

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/JP2019/050673

**A. CLASSIFICATION OF SUBJECT MATTER**

Int.Cl. G09G3/20(2006.01) i, G09G3/34(2006.01) i, G09G3/36(2006.01) i,  
G02F1/133(2006.01) i  
FI: G09G3/36, G09G3/34J, G09G3/20641E, G09G3/20622D, G02F1/133535,  
G02F1/133510

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)

Int.Cl. G09G3/20, G09G3/34, G09G3/36, G02F1/133

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan	1922-1996
Published unexamined utility model applications of Japan	1971-2020
Registered utility model specifications of Japan	1996-2020
Published registered utility model applications of Japan	1994-2020

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2012-242452 A (JAPAN DISPLAY EAST CO., LTD.) 10.12.2012 (2012-12-10), paragraphs [0024], [0027], [0028], [0032]-[0038], fig. 1, 4, 5, 9, 10	1-2, 4, 6-7, 10 3, 5, 8, 9
Y	JP 2008-304644 A (TOSHIBA MATSUSHITA DISPLAY TECHNOLOGY CO., LTD.) 18.12.2008 (2008-12-18), paragraphs [0156]-[0166], fig. 9	3, 5, 8-9
A	JP 2018-120024 A (JAPAN DISPLAY INC.) 02.08.2018 (2018-08-02), entire text, all drawings	1-10
A	WO 2015/186593 A1 (SHARP CORPORATION) 10.12.2015 (2015-12-10), entire text, all drawings	1-10
A	JP 2010-276966 A (SONY CORPORATION) 09.12.2010 (2010-12-09), entire text, all drawings	1-10
A	CN 102629450 A (AU OPTRONICS CORP.) 08.08.2012 (2012-08-08), entire text, all drawings	1-10

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"I" 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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent but published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"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	

Date of the actual completion of the international search  
09.03.2020

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24.03.2020

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2006-506687 A (THOMSON LICENSING) 23.02.2006 (2006-02-23), entire text, all drawings	1-10

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
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JP 2012-242452 A	10.12.2012	US 2012/0293563 A1 paragraphs [0047], [0050], [0051], [0055]-[0061], fig. 1, 4, 5, 9, 10 EP 2525351 A2 CN 102881258 A TW 201301247 A
JP 2008-304644 A	18.12.2008	(Family: none)
JP 2018-120024 A	02.08.2018	US 2018/0211630 A1 entire text, all drawings
WO 2015/186593 A1	10.12.2015	US 2017/0047021 A1 entire text, all drawings
JP 2010-276966 A	09.12.2010	US 2012/0062584 A1 entire text, all drawings WO 2010/137515 A1 TW 201117166 A CN 102439654 A
CN 102629450 A	08.08.2012	(Family: none)
JP 2006-506687 A	23.02.2006	US 2006/0050185 A1 entire text, all drawings WO 2004/049691 A2 KR 10-2005-0083893 A CN 1701615 A