

PATENT ASSIGNMENT COVER SHEET

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Assignment ID: PATI556920

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
BOE Technology Group Co., Ltd.	09/30/2024
RECEIVING PARTY DATA	
Company Name:	Beijing BOE Technology Development Co., Ltd.
Street Address:	Room 407, Building 1, No.9 Dize Road, BDA
City:	Beijing
State/Country:	CHINA
Postal Code:	100176
PROPERTY NUMBERS Total: 18	
Property Type	Number
Application Number:	17912061
Application Number:	17603011
Application Number:	18275013
Application Number:	17427107
Application Number:	17637819
Application Number:	17419307
Application Number:	17909763
Application Number:	17909445
Application Number:	17762093
Application Number:	17417775
Application Number:	17763198
Application Number:	17637815
Application Number:	17429359
Application Number:	18580163
Application Number:	17260563
Application Number:	18023003
Application Number:	18027373
Application Number:	17266622
CORRESPONDENCE DATA	

Fax Number: 2532959447

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SIGNATURE:	Yolanda Liu
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DATE SIGNED:	10/11/2024
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Total Attachments: 11

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ASSIGNMENT

THIS ASSIGNMENT is made and entered into by and between **BOE Technology Group Co., Ltd.**, ("Assignors") having an address of No.10 Jiuxianqiao Rd., Chaoyang District, Beijing, 100015, P.R. China, and **Beijing BOE Technology Development Co., Ltd.** ("Assignee") having an address of Room 407, Building 1, No.9 Dize Road, BDA, Beijing, 100176, P.R. China.

WHEREAS, Assignor wishes to confirm assignment to Assignee and assign to Assignee if such assignment has not already been effected, and Assignee wishes to acquire from Assignor, the entire right, and title in and to all Intellectual Property set forth herein that is owned by the Assignor in the event the Assignee has not already acquired these rights.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby transfers and assigns to Assignee its entire right and title in and to the patents and patent applications listed on Schedule A hereto and hereby confirm its transfer and assign in the event it has not already been made;

AND Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks, the Register of Copyrights of the United States, and any other applicable governmental authority or registrar (including in any applicable foreign country), to record Assignee as assignee and owner of the Trademarks, Patents and/or Copyrights.

[Signature page follows]

IN WITNESS WHEREOF, Assignor and Assignee have caused this Assignment to be executed by their duly authorized representatives.

BOE TECHNOLOGY GROUP CO., LTD.

By: Xinguo LI
Name: Xinguo LI
Title: Head of Technology & IP anagement Center / Vice President
Date: Sep. 30th, 2024

ACCEPTED BY: Beijing BOE Technology Development Co., Ltd.

By: Xinguo LI
Name: Xinguo LI
Title: General Manager
Date: Sep. 30th, 2024

SCHEDULE A

No.	US Application Number	Filed Date	Title
1	17/828,194	2021-05-31	DISPLAY PANEL AND DISPLAY DEVICE
2	17/296,592	2020-08-07	DISPLAY SUBSTRATE AND DISPLAY DEVICE
3	17/783,090	2021-03-19	DISPLAY PANEL AND METHOD FOR MANUFACTURING SAME
4	17/262,306	2020-03-31	ARRAY SUBSTRATE, DISPLAY PANEL AND DISPLAY DEVICE
5	17/788,426	2021-04-30	DISPLAY PANEL AND DISPLAY DEVICE
6	18/452,795	2020-10-23	PIXEL CIRCUIT, DISPLAY PANEL AND DISPLAY APPARATUS
7	18/033,487	2020-10-27	TERMINAL CONTROL METHOD, APPARATUS, AND SYSTEM
8	17/603,011	2020-12-28	Light-emitting Substrate and Preparation Method Thereof, Light-emitting Module, and Display Module
9	17/789,723	2021-03-04	TOUCH-CONTROL ELECTRODE STRUCTURE, DISPLAY PANEL, AND ELECTRONIC DEVICE
10	17/757,928	2021-08-31	TOUCH DISPLAY PANEL AND DISPLAY DEVICE
11	17/311,583	2020-09-11	METHOD FOR TRAINING JOINT MODEL, OBJECT INFORMATION PROCESSING METHOD, APPARATUS, AND SYSTEM
12	17/788,585	2021-06-22	COMMUNICATION METHODS AND APPARATUSES, ELECTRONIC DEVICES AND COMPUTER READABLE STORAGE MEDIA

