05/12/2020 506054762

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6101476

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DONGSHENG LI	02/05/2018
JIANMING SUN	02/05/2018
HUILI WU	02/05/2018
SHIPEI LI	02/05/2018
QINGRONG REN	02/05/2018

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:	16872412

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

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

KENNETH J. SMITH **Correspondent Name:**

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:	31411/04808
NAME OF SUBMITTER:	KENNETH J. SMITH
SIGNATURE:	/ken smith/
DATE SIGNED:	05/12/2020

PATENT REEL: 052632 FRAME: 0149

Total Attachments: 10

source=31411-04808_-_executed_Oath_and_assignment_from_parent_-_fpph20130011us#page1.tif source=31411-04808_-_executed_Oath_and_assignment_from_parent_-_fpph20130011us#page2.tif source=31411-04808_-_executed_Oath_and_assignment_from_parent_-_fpph20130011us#page3.tif source=31411-04808_-_executed_Oath_and_assignment_from_parent_-_fpph20130011us#page4.tif source=31411-04808_-_executed_Oath_and_assignment_from_parent_-_fpph20130011us#page5.tif source=31411-04808_-_executed_Oath_and_assignment_from_parent_-_fpph20130011us#page6.tif source=31411-04808_-_executed_Oath_and_assignment_from_parent_-_fpph20130011us#page7.tif source=31411-04808_-_executed_Oath_and_assignment_from_parent_-_fpph20130011us#page8.tif source=31411-04808_-_executed_Oath_and_assignment_from_parent_-_fpph20130011us#page9.tif source=31411-04808_- executed_Oath_and_assignment_from_parent_-_fpph20130011us#page9.tif source=31411-04808_- executed_Oath_and_assignment_from_parent_-_fpph20130011us#page9.tif source=31411-04808_- executed_Oath_and_assignment_from_parent_-_fpph20130011us#page9.tif

PATENT REEL: 052632 FRAME: 0150

Title of Invention	DISPLAY SUBSTRATE, DISPLAY PANEL AND DISPLAY DEVICE
As a below	named inventor, I hereby declare that:
This declar	ration
is directed	to:
	United States application or PCT international application number
The above-	dentified application was made or authorized to be made by me.
l 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) 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	TRANSFE	R to BOE TECHN	NOLOGY GROUP CO., LTD.,
havii	ng a place of business	at No.10 Jiu:	xiangiao Rd., Chac	yang District, Beijing, 100015,
<u>P. R</u>	. China (each hereina	fter referred	to as "ASSIGNE	E"), the entire right, title and
inter	est for the United Stat	es and all fe	oreign countries in	and to any and all inventions
whic	h are disclosed in the	above-ident	ified application fo	or United States Letters Patent,
whic	h has been executed by	the undersi	gned concurrently	herewith, which claims priority
to	CN 201710648337.7	_filed on	August 1, 2017	_; which in turn claims priority
to	fil	ed on	; such	applications and all divisional,
				lications for patent which have
been	or shall be filed in	the United	States and all for	eign countries on any of such
inver	ntions; all original and	l reissued pa	atents which have	been or shall be issued in the
Unite	ed States and all foreig	n countries	on such inventions	; and specifically including the
right	to file foreign applic	ations under	r the provisions of	f any convention or treaty and
alain		4	. d II 's 100 s	
Clain	n priority based on sucl	n application	i in the United Stat	es;

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

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be

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

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

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the agents and attorneys of <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: Dongsheng LI	Date: FFR. 5, 2018
Signature: Donysheng []	

Title of Invention	DISPLAY SUBSTRATE, 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 numberfiled on
ne above-	identified application was made or authorized to be made by me.
l believe thain 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.

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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 (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 201710648337.7 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;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be

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

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LEGAL NAME	E OF INVENTOR	_
Inventor:	Jianming SUN	Date: FEB. 5. 2018
Signature:	Jianming SUN	

Title of Invention	DISPLAY SUBSTRATE, DISPLAY PANEL AND DISPLAY DEVICE
As a below	named inventor, I hereby declare that:
This decla	ration
is directed	to:
	United States application or PCT international application number
The above-	identified application was made or authorized to be made by me.
l believe thain 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.

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having a place	of business at No.10 Ji	uxianqiao Rd., Chaoyang District, Beijing, 100015,
<u>P. R. China (</u>	each hereinafter referre	d 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 disc	losed in the above-ider	ntified application for United States Letters Patent,
which has been	n executed by the under	signed concurrently herewith, which claims priority
to <u>CN 2017</u>	10648337.7 filed on _	August 1, 2017; which in turn claims priority
to	El.J.	t analy applications and all divisional
ω	nied on	; such applications and all divisional,
		e and all other applications for patent which have
continuing, su	bstitute, renewal, reissu	
continuing, su been or shall	bstitute, renewal, reissu be filed in the United	e and all other applications for patent which have
continuing, su been or shall inventions; all	bstitute, renewal, reissu be filed in the United original and reissued p	te and all other applications for patent which have States and all foreign countries on any of such
continuing, subeen or shall inventions; all United States	bstitute, renewal, reissu be filed in the United original and reissued p and all foreign countries	te and all other applications for patent which have States and all foreign countries on any of such patents which have been or shall be issued in the
continuing, subeen or shall inventions; all United States aright to file for	bstitute, renewal, reissu be filed in the United original and reissued p and all foreign countries	se and all other applications for patent which have States and all foreign countries on any of such patents which have been or shall be issued in the s on such inventions; and specifically including the er the provisions of any convention or treaty and

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

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be

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

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LEGAL NAME	E OF INVENTOR	
Inventor:	Huili WU	Date: FEB. 5. 2018
Signature:	Huili WU	

Title of Invention	DISPLAY SUBSTRATE, DISPLAY PANEL AND DISPLAY DEVICE
As a below	named inventor, I hereby declare that:
This decla	ration
is directed	to: 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 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.

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LEGAL NAME OF INVENTOR				
Inventor:	Shipei LI	Date: FEB. 5. 2017		
Signature:	Shipei LI			

Title of Invention	DISPLAY SUBSTRATE, DISPLAY PANEL AND DISPLAY DEVICE
As a below	named inventor, I hereby declare that:
This declar	ration
is directed	to:
	United States application or PCT international application number
The above-	identified application was made or authorized to be made by me.
	at I am the original inventor or an original joint inventor of a claimed invention
	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.

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LEGAL NAME OF INVENTOR				
l	entor: Oingrong REN Date: FB · 5 · 2018			
5	nature: Qing rong REN	*****		