

Title (en)

POWER SUPPLY LINE VOLTAGE DROP COMPENSATION FOR ACTIVE MATRIX DISPLAYS

Title (de)

KOMPENSIERUNG DES SPANNUNGSVERLUSTS IN STROMVERSORGUNGSLEITUNGEN FÜR AKTIVMATRIXANZEIGEN

Title (fr)

COMPENSATION DE CHUTE DE TENSION DE LIGNE D'ALIMENTATION POUR AFFICHAGES À MATRICE ACTIVE

Publication

EP 3319075 B1 20230322 (EN)

Application

EP 16197152 A 20161103

Priority

EP 16197152 A 20161103

Abstract (en)

[origin: EP3319075A1] Driving system circuitry for an active matrix display comprises: a data driver module for receiving a digital data bit stream representing an image to be displayed by pixels of the active matrix display, one or more power supply lines for powering a plurality of pixels each comprising at least one light emitting element, a voltage source connected to the one or more power supply lines, and calibration means for compensating for power drop over the one or more supply lines. The calibration means comprise means for flowing a current through an individual pixel, means for determining a voltage drop across the pixel and for comparing this to a pre-determined reference voltage for that pixel, means for determining, from the comparison, calibration values for that pixel which take into account resistance of wiring connected to the voltage source and to ground, and means for applying the calibration values to a received digital data bit stream to generate therefrom data driver voltages to be applied to the data driver module for representation of a corrected image.

IPC 8 full level

G09G 3/3225 (2016.01); **G09G 3/20** (2006.01)

CPC (source: EP KR)

G09G 3/3225 (2013.01 - EP KR); **G09G 2300/0866** (2013.01 - EP KR); **G09G 2320/0223** (2013.01 - EP KR); **G09G 2320/0285** (2013.01 - EP KR); **G09G 2320/0295** (2013.01 - EP KR); **G09G 2320/0693** (2013.01 - EP KR); **G09G 2330/028** (2013.01 - EP KR); **G09G 2330/12** (2013.01 - EP KR)

Citation (examination)

US 2012032940 A1 20120209 - MIZUKOSHI SEIICHI [JP], et al

Cited by

EP3588479A1; CN110718183A; US11551605B2; US11929015B2

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

DOCDB simple family (publication)

EP 3319075 A1 20180509; **EP 3319075 B1 20230322**; CN 109906477 A 20190618; CN 109906477 B 20220614; KR 102521163 B1 20230413; KR 20190076984 A 20190702; TW 201818392 A 20180516; TW I734842 B 20210801; WO 2018083135 A1 20180511

DOCDB simple family (application)

EP 16197152 A 20161103; CN 201780067935 A 20171101; EP 2017077988 W 20171101; KR 20197013472 A 20171101; TW 106134225 A 20171003