13	17/514,576	2021-10-29	EVENT EXTRACTION METHOD, DEVICE AND STORAGE MEDIUM
14	18/044,065	2022-06-24	PIXEL CIRCUIT, DRIVING METHOD AND DISPLAY DEVICE
15	17/767,763	2021-03-09	OPTICAL COMMUNICATION DEVICE, OPTICAL COMMUNICATION SYSTEM, AND METHOD FOR ESTABLISHING COMMUNICATION CONNECTION
16	18/041,076	2022-05-20	DISPLAY APPARATUS
17	18/024,413	2021-08-19	TOUCH STRUCTURE, DISPLAY PANEL, AND ELECTRONIC DEVICE
18	17/607,493	2020-11-18	ARRAY SUBSTRATE AND DISPLAY DEVICE
19	17/912,061	2021-11-08	Display Substrate and Preparation Method thereof, and Display Apparatus
20	18/015,623	2022-01-26	DISPLAY PANEL AND MANUFACTURING METHOD THEREOF, AND DISPLAY DEVICE
21	17/924,137	2021-01-22	DISPLAY SUBSTRATE AND DISPLAY APPARATUS
22	18/250,456	2020-10-27	DISPLAY SUBSTRATE, DETECTION METHOD THEREFOR, AND DISPLAY DEVICE
23	18/543,726	2019-11-29	DISPLAY SUBSTRATE AND DISPLAY DEVICE
24	17/598,601	2020-11-27	PHASE SHIFTER AND ANTENNA
25	17/487,079	2021-09-28	SERVICE DEPLOYMENT METHOD, DEVICE, SYSTEM, AND COMPUTER-READABLE STORAGE MEDIUM
26	17/427,261	2020-11-27	DISPLAY SUBSTRATE, MASK, AND DISPLAY DEVICE

27	16/987,610	2014-06-23	COMPOSITE FILM AND MANUFACTURING METHOD THEREOF, AND ENCAPSULATION STRUCTURE INCLUDING THE COMPOSITE FILM
28	18/026,233	2022-06-30	DISPLAY MODULE AND PREPARATION METHOD
29	17/611,923	2020-05-21	METHOD, APPARATUS, AND DEVICE FOR SUBSCRIBING RESOURCES IN FIELD OF INTERNET OF THINGS, AND STORAGE MEDIUM
30	17/436,756	2020-12-25	MASK SHEET INCLUDING RIB AND MASK DEVICE
31	18/246,708	2022-06-30	DISPLAY SUBSTRATE AND DISPLAY APPARATUS
32	17/618,710	2021-02-23	DISPLAY MODULE, METHOD FOR MANUFACTURING THE SAME, AND DISPLAY DEVICE
33	18/275,013	2022-07-21	DISPLAY PANEL AND DISPLAY DEVICE
34	18/004,888	2022-02-17	ELECTRONIC APPARATUS AND METHOD OF OPERATING ELECTRONIC APPARATUS
35	17/251,575	2020-05-25	DISPLAY SUBSTRATE, MANUFACTURING METHOD AND DISPLAY DEVICE
36	17/427,107	2021-01-06	DISPLAY PANEL AND PREPARATION METHOD THEREFOR, AND DISPLAY APPARATUS
37	17/921,093	2021-10-26	TOUCH ELECTRODE STRUCTURE WITH BRANCH ELECTRODES, TOUCH PANEL AND DISPLAY DEVICE
38	17/626,657	2021-03-11	ULTRASONIC IMAGING METHOD AND DEVICE, AND STORAGE MEDIUM
39	17/637,819	2021-04-28	Pluggable Display System and Power-on Method thereof
40	17/419,307	2020-09-28	Organic Light Emitting Device and Display Apparatus

