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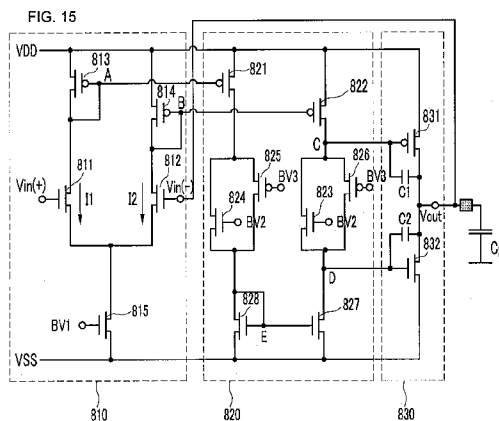
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[Continued on next page]

(54) Title: VOLTAGE AMPLIFIER AND DRIVING DEVICE OF DISPLAY DEVICE USING THE VOLTAGE AMPLIFIER



(57) Abstract: An amplifying circuit of a display device including a plurality of pixels includes an input unit, a bias unit, and an output unit. The input unit is coupled between a first power source for supplying a first voltage and a second power source for supplying a second voltage, receives a first input signal and a second input signal, and is controlled by the first and second input signals. The bias unit receives a bias voltage for operating the input unit, and includes a first node and a second node controllable by the input unit. The output unit applies an output voltage to a pixel by using a first output transistor turned on/off by a signal applied to the first node and a second output transistor turned on/off by a signal applied to the second node, and the first output transistor is a different type to the second output transistor. In this instance, the input unit includes a first input transistor having a first terminal coupled to a first power source and being turned on/off by a first input signal and a second input transistor of the same type as the first input transistor, having a first terminal coupled to the first power source, and being turned on/off by a second input signal. The bias unit includes a first transistor controllable by the on/off state of the first input transistor and a second transistor controllable by the on/off state of the second input transistor.

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B. FIELDS SEARCHED

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Documentation 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 since 1975

Japanese Utility models and applications for Utility Models since 1975

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

eKIPASS (KIPO internal) "Keyword: amplifier, positive, negative, bias, area, size and similar terms"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 2005-338131 A (HIDA YOICHI et al.) 08 DECEMBER 2005 See Paragraphs [38-98] and Figures 5, 10.	1-2 3-21
Y A	US 2005/0068105 A1 (ATSUSHI SHIMATANI) 31 MARCH 2005 See Paragraphs [50-56] and Figure 4.	1-2 3-21
A	US 2005/0017809 A1 (MASAJI UENO et al.) 27 JANUARY 2005 See See Paragraphs [17-54, 124-137] and Figures 1, 4.	1-21
A	US 2005/0206642 A1 (TAKAHITO KUSHIMA et al.) 22 SEPTEMBER 2005 See Paragraphs [92-134] and Figures 3-4.	1-21

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

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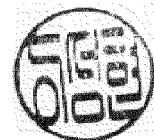
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Information on patent family members

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