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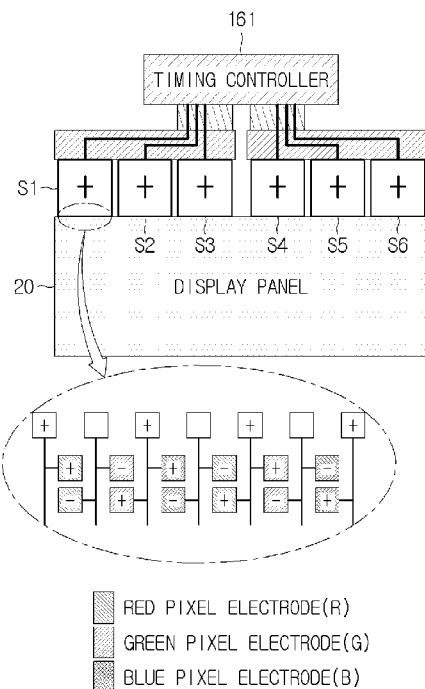
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(54) Title: DISPLAY APPARATUS AND DRIVING METHOD THEREOF

[Fig. 4a]



(57) Abstract: A display apparatus and driving method are discussed where the display apparatus includes a timing controller configured to output a source control signal for setting a polarity for at least one source driver or for at least one pixel connected to the at least one source driver; a source driving device including the at least one source driver, and configured to receive the source control signal and output a source signal to a pixel electrode connected to the at least one source driver; a gate driving device controlled by the timing controller, and configured to output a gate signal; and a display panel configured to display image data by the source driving device and the gate driving device.



A. CLASSIFICATION OF SUBJECT MATTER**G09G 3/20(2006.01)i, G09G 3/36(2006.01)i, G09G 3/3275(2016.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
G09G 3/20; G09G 3/36; G06F 3/038; G09G 3/3275Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility modelsElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & keywords: display, timing controller, source control signal, polarity, source driver, pixel, group**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 10-2012-0017161 A (LG DISPLAY CO., LTD.) 28 February 2012 See paragraphs [0002], [0024], [0029]-[0037]; and figures 8-9.	1-15
A	US 2014-0071184 A1 (HEFEI BOE OPTOELECTRONICS TECHNOLOGY CO., LTD. et al.) 13 March 2014 See paragraphs [0039]-[0046], [0058]-[0072]; and figures 4-10.	1-15
A	KR 10-1113997 B1 (LG DISPLAY CO., LTD.) 05 March 2012 See paragraphs [0038]-[0064]; and figures 3-7.	1-15
A	KR 10-2009-0107238 A (LG DISPLAY CO., LTD.) 13 October 2009 See paragraphs [0020]-[0028], [0054]-[0064]; and figures 5, 10-12.	1-15
A	US 2008-0012840 A1 (HIROYUKI HIGASHINO et al.) 17 January 2008 See claim 4; and figures 1, 5-6.	1-15

 Further documents are listed in the continuation of Box C. See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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