41	17/364,625	2021-06-30	BLUE ELECTROLUMINESCENT DEVICE, DISPLAY PANEL AND DISPLAY DEVICE
42	17/610,409	2020-11-17	DISPLAY SUBSTRATE COMPRISING POWER LINES ARRANGED BETWEEN COLUMNS OF SUB-PIXELS AND DISPLAY APPARATUS
43	17/789,046	2021-03-31	METHOD AND APPARATUS FOR APPLICATION DEPLOYMENT IN SOFTWARE-AS-A-SERVICE PLATFORM AND STORAGE MEDIUM
44	17/359,457	2021-06-25	DIOXIN DERIVATIVES, PREPARATION METHODS THEREOF, ELECTRON TRANSPORT LAYERS, OLED DEVICES AND DISPLAY PANELS
45	17/769,937	2021-05-21	DISPLAY SUBSTRATE AND DISPLAY DEVICE
46	17/909,763	2021-11-17	Cover Plate for Foldable Display Module, Foldable Display Module and Display Device
47	18/136,183	2021-08-19	Read/Write Control Method and Device for DDR Dynamic Random Access Memory, and System
48	17/501,395	2021-10-14	DISPLAY CABINET
49	17/790,332	2021-08-17	CONTROL VALVE STRUCTURE, USING METHOD THEREOF, MICROFLUIDIC CHIP, AND NUCLEIC ACID EXTRACTION DEVICE
50	17/909,445	2021-11-12	Touch Display Driving Apparatus, Method and Touch Display Apparatus
51	17/799,803	2021-08-09	DISPLAY DEVICE
52	17/595,306	2021-02-26	DISPLAY SUBSTRATE, METHOD OF MANUFACTURING THE SAME AND DISPLAY DEVICE
53	17/417,442	2020-12-25	ARRAY SUBSTRATE AND DISPLAY PANEL INCLUDING STACKED METAL LAYER TEST UNIT AREA
54	17/800,486	2021-08-05	DISPLAY PANEL AND METHOD FOR DRIVING THE SAME, AND DISPLAY APPARATUS

55	17/796,308	2021-06-25	PIXEL DRIVING CIRCUIT, DRIVING METHOD FOR THE PIXEL DRIVING CIRCUIT, AND DISPLAY PANEL
56	17/762,093	2021-05-11	Display Panel and Preparation Method thereof, and Display Touch Apparatus
57	17/788,437	2021-05-12	DISPLAY APPARATUS AND ELECTRONIC DEVICE
58	17/417,775	2020-09-10	Display Substrate and Preparation Method Thereof, and Display Apparatus
59	17/772,263	2021-05-20	ACOUSTIC TRANSDUCER UNIT, METHOD FOR MANUFACTURING THE SAME, AND ACOUSTIC TRANSDUCER
60	17/800,269	2021-09-06	FLEXIBLE FOLDABLE DISPLAY MODULE, METHOD FOR MANUFACTURING THE SAME, AND FLEXIBLE FOLDABLE DISPLAY APPARATUS
61	17/435,221	2020-03-19	DISPLAY SUBSTRATE AND DISPLAY DEVICE
62	17/920,911	2021-06-08	DISPLAY PANEL AND DISPLAY DEVICE
63	18/036,422	2020-11-13	DRIVING CIRCUIT, DRIVING METHOD THEREFOR, AND DISPLAY APPARATUS
64	18/044,979	2022-06-30	DISPLAY SUBSTRATE, DISPLAY APPARATUS, AND LOAD COMPENSATION METHOD APPLIED TO DISPLAY SUBSTRATE
65	18/028,038	2022-03-25	PIXEL CIRCUIT, PIXEL DRIVE METHOD AND DISPLAY DEVICE
66	18/020,971	2022-01-29	PIXEL CIRCUIT AND DRIVING METHOD THEREOF, AND DISPLAY DEVICE
67	17/255,458	2019-11-28	USER INTERFACE SYSTEM, ELECTRONIC EQUIPMENT AND INTERACTION METHOD FOR PICTURE RECOGNITION
68	17/763,198	2021-05-31	Display Substrate and Manufacturing Method Therefor, and Display Apparatus

