03/28/2016 503756986

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3803632

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
CHANGFENG LI	12/18/2015
XUE DONG	12/18/2015
HAISHENG WANG	12/18/2015
XIAOCHUAN CHEN	12/18/2015
WENQING ZHAO	12/18/2015
YINGMING LIU	12/18/2015
SHENGJI YANG	12/18/2015
MING YANG	12/18/2015
MUBING LI	12/18/2015

### **RECEIVING PARTY DATA**

Name:	BOE TECHNOLOGY GROUP CO., LTD.
Street Address:	NO. 10, JIUXIANQIAO ROAD
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:	14906480

### **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

> **PATENT REEL: 038116 FRAME: 0409**

**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

ATTORNEY DOCKET NUMBER: 31411/04178

NAME OF SUBMITTER: KENNETH J. SMITH

SIGNATURE: /ken smith/

**DATE SIGNED:** 03/28/2016

**Total Attachments: 18** 

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PATENT REEL: 038116 FRAME: 0410

Title of Invention	ELECTROCHROMIC GRATING, DISPLAY PANEL AND DISPLAY DEVICE
As a below	v named inventor, I hereby declare that:
This decla	The attached application, or
The above-	United States application or PCT international application number PCT/CN2015/ 086867 filed on August 13, 2015. identified application was made or authorized to be made by me.
I believe tha in the applic	at I am the original inventor or an original joint inventor of a claimed invention cation.
	knowledge that any willful false statement made in this declaration is under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) oth.
<del>-</del> -	

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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
CN 201510064931.2 filed on February 6, 2015; which in turn claims
priority to filed on; 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.

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### **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	/ENTOR	
Inventor:	Changfeng LI	Date: 18-DEC-2015
Signature:	Changferg L1	

Title of Invention	ELECTROCHROMIC GRATING, DISPLAY PANEL AND DISPLAY DEVICE
As a below	v named inventor, I hereby declare that:
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is directed	to: The attached application, or
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right to file foreign applications under the provisions of any convention or treaty and
claim priority based on such application in the United States;
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PATENT REEL: 038116 FRAME: 0413

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LEGAL NAME OF INV	ENTOR		
Inventor:	Xue DONG	Date:	18. Dec. 2015
Signature:	xue DON6		

Title of Invention	ELECTROCHROMIC GRATING, DISPLAY PANEL AND DISPLAY DEVICE
As a below	named inventor, I hereby declare that:
This decla	ration
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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
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PATENT REEL: 038116 FRAME: 0415

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LEGAL NAME OF I	NVENTOR		
Inventor:	Haisheng WANG	Date: <i>[</i>	3. Dec. 2015
Signature:	Hai sheng WANG		

Title of Invention	ELECTROCHROMIC GRATING, DISPLAY PANEL AND DISPLAY DEVICE
As a below	named inventor, I hereby declare that:
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LEGAL NAME OF INVE	ENTOR	
Inventor:	Xiaochuan CHEN	Date: 18. Dec. 2015
Signature:	Xiao chuan CHBN	

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LEGAL NAME OF INVEN	TOR		
Inventor:	Wenqing ZHAO	Date:_	18. Dec. 2015
Signature:	Wenging 2HAO		

Title of Invention	ELECTROCHROMIC GRATING, DISPLAY PANEL AND DISPLAY DEVICE
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LEGAL NAME OF INVEN	TOR		
Inventor:	Yingming LIU	Date:	18. Dec. 2015
Signature:	Ying ming LLU		

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### **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:	Shengji YANG	Date:	18.Dec. 2015	
Signature:	Shengji YANG			

Title of Invention	ELECTROCHROMIC GRATING, DISPLAY PANEL AND DISPLAY DEVICE			
As a below named inventor, I hereby declare that:				
This decla	ration			
is directed	to: The attached application, or			
The above-	United States application or PCT international application number PCT/CN2015/ 086867_filed on August 13, 2015 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.			

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 Road, Chaoyang District, Beijing
100015, P. R. China, and BEIJING 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
CN 201510064931.2 filed on February 6, 2015; which in turn claims
priority to filed on; 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</u> & <u>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**

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LEGAL NAME OF INVENTOR			
Inventor:	Ming YANG	Date: 18. DEC. 2015	
Signature:	Ming YANG		

Title of Invention	ELECTROCHROMIC GRATING, DISPLAY PANEL AND DISPLAY DEVICE		
As a below named inventor, I hereby declare that:			
This decla	The attached application, or		
United States application or PCT international application number <a href="PCT/CN2015/086867">PCT/CN2015/086867</a> filed on <a href="August 13">August 13</a> , <a href="2015">2015</a> . 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:

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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**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.

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LEGAL NAME OF INVENTOR				
Inventor:	Mubing LI	Dale: 18. Dec. 2015		
Signature:	Mubing L1			