

Title (en)

Method of driving liquid crystal display device.

Title (de)

Verfahren zur Steuerung einer Flüssigkristallanzeigevorrichtung.

Title (fr)

Méthode de commande d'un dispositif d'affichage à cristaux liquides.

Publication

EP 0607860 A1 19940727 (EN)

Application

EP 94100380 A 19940112

Priority

- JP 432293 A 19930113
- JP 12396493 A 19930526
- JP 14777993 A 19930618
- JP 14955293 A 19930621
- JP 28778993 A 19931023

Abstract (en)

Method of driving an active-matrix type of liquid crystal display device that has a plurality of pixels comprising a liquid crystal layer and a two-terminal element having non-linear resistance characteristics connected in series therewith. A compensatory voltage is applied to each pixel immediately before a data write period during which the liquid crystal layer of the pixel is charged with a data charge voltage corresponding to a display gradation. This compensatory voltage is a voltage that charges the liquid crystal layer with a compensatory charge voltage of a polarity opposite to that of the data charge voltage. The relationship between the two voltages is such that when the magnitude of the data charge voltage is large, that of the compensatory charge voltage is small; when the magnitude of the data charge voltage is small, that of the compensatory charge voltage is large. This reduces the occurrence of afterimages that are caused by I-V characteristic shift in a non-linear two-terminal element. <IMAGE>

IPC 1-7

G09G 3/36

IPC 8 full level

G02F 1/133 (2006.01); **G09G 3/36** (2006.01); **G09G 3/20** (2006.01)

CPC (source: EP)

G09G 3/367 (2013.01); **G09G 3/2011** (2013.01); **G09G 2310/06** (2013.01); **G09G 2310/061** (2013.01)

Citation (search report)

- [A] EP 0508628 A2 19921014 - SEIKO EPSON CORP [JP]
- [A] EP 0367531 A2 19900509 - SHARP KK [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 015, no. 410 (P - 1264) 18 October 1991 (1991-10-18)
- [A] S. TOGASHI: "Two-terminal device addressed LCD", OPTOELECTRONICS DEVICES AND TECHNOLOGIES, vol. 7, no. 2, December 1992 (1992-12-01), TOKYO JP, pages 271 - 286, XP000336430

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Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

EP 0607860 A1 19940727; **EP 0607860 B1 19981216**; DE 69415181 D1 19990128; DE 69415181 T2 19990624; JP 3482667 B2 20031222; JP H0772457 A 19950317

DOCDB simple family (application)

EP 94100380 A 19940112; DE 69415181 T 19940112; JP 28778993 A 19931023