69	17/514,798	2021-10-29	PHASE SHIFTER, FABRICATING METHOD THEREOF AND ANTENNA
70	17/789,188	2021-08-16	DISPLAY PANEL, METHODS FOR DRIVING AND MANUFACTURING THE SAME, AND DISPLAY APPARATUS
71	17/285,975	2020-07-28	FOLDABLE DISPLAY PANEL, MANUFACTURE METHOD THEREOF AND FOLDABLE DISPLAY DEVICE
72	17/635,856	2021-02-09	REMOTE OPERATION CONTROL SYSTEM, REMOTE OPERATION CONTROL METHOD, AND NON-TRANSITORY STORAGE MEDIUM
73	17/637,815	2021-04-23	Pixel Circuit, Driving Method Therefor, and Display Apparatus
74	17/429,359	2020-12-24	Organic Light Emitting Device and Display Apparatus
75	17/490,592	2021-09-30	PHASE SHIFTER AND ANTENNA DEVICE
76	18/580,163	2022-08-15	DISPLAY SUBSTRATE, MANUFACTURING METHOD THEREFOR, AND DISPLAY DEVICE
77	17/311,606	2020-11-17	ARRAY SUBSTRATE AND DISPLAY APPARATUS
78	17/768,920	2021-05-13	DISPLAY SUBSTRATE AND DISPLAY APPARATUS
79	17/915,427	2021-11-26	DISPLAY DEVICE AND CONTROL METHOD THEREOF
80	17/615,881	2020-10-30	METHOD, APPARATUS AND SYSTEM FOR IMPLEMENTING VIDEO CONFERENCE, AND STORAGE MEDIUM
81	17/802,121	2021-09-18	METAL MESH ARRAY AND MANUFACTURING METHOD THEREOF, THIN FILM SENSOR AND MANUFACTURING METHOD THEREOF
82	17/523,517	2021-11-10	FLEXIBLE DISPLAY PANEL, FLEXIBLE DISPLAY DEVICE AND METHOD OF FORMING FLEXIBLE DISPLAY PANEL
83	17/916,097	2021-10-13	REMOTE CONTROLLER CONTROL METHOD AND SYSTEM, STORAGE MEDIUM, AND ELECTRONIC DEVICE

84	17/260,563	2020-04-09	OLED Display Substrate and Display Apparatus
85	18/473,830	2021-02-07	DISPLAY SUBSTRATE, DISPLAY PANEL AND DISPLAY APPARATUS
86	18/023,003	2022-03-31	Hinge Apparatus and Foldable Display Apparatus
87	18/360,218	2020-09-28	TOUCH CONTROL STRUCTURE AND DISPLAY APPARATUS
88	18/027,373	2022-05-27	Pixel Circuit, Drive Method Thereof, Display Substrate, and Display Apparatus
89	17/640,848	2021-03-31	COLOR CORRECTION METHOD, FIELD PROGRAMMABLE GATE ARRAY, CHIP AND DISPLAY DEVICE
90	17/778,119	2021-06-07	ULTRASONIC IMAGING APPARATUS AND ULTRASONIC IMAGING METHOD
91	17/773,337	2021-05-10	METHOD AND APPARATUS FOR TRANSMITTING IMAGE DATA
92	17/292,441	2020-08-24	DISPLAY PANEL, JIG, AND METHOD OF MANUFACTURING DISPLAY PANEL WITH THE SAME
93	17/561,105	2021-12-23	DISPLAY DEVICE AND MANUFACTURING METHOD THEREOF
94	17/414,724	2020-12-30	DISPLAY SUBSTRATE AND PREPARATION METHOD THEREOF, AND DISPLAY PANEL AND PREPARATION METHOD THEREOF
95	17/642,309	2020-09-14	METHOD FOR ACQUIRING TARGET IDENTIFICATION, SERVICE ENTITY, ELECTRONIC APPARATUS AND STORAGE MEDIUM
96	17/266,622	2020-06-10	Display Substrate, Preparation Method thereof, Display Mother Plate and Display Device
97	17/352,277	2021-06-19	PANEL SUPPORT STRUCTURE, MANUFACTURING METHOD THEREOF, AND DISPLAYING DEVICE

