### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT6848001 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
LIPING LEI	05/05/2021
CHANGCHENG LIU	05/05/2021
YANGYANG ZHANG	05/05/2021
HONGLEI ZHANG	05/05/2021
YONGDA MA	05/05/2021

#### **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:	17428412

#### **CORRESPONDENCE DATA**

**Fax Number:** (412)471-4094

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:** 4124718815

Email: assignments@webblaw.com
Correspondent Name: THE WEBB LAW FIRM

Address Line 1: 1 GATEWAY CENTER 420 FT. DUQUESNE BLVD. SUITE 1200

Address Line 2: 420 FT. DUQUESNE BLVD, SUITE 1200
Address Line 4: PITTSBURGH, PENNSYLVANIA 15222

ATTORNEY DOCKET NUMBER:	9440-2104625
NAME OF SUBMITTER:	KIRK M. MILES, REG NO.: 37,891
SIGNATURE:	/Kirk M. Miles/
DATE SIGNED:	08/04/2021

**Total Attachments: 10** 

PATENT REEL: 057079 FRAME: 0061

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	HUMAN-COMPUTER INTERACTION METHOD, APPARATUS AND SYSTEM AND COMPUTER-READABLE STORAGE MEDIUM
As a below	named inventor, I hereby declare that:
This declar	ration
is directed	to: F The attached application, or
The above-i	United States application or PCT international application numberfiled ondentified application was made or authorized to be made by me.
believe than the applic	it I am the original inventor or an original joint inventor of a claimed invention ation.
hereby ac ounishable /ears, or bo	cknowledge 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.1	9 Jiuxiangiao Rd., Chaoyane District
Beiling, 100015, P.K. China	(hereinafter referred to as
"ASSIGNEE"), the entire right, title and interest	est for the United States and all foreign
countries in and to any and all inventions which	h are disclosed in the above-identified
application for United States Letters Patent	which has been executed by the
undersigned concurrently herewith, wh	iich claims priority to
PC1/CN2020/125126 filed on Oct.30,2020	; such applications and all divisional
continuing, substitute, renewal, reissue and all c	ther applications for patent which have
been or shall be filed in the United States and	I all foreign countries on any of such
inventions; all original and reissued patents wh	ich have been or shall be issued in the
United States and all foreign countries on such in	eventions, and specifically including the
right to file foreign applications under the prov	defense of any constantion or tractic and
claim priority based on such application in the U	rited States
production of sacre approximation in the C	minor minor,

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

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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>The Webb Law Firm</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: Liping LEL Date:	**************************************	
signature: 175 mg lei		*******

Title of HUMAN-COMPUTER INTERACTION METHOD, APPARATUS Invention AND SYSTEM AND COMPUTER-READABLE STORAGE MEDIUM
As a below named inventor, I hereby declare that:
This declaration
is directed to: Fig. The attached application, or
United States application or PCT international application number filed on 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.
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 Jiuxiangiao 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 PCT/CN2020/125126 filed on Oct.30,2020 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

1

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 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>The Webb Law Firm</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.

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LEGAL NAME OF INVENTOR
Inventor. Changcheng LIU Date: May, 5, 201
 Signature: Cleany Chans Ulu

***************************************
HUMAN-COMPUTER INTERACTION METHOD, APPARATUS AND SYSTEM AND COMPUTER-READABLE STORAGE MEDIUM
named inventor, I hereby declare that:
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to: Fine attached application, or
United States application or PCT international application number filed on
dentified application was made or authorized to be made by me. t I am the original inventor or an original joint inventor of a claimed invention ation.
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) h.

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,naving a place of business atNo.10 Juxiangiao Rd. Chaoyang District
thereinafter referred to as
ASSISTED), 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/CN2020/125126 filed on Oct.30.2020; 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 applications of the fire foreign applications under the applications of the foreign applications and the fire foreign applications are applications are applications and the fire foreign applications are applications are applications and the fire foreign applications are applications and the fire foreign applications are applications are applications and the fire foreign applications
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

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ASSIGNOR HEREBY GRANTS to the agents and attorneys of <u>The Webb Law Firm</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.

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LEGAL NAME OF INVENTOR		************
Inventor: Yangyang ZHANG	Oate: <u>                                     </u>	
 Signature Yeng Yong Zhang	1	

Title of Invention	HUMAN-COMPUTER INTERACTION METHOD, APPARATUS AND SYSTEM AND COMPUTER-READABLE STORAGE MEDIUM
As a belov	v named inventor, I hereby declare that:
This decla	ration
is directed	to: F The attached application, or
The above.	United States application or PCT international application number filed on
	dentified application was made or authorized to be made by me.  It I am the original inventor or an original joint inventor of a claimed invention action.
l hereby ac punishable years, or bo	cknowledge 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.

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having a place of business at No.10 Jiuxiangiao Rd., Chaoyang District
Selling 1999 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
EVANABLE 120120 tiled on Oct 30.2020 : 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;
and brooms pased on seen additionation in the Officed 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

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ŧ	EGAL NAME OF INVENTOR
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}	and the second s
}	ventor: Hanglei ZHANG Date: KARY 1 2024
	ionature: Hongle) Zhang
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	HUMAN-COMPUTER INTERACTION METHOD, APPARATUS AND SYSTEM AND COMPUTER-READABLE STORAGE MEDIUM			
As a below named inventor, I hereby declare that:				
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The above-	identified application was made or authorized to be made by me.			
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Beijing 100015, P.R. China (hereinafter referred to as
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countries in and to any and all inventions which are disclosed in the above-identified
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LEGAL NAME OF INVENTOR	
Inventor: Yongda MA Date: 1/09, 5,2014	
 Signature: Yang da 198	

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