505195082 11/16/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

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SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the SECOND ASSIGNEE previously recorded on Reel 047119 Frame 0187. Assignor(s) hereby confirms the ASSIGNMENT.

CONVEYING PARTY DATA

Name	Execution Date
YUANQI ZHANG	07/12/2018
PENG XU	07/12/2018

RECEIVING PARTY DATA

Name:	BOE TECHNOLOGY GROUP CO., LTD.
Street Address:	NO. 10 JIUXIANQIAO RD., CHAOYANG DISTRICT,
City:	BEIJING
State/Country:	CHINA
Postal Code:	100015
Name:	CHENGDU BOE OPTOELECTRONICS TECHNOLOGY CO., LTD.
Street Address:	NO. 1188 HEZOU RD., (WEST ZONE), HI-TECH DEVELOPMENT ZONE, CHENGDU
City:	SICHUAN
State/Country:	CHINA
Postal Code:	611731

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16156056

CORRESPONDENCE DATA

Fax Number: (248)358-3351

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: 2482262888

Email: hgreenwell@brookskushman.com

Correspondent Name: HEATHER GREENWELL Address Line 1: 1000 TOWN CENTER

Address Line 2: 22ND FLOOR

Address Line 4: SOUTHFIELD, MICHIGAN 48075

ATTORNEY DOCKET NUMBER: | BOED0887PUSA

PATENT REEL: 048104 FRAME: 0017

EPAS ID: PAT5241851

NAME OF SUBMITTER:	HEATHER GREENWELL
SIGNATURE:	/Heather Greenwell/
DATE SIGNED:	11/16/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 5	
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source=BOED0887PUSA_Assignment#page1.tif source=BOED0887PUSA_Assignment#page2.tif source=BOED0887PUSA_Assignment#page3.tif source=BOED0887PUSA_Assignment#page4.tif source=Original Coversheet#page1.tif

> PATENT REEL: 048104 FRAME: 0018

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

	DISPLAY SUBSTRATE, METHOD AND DEVICE FOR MANUFACTURING DISPLAY SUBSTRATE, 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 $\frac{16/156,056}{1000000000000000000000000000000000000$
believe the	at I am the original inventor or an original joint inventor of a claimed invention cation.
	knowledge that any willful faise 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 Jiuxiangiao Rd. Chaoyang District, Beijing 1000) S. P.R. Chibs, and CHENGDU BOE OPTOFLECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.1188 Hezuo Rd., (West Zone), Hi-tech Development Zone Chengdu, Sichuan, 61.1731, 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 201810089790.3 filed on January 30, 2018; 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;

3

PATENT REEL: 048104 FRAME: 0019

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 **Brooks Kushman** P.C. 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.

Secretary Control of the Control of
LEGAL NAME OF INVENTOR
Inventor: Yuangi ZHANG Date: July . IL , 2018
Signature: Yuman 2HAVA

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

	DISPLAY SUBSTRATE, METHOD AND DEVICE FOR MANUFACTURING DISPLAY SUBSTRATE, AND DISPLAY DEVICE
As a belov	v 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 16/156,056 filed on Oct. 10, 2018 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.

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., LID., having a place of business at No.10 Juxiangian Rd., Chaoyang District, Beijing 100015, P.R. China, and CHENGDU BOE OPTOELECTRONICS TECHNOLOGY CO., LTD., having a place of business at No.1188 Hezon Rd., (West Zone), Hi-tech Development Zone, Chengdu, Sichuan, 611731, 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 201810089790.3 filed on January 30. 2018; 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;

3

PATENT REEL: 048104 FRAME: 0021

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 **Brooks Kushman P.C.** 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.

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	LEGAL NAME OF INVENTOR
	Single of the second se
	Inventor: Peng XU Date: //// // // /// // // // // // // // //
	Signature: Deng X a l
•••	

505134267 10/10/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5181030

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUANQI ZHANG	07/12/2018
PENG XU	07/12/2018

RECEIVING PARTY DATA

Name:	BOE TECHNOLOGY GROUP CO., LTD.
Street Address:	NO. 10 JIUXIANQIAO RD., CHAOYANG DISTRICT
City:	BEIJING
State/Country:	CHINA
Postal Code:	100015
Name:	CHENGDU BOE OPTOELECTRONICS TECHNOLOGY CO, LTD.
Street Address:	NO. 1188 HEZUO RD., (WEST ZONE), HI-TECH DEVELOPMENT ZONE, CHENGDU
City:	SICHUAN
State/Country:	CHINA
Postal Code:	611731

PROPERTY NUMBERS Total: 1

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Application Number:	16156056

CORRESPONDENCE DATA

Fax Number: (248)358-3351

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.

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Correspondent Name: BROOKS KUSHMAN P.C. Address Line 1: 1000 TOWN CENTER

Address Line 2: 22ND FLOOR

Address Line 4: SOUTHFIELD, MICHIGAN 48075

ATTORNEY DOCKET NUMBER:	BOED0887PUSA
NAME OF SUBMITTER:	MICHAEL S. BRODBINE
SIGNATURE:	/Michael S. Brodbine/

PATENT
RECORDED: 11/16/2018 REEL: 048104 FRAME: 0023