98	18/338,517	2019-12-20	DISPLAY PANEL AND MANUFACTURING METHOD THEREOF, ALIGNMENT METHOD
99	17/535,611	2021-11-25	DISPLAY MODULE, METHOD OF FABRICATING THE SAME, AND BACK FILM
100	17/569,158	2022-01-05	FLEXIBLE DISPLAY SUBSTRATE AND METHOD FOR PREPARING SAME, AND DISPLAY DEVICE
101	17/600,278	2020-11-30	ORGANIC LIGHT EMITTING DIODE, MANUFACTURING METHOD THEREOF AND DISPLAY PANEL
102	17/798,170	2021-09-16	PIXEL UNIT AND DRIVING METHOD THEREFOR, ARRAY SUBSTRATE, AND VERTICAL ALIGNMENT LIQUID CRYSTAL DISPLAY DEVICE
103	18/498,572	2019-12-06	ANTI-GLARE APPARATUS AND MIRROR
104	17/920,740	2021-06-08	DISPLAY MODULE AND DISPLAY DEVICE
105	17/628,054	2021-04-29	DISPLAY APPARATUS, PREPARATION METHOD THEREOF AND SMART MIRROR
106	17/615,156	2021-01-20	IMAGE ENCODING, DECODING METHOD AND DEVICE, CODER-DECODER
107	17/418,811	2020-12-09	ARRAY SUBSTRATE, DISPLAY PANEL, AND DISPLAY DEVICE
108	17/598,967	2021-01-13	FOLDABLE DISPLAY AND TERMINAL DEVICE
109	18/289,108	2022-08-02	PIXEL CIRCUIT, DISPLAY APPARATUS, AND DRIVING METHOD
110	17/207,869	2021-03-22	POLARIZING STRUCTURE, MODULAR STRUCTURE, AND MANUFACTURING METHOD THEREOF
111	17/477,070	2021-09-16	IMAGE DATA CLASSIFICATION METHOD, DEVICE AND SYSTEM

112	17/426,894	2020-10-15	Calculation Method of Food Volume and Food Calories, Electronic Apparatus, Electronic Device and Storage Medium
113	17/631,481	2021-04-09	TRAINING METHOD AND APPARATUS FOR IMAGE PROCESSING MODEL, AND IMAGE PROCESSING METHOD AND APPARATUS
114	16/977,270	2019-11-29	PEPTOID COMPOUND AND DETECTION CHIP COUPLED WITH PEPTOID COMPOUND ON THE SURFACE
115	17/756,178	2021-03-11	GREEN QUANTUM DOT LIGHT-EMITTING DEVICE, METHOD FOR MANUFACTURING THE SAME, AND DISPLAY APPARATUS
116	17/620,827	2020-10-20	DISPLAY PANEL AND DISPLAY DEVICE
117	17/770,751	2021-07-20	ARRAY SUBSTRATE, DISPLAY PANEL, AND METHOD OF TESTING ARRAY SUBSTRATE
118	17/761,523	2021-05-18	STRETCHABLE DISPLAY PANEL, PREPARATION METHOD THEREFOR, AND DISPLAY APPARATUS