

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4914863

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| XIAOLIANG DING | 02/06/2018 |
| XUE DONG | 02/06/2018 |
| JING LV | 02/06/2018 |
| HAISHENG WANG | 02/06/2018 |
| CHUNWEI WU | 02/06/2018 |
| YINGMING LIU | 02/06/2018 |
| WEI LIU | 02/06/2018 |
| PENGPENG WANG | 02/06/2018 |
| YANLING HAN | 02/06/2018 |
| XUEYOU CAO | 02/06/2018 |
| 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 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 15768218 |
| CORRESPONDENCE DATA | |
| Fax Number: | (248)358-3351 |
| <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> | |
| Phone: | 2483584400 |
| Email: | mkatirtzidakis@brookskushman.com |
| Correspondent Name: | BROOKS KUSHMAN P.C. |
| Address Line 1: | 1000 TOWN CENTER |
| Address Line 2: | TWENTY-SECOND FLOOR |
| Address Line 4: | SOUTHFIELD, MICHIGAN 48075 |
| ATTORNEY DOCKET NUMBER: | BOED0791PUSA |

PATENT

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|---|--|
| NAME OF SUBMITTER: | MICHAEL S. BRODBINE |
| SIGNATURE: | /Michael S. Brodbine/ |
| DATE SIGNED: | 04/13/2018 |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |
| Total Attachments: 20 source=BOED0791PUSA_Assign_and_Decl#page1.tif source=BOED0791PUSA_Assign_and_Decl#page2.tif source=BOED0791PUSA_Assign_and_Decl#page3.tif source=BOED0791PUSA_Assign_and_Decl#page4.tif source=BOED0791PUSA_Assign_and_Decl#page5.tif source=BOED0791PUSA_Assign_and_Decl#page6.tif source=BOED0791PUSA_Assign_and_Decl#page7.tif source=BOED0791PUSA_Assign_and_Decl#page8.tif source=BOED0791PUSA_Assign_and_Decl#page9.tif source=BOED0791PUSA_Assign_and_Decl#page10.tif source=BOED0791PUSA_Assign_and_Decl#page11.tif source=BOED0791PUSA_Assign_and_Decl#page12.tif source=BOED0791PUSA_Assign_and_Decl#page13.tif source=BOED0791PUSA_Assign_and_Decl#page14.tif source=BOED0791PUSA_Assign_and_Decl#page15.tif source=BOED0791PUSA_Assign_and_Decl#page16.tif source=BOED0791PUSA_Assign_and_Decl#page17.tif source=BOED0791PUSA_Assign_and_Decl#page18.tif source=BOED0791PUSA_Assign_and_Decl#page19.tif source=BOED0791PUSA_Assign_and_Decl#page20.tif | |

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

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|---|--|
| Title of Invention | FINGERPRINT PHOTOCURRENT DETECTION UNIT, FINGERPRINT IDENTIFIER, DRIVING METHOD AND DISPLAY DEVICE |
| As a below named inventor, I hereby declare that: | |
| This declaration | |
| is directed to: | The attached application, or |
| | <input checked="" type="checkbox"/> United States application or PCT international application number <u>15768.218</u> filed on <u>April 13, 2018</u> |
| 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:

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, (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/CN2017/101222 filed on September 11, 2017; which in turn claims priority to CN 201610829135.8 filed on September 18, 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;

Docket No. BOED0791PUSA

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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| | |
|----------------------------------|---------------------------|
| LEGAL NAME OF INVENTOR | |
| Inventor: <u>Xiaoliang DING</u> | Date: <u>Feb. 6, 2018</u> |
| Signature: <u>Xiao Yang DING</u> | |

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| LEGAL NAME OF INVENTOR | |
| Inventor: <u>Xue DONG</u> | Date: <u>Feb. 6, 2018</u> |
| Signature: <u>Xue Dong</u> | |

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| LEGAL NAME OF INVENTOR | |
| Inventor: <u>Jing LV</u> | Date: <u>Feb. 6, 2018</u> |
| Signature: <u>Jing LV</u> | |

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| LEGAL NAME OF INVENTOR | |
| Inventor: <u>Haisheng WANG</u> | Date: <u>Feb. 6, 2018</u> |
| Signature: <u>Haisheng WANG</u> | |

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| LEGAL NAME OF INVENTOR | |
| Inventor: <u>Chunwei WU</u> | Date: <u>Feb 6, 2018</u> |
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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.

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|---------------------------------|---------------------------|
| LEGAL NAME OF INVENTOR | |
| Inventor: <u>Yingming LIU</u> | Date: <u>Feb. 6, 2018</u> |
| Signature: <u>Ying ming LIU</u> | |

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

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| Title of Invention | FINGERPRINT PHOTOCURRENT DETECTION UNIT, FINGERPRINT IDENTIFIER, DRIVING METHOD AND DISPLAY DEVICE |
| <p>As a below named inventor, I hereby declare that:</p> <p>This declaration</p> <p>is directed to: The attached application, or</p> <p style="padding-left: 150px;"><input checked="" type="checkbox"/> United States application or PCT international application number <u>15/768,218</u> filed on <u>April 13, 2018</u></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 Jiaxiangqiao Rd., Chaoyang District, Beijing, 100015, P.R. China, (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/CN2017/101222 filed on September 11, 2017; which in turn claims priority to CN 201610829135.8 filed on September 18, 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.

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.

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| LEGAL NAME OF INVENTOR | |
| Inventor: <u>Wei LU</u> | Date: <u>Feb. 6, 2018</u> |
| Signature: <u>Wei LU</u> | |

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| LEGAL NAME OF INVENTOR | |
| Inventor: <u>Pengpeng WANG</u> | Date: <u>Feb. 6, 2018</u> |
| Signature: <u>Peng peng WANG</u> | |

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| LEGAL NAME OF INVENTOR | |
| Inventor: <u>Yanling HAN</u> | Date: <u>Feb 6, 2018</u> |
| Signature: <u>Yanling HAN</u> | |

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| LEGAL NAME OF INVENTOR | |
| Inventor: <u>Xueyou CAO</u> | Date: <u>Feb. 6, 2018</u> |
| Signature: <u>Xueyou CAO</u> | |