

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference UP-180324-02	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/CN2018/117873	International filing date (<i>day/month/year</i>) 28 November 2018	(Earliest) Priority Date (<i>day/month/year</i>)
Applicant BOE TECHNOLOGY GROUP CO., LTD.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

the international application in the language in which it was filed.

a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

b. This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. **Certain claims were found unsearchable** (see Box No. II).

3. **Unity of invention is lacking** (see Box No. III).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 3

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b. none of the figures is to be published with the abstract.

Box No. IV **Text of the abstract (Continuation of item 5 of the first sheet)**

A pixel structure includes a base substrate(10), an insulating island(21) on the base substrate(10), a light emitting element(50) on a side of the insulating island(21) away from the base substrate(10), an insulating layer(22) on the base substrate(10) and surrounding the insulating island(21), and the insulating layer(22) is spaced apart from the insulating island(21) by a groove(G). A reflective layer(40) on a lateral side of the insulating layer(22) surrounds a periphery of the light emitting element(50), and is configured to reflect light laterally emitted from the light emitting element(50) to exit from a light emitting surface of the pixel structure. The insulating layer(22) has a height relative to a main surface of the base substrate(10) greater than a height of the insulating island(21) relative to the main surface of the base substrate(10).

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International application No.

PCT/CN2018/117873

A. CLASSIFICATION OF SUBJECT MATTER		
H01L 27/32(2006.01)i; H01L 51/52(2006.01)i		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
H01L		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
CNABS, VEN: REFLECT+, PIXEL?, PICTURE?, ISOLAT+, INSULAT+, PROTECT+, OVERCOAT+, DIELECTRIC, PLANAR+, PASSIVAT+, FLAT+, LEAK+, BANK?, DEFIN+		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 104733501 A (BOE TECHNOLOGY GROUP CO LTD) 24 June 2015 (2015-06-24) description, paragraphs [0059]-[0118] and figures 1-8b	1-3, 6, 9-17
X	CN 204391161 U (BOE TECHNOLOGY GROUP CO LTD) 10 June 2015 (2015-06-10) description, paragraphs [0038]-[0097] and figures 1-8b	1-3, 6, 9-17
E	CN 109037493 A (BOE TECHNOLOGY GROUP CO LTD) 18 December 2018 (2018-12-18) description, paragraphs [0088]-[0101] and figures 6-9	1-4, 6, 7, 9-19
A	US 2008303419 A1 (CANON KK) 11 December 2008 (2008-12-11) the whole document	1-20
A	CN 106941113 A (BOE TECHNOLOGY GROUP CO LTD) 11 July 2017 (2017-07-11) the whole document	1-20
A	US 9837631 B2 (SAMSUNG DISPLAY CO LTD) 05 December 2017 (2017-12-05) the whole document	1-20
A	CN 104241535 A (SHANGHAI EVERDISPLAY OPTRONICS CO LTD) 24 December 2014 (2014-12-24) the whole document	1-20
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search		Date of mailing of the international search report
28 August 2019		11 September 2019
Name and mailing address of the ISA/CN		Authorized officer
National Intellectual Property Administration, PRC 6, Xitucheng Rd., Jimen Bridge, Haidian District, Beijing 100088 China		ZHONG, Yu
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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/CN2018/117873

Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)			Publication date (day/month/year)
CN	104733501	A	24 June 2015	CN	108336126	A	27 July 2018
				US	2016359142	A1	08 December 2016
				US	9685634	B2	20 June 2017
				CN	104733501	B	15 June 2018
				WO	2016127581	A1	18 August 2016

CN	204391161	U	10 June 2015	None			

CN	109037493	A	18 December 2018	None			

US	2008303419	A1	11 December 2008	US	7868542	B2	11 January 2011
				JP	2009044117	A	26 February 2009

CN	106941113	A	11 July 2017	US	2018331325	A1	15 November 2018

US	9837631	B2	05 December 2017	KR	20160101271	A	25 August 2016
				US	2018083221	A1	22 March 2018
				US	2016240811	A1	18 August 2016

CN	104241535	A	24 December 2014	TW	201448307	A	16 December 2014
				US	2014361265	A1	11 December 2014
				CN	104241535	B	25 July 2017
				US	9379357	B2	28 June 2016
				TW	1515938	B	01 January 2016
