe that 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) with.

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 at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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

PATE

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>CALFEE</u>. HALTER & GRISWOLD <u>LLP</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 INVENTOR	
inventor:	Jian GAO	Date: AUG. 11-201]
**************************************	The fee we	
Signature:	jan GAO	

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure
As a below	named inventor, I hereby declare that:
This decla	₩ The attached application, or
io directos	United States application or PCT international application number
The above-	dentified application was made or authorized to be made by me.
I believe that 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 BOE TECHNOLOGY GROUP CO., LTD., having a place of business at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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

Docket No.X1S01752B1-FPPH16130359US

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>CALFEE</u>, <u>HALTER & GRISWOLD LLP</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 INVENTOR				
Inventor:	Xiaochen NIU	Date:	AUq.11.201)	
Signature:	Manchen NIU	-70 (20 T) 14 T) 12 T) 12 T) 14 T) T) 14 T)		

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure			
As a below named inventor, I hereby declare that:				
This declaration is directed to:				
io anotto	United States application or PCT international application number			
The above-identified application was made or authorized to be made by me.				
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.				
	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.			
Natural designation of the Hill Hill of the grant party pages and pages and the second pages				

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 at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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

PA

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>CALFEE</u>, <u>HALTER & GRISWOLD LLP</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 INVENTOR				
Inventor:	Haisheng WANG	Date: AUG. (1. 201)		
Signature:	Haishovy WANG			

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure			
As a below named inventor, I hereby declare that:				
This declaration is directed to:				
io anotto	United States application or PCT international application number			
The above-identified application was made or authorized to be made by me.				
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.				
	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.			
Natural designation of the Hill Hill of the grant party pages and pages and the second pages				

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 at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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;

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>CALFEE</u>, <u>HALTER & GRISWOLD LLP</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 IN	LEGAL NAME OF INVENTOR			
Inventor:	Shengji YANG	Date: AU(r.1]. 201)		
 Signature:	Shengii YANG			

Title of Invention	Pixel Structure, Display Panel and Driving Method of Pixel Structure			
As a below named inventor, I hereby declare that:				
This declaration is directed to:				
io anotto	United States application or PCT international application number			
The above-identified application was made or authorized to be made by me.				
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.				
	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.			
Natural designation of the Hill Hill of the grant party pages and pages and the second pages				

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 at No.10 Jiuxianqiao Rd., Chaoyang District, Beijing 100015, P. R. China and BELIING BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.8 Xihuanzhonglu, BDA, Beijing 100176, 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/CN2017/073562 filed on February 15, 2017; which in turn claims priority to CN 201610330686.X filed on May 18, 2016; 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;

Docket No.X1501752B1-FPPH16130359US

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>CALFEE</u>, <u>HALTER & GRISWOLD LLP</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.

LEG	LEGAL NAME OF INVENTOR					
Inve	ntor:	Changfeng LI	Date:_	AUG.11, 201)	
Sign	ature:	Changfong II				