

Title (en)

Drive device for liquid crystal display panel

Title (de)

Antriebsvorrichtung für Flüssigkristallanzeigetafel

Title (fr)

Dispositif de commande de panneau d'affichage à cristaux liquides

Publication

**EP 2458581 A1 20120530 (EN)**

Application

**EP 11009370 A 20111125**

Priority

JP 2010264893 A 20101129

Abstract (en)

A drive device for driving a liquid crystal display panel by column inversion driving, whereby power consumption is further reduced. In an output buffer 251 to apply a voltage to source wirings, in a prescribed period after initiation of driving at one frame, a bias circuit 262 gives a bias voltage to lower the driving ability of an amplifier 261, whereby a first switch 263 becomes an open state and a second switch 264 becomes a closed state. Upon termination of the prescribed period, the first switch 263 becomes a closed state and the second switch 264 becomes an open state, whereby a source wiring is driven by a voltage signal from a D-A converter.

IPC 8 full level

**G09G 3/36** (2006.01); **G09G 3/20** (2006.01)

CPC (source: EP)

**G09G 3/2018** (2013.01); **G09G 3/3614** (2013.01); **G09G 3/3688** (2013.01); **G09G 2310/0291** (2013.01); **G09G 2330/021** (2013.01); **G09G 2330/023** (2013.01)

Citation (applicant)

- JP 2010264893 A 20101125 - KOBE STEEL LTD
- JP 2010117118 A 20100527 - TORNEX INC

Citation (search report)

- [I] US 2006227092 A1 20061012 - NOSE TAKASHI [JP]
- [A] US 2005122303 A1 20050609 - HASHIMOTO YOSHIHARU [JP]
- [A] US 2008117235 A1 20080522 - MORITA AKIRA [JP]
- [A] US 6331847 B1 20011218 - KIM CHANG-OON [KR], et al
- [A] EP 1798710 A2 20070620 - TPO HONG KONG HOLDING LTD [CN]
- [A] EP 1293957 A2 20030319 - SAMSUNG ELECTRONICS CO LTD [KR]
- [A] US 6064363 A 20000516 - KWON OH-KYONG [KR]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2458581 A1 20120530**; **EP 2458581 B1 20170215**; CN 102479497 A 20120530; CN 102479497 B 20151125

DOCDB simple family (application)

**EP 11009370 A 20111125**; CN 201110404726 A 20111128