

Title (en)

AN ACTIVE MATRIX DISPLAY AND A METHOD FOR THRESHOLD VOLTAGE COMPENSATION IN AN ACTIVE MATRIX DISPLAY

Title (de)

AKTIVMATRIXANZEIGE UND VERFAHREN ZUR KOMPENSIERUNG VON SCHWELLENSPANNUNG

Title (fr)

ECRAN A MATRICE ACTIVE PROCÉDÉ DE COMPENSATION POUR TENSION DE SEUIL

Publication

**EP 3367374 A1 20180829 (EN)**

Application

**EP 17158476 A 20170228**

Priority

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Abstract (en)

A method for threshold voltage compensation in an active matrix display (200) is provided. The display (200) comprises pixels (100), each comprising a drive transistor (102) having a driver gate (104) and a calibration gate (106), a first dataline (110) selectively connected to the driver gate (104), a second dataline (114) selectively connected to the calibration gate (106). The method comprises: driving (402) the display (200) in a calibration measurement mode for measuring a threshold voltage of a pixel (100), wherein the first dataline (110) is connected to the driver gate (104) and the second dataline (114) is connected to the calibration gate (106), and a measurement signal is actively driven to one of the first and the second dataline (110; 114) and a calibration signal is measured on the other of the first and the second dataline (110; 114), determining (404) calibration data based on the measured calibration signal; and driving (406) the display (200) in a calibration refresh mode, wherein the second dataline (114) is connected to the calibration gate (106) of the drive transistor (102), and the determined calibration data is provided on the second dataline (114) to the calibration gate (106) of the drive transistor (102).

IPC 8 full level

**G09G 3/3275** (2016.01)

CPC (source: CN EP KR)

**G09G 3/3225** (2013.01 - CN KR); **G09G 3/3233** (2013.01 - EP); **G09G 3/3275** (2013.01 - EP); **G09G 2300/043** (2013.01 - EP KR);  
**G09G 2300/0819** (2013.01 - EP); **G09G 2300/0828** (2013.01 - KR); **G09G 2300/0852** (2013.01 - EP); **G09G 2310/0264** (2013.01 - CN);  
**G09G 2320/0204** (2013.01 - EP); **G09G 2320/0233** (2013.01 - EP); **G09G 2320/0295** (2013.01 - EP); **G09G 2320/045** (2013.01 - EP)

Citation (applicant)

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- C. JEON ET AL.: "AMOLED Pixel Circuit using Dual Gate a-IGZO TFTs for Simple Scheme and High Speed V Extraction", SOCIETY FOR INFORMATION DISPLAY DIGEST, vol. 47, no. 1, 2016, pages 65 - 68
- BHOOLOKAM ET AL.: "Analysis of frequency dispersion in amorphous In-Ga-Zn-O thin-film transistors", JOURNAL OF INFORMATION DISPLAY, vol. 16, no. 1, 2015, pages 31 - 36

Citation (search report)

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BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

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