

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4818419

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JINCHENG GAO	01/10/2018
XIAOLONG HE	01/10/2018
ZHANFENG CAO	01/10/2018
BIN ZHANG	01/10/2018
QI YAO	01/10/2018
ZHENGLIANG LI	01/10/2018
XUEFEI SUN	01/10/2018
WEI ZHANG	01/10/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	BOE TECHNOLOGY GROUP CO., LTD.
<b>Street Address:</b>	NO.10 JIUXIANQIAO RD.
<b>Internal Address:</b>	CHAOYANG DISTRICT
<b>City:</b>	BEIJING
<b>State/Country:</b>	CHINA
<b>Postal Code:</b>	100015
<b>Name:</b>	HEFEI BOE DISPLAY TECHNOLOGY CO., LTD.
<b>Street Address:</b>	BLOCK 15 GROUP-A ZONE-E OF INDUSTRIAL PARK
<b>Internal Address:</b>	HEFEI NEW STATION
<b>City:</b>	HEFEI CITY, ANHUI
<b>State/Country:</b>	CHINA
<b>Postal Code:</b>	230012
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15751511
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(212)484-3990
<i>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.</i>	
<b>Phone:</b>	2124843900

**Email:** patentdocket@arentfox.com  
**Correspondent Name:** MICHAEL FAINBERG  
**Address Line 1:** 1675 BROADWAY  
**Address Line 2:** ARENT FOX LLP  
**Address Line 4:** NEW YORK, NEW YORK 10019

**ATTORNEY DOCKET NUMBER:** 038835.00023

**NAME OF SUBMITTER:** MICHAEL FAINBERG

**SIGNATURE:** /Michael Fainberg/

**DATE SIGNED:** 02/09/2018

This document serves as an Oath/Declaration (37 CFR 1.63).

**Total Attachments: 24**

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

<b>Title of Invention</b>	<b>SWITCH ELEMENT, ARRAY SUBSTRATE, DISPLAY PANEL, AND DISPLAY DEVICE</b>
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This declaration	
is directed to:	<input checked="" type="checkbox"/> The attached application, or <input type="checkbox"/> _____ United States application or PCT international application number _____ filed on _____.
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.	
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:

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

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

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

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

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Docket No. \_\_\_\_\_  
PX1600011B9CN-WOUS/US1712586FP

LEGAL NAME OF INVENTOR	
Inventor: Jincheng GAO	Date: Jan. 12, 2018
Signature: Jincheng GAO	

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Docket No. \_\_\_\_\_  
PX1600011B9CN-WOUS/US1712586FP

LEGAL NAME OF INVENTOR	
Inventor: <u>Xiaolong HE</u>	Date: <u>Jan. 15, 2018</u>
Signature: <u>Xiaolong HE</u>	



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Docket No. \_\_\_\_\_  
PX1600011B9CN-WOUS/US1712586FP

LEGAL NAME OF INVENTOR	
Inventor: <u>Zhanfeng CAO</u>	Date: <u>Jan 10, 2018</u>
Signature: <u>Zhanfeng CAO</u>	

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Docket No. \_\_\_\_\_  
PX1600011B9CN-WOUS/US1712586FP

LEGAL NAME OF INVENTOR	
Inventor: <u>Bin ZHANG</u>	Date: <u>Jan. 10, 2018</u>
Signature: <u>Bin ZHANG</u>	

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LEGAL NAME OF INVENTOR	
Inventor: <u>QI YAO</u>	Date: <u>Jan. 10. 2018</u>
Signature: <u>Qi Yao</u>	

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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 Arent Fox LLP 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.

Docket No. \_\_\_\_\_  
PX1600011B9CN-WOUS/US1712586FP

LEGAL NAME OF INVENTOR	
Inventor: Zhengliang LI	Date: Jan. 10, 2018
Signature: Zhengliang LI	

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

<b>Title of Invention</b>	<b>SWITCH ELEMENT, ARRAY SUBSTRATE, DISPLAY PANEL, AND DISPLAY DEVICE</b>
<p>As a below named inventor, I hereby declare that:</p> <p>This declaration is directed to:      <input checked="" type="checkbox"/> The attached application, or                                  <input type="checkbox"/> United States application or PCT international application                                  number _____ filed on _____</p> <p>The above-identified application was made or authorized to be made by me.</p> <p>I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.</p> <p>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.</p>	

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 HEFEI BOE DISPLAY TECHNOLOGY CO., LTD., having a  
place of business at Block 15 group-A zone-E of Industrial park in Hefei New  
Station Hefei city, Anhui 230012, 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/CN2017/098824 filed on  
August 24, 2017; which in turn claims priority to 201610971097.X filed on  
October 27, 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;

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.

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Docket No. \_\_\_\_\_  
PX1600011B9CN-WOUS/US1712586FP

LEGAL NAME OF INVENTOR	
Inventor: <u>Xuefei SUN</u>	Date: <u>Jan 10, 2018</u>
Signature: <u>Xuefei Sun</u>	

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

<b>Title of Invention</b>	<b>SWITCH ELEMENT, ARRAY SUBSTRATE, DISPLAY PANEL, AND DISPLAY DEVICE</b>
As a below named inventor, I hereby declare that:	
This declaration	
is directed to:	<input checked="" type="checkbox"/> The attached application, or <input type="checkbox"/> _____ United States application or PCT international application number _____ filed on _____.
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.	
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.	

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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 HEFEI BOE DISPLAY TECHNOLOGY CO., LTD., having a place of business at Block 15 group-A zone-E of Industrial park in Hefei New Station Hefei city, Anhui 230012, 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/CN2017/098824 filed on August 24, 2017; which in turn claims priority to 201610971097.X filed on October 27, 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;



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Docket No. \_\_\_\_\_  
PX1600011B9CN-WOUS/US1712586FP

LEGAL NAME OF INVENTOR	
Inventor: <u>Wei ZHANG</u>	Date: <u>Jan. 10, 2018</u>
Signature: <u>Wei ZHANG</u>	