PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4432113

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZUQIANG WANG	05/08/2017
YUQING YANG	05/08/2017
LUJIANG HUANGFU	05/08/2017

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

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15529963	

CORRESPONDENCE DATA

Fax Number: (612)339-6580

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: 6123391863

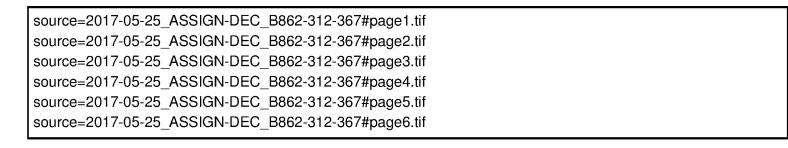
Email: bgould@kinney.com **GRANT M. MCNEILLY Correspondent Name:** Address Line 1: KINNEY & LANGE, P.A. Address Line 2: 312 SOUTH THIRD STREET

Address Line 4: MINNEAPOLIS, MINNESOTA 55415

ATTORNEY DOCKET NUMBER:	B862.312-367
NAME OF SUBMITTER:	GRANT M. MCNEILLY
SIGNATURE:	/Grant M. McNeilly/
DATE SIGNED:	05/25/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 6

PATENT REEL: 042512 FRAME: 0190



PATENT REEL: 042512 FRAME: 0191

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

Title of Invention	Array Substrate And Method Of Manufacturing The Same, And Display Panel and Display Apparatus Including The Array Substrate
As a below r	amed inventor, I hereby declare that:
This declars	The attached application, or United States application or PCT international application number filed on
	entified application was made or authorized to be made by me.
I believe that application.	I am the original inventor or an original joint inventor of a claimed invention in the
I hereby ack under 18 U.:	nowledge that any willful false statement made in this declaration is punishable in the 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, China, (hereafter 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/CN2016/099324 filed on 2016-09-19; which in turn claims priority to 201610058612.5 filed on 2016-01-28; 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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PATENT REEL: 042512 FRAME: 0192 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 **KINNEY & LANGE** 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: Zuqiang WANG	Date: <u>May 8, 2017</u>
Signature: Zuqiang WANG	

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

Title of Invention	Array Substrate And Method Of Manufacturing The Same, And Display Panel and Display Apparatus Including The Array Substrate			
As a below n	amed inventor, I hereby declare that:			
This declarat is directed to The above-ic	The attached application, or			
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 <u>BOE TECHNOLOGY GROUP CO.LTD</u>, having a place of business at <u>No.10 Jiuxianqiao Rd.</u>, Chaoyang District, Beijing 100015, China, (hereafter 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/CN2016/099324 filed on <u>2016-09-19</u>; which in turn claims priority to 201610058612.5 filed on <u>2016-01-28</u>; such applications and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such inventions; all original and reissued patents which have been or shall be issued in the United States and all foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

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

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

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

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LEGAL NAME OF INVENTOR				
Inventor: Yuqing YANG	Date:_	May	\$,2017	
Signature: Kiging YANG		·		

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This declarates directed to	The attached application or					
I believe that application.	I am the original inventor or an original joint inventor of a claimed invention in the					
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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;

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PATENT REEL: 042512 FRAME: 0196 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;

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LEGAL NAME OF INVENTOR		
Inventor: Lajiang HUANGFU	Date: May 8, 2	017
Signature: Lujiang HUANGJU	<u> </u>	