Title (en)

Method of driving ferroelectric liquid crystal element.

Title (de)

Verfahren zur Ansteuerung eines ferroelektrischen Flüssigkristallelementes.

Title (fr)

Méthode de commande d'un élément à cristal liquide ferroélectrique.

Publication

EP 0448032 A2 19910925 (EN)

Application

EP 91104222 A 19910319

Priority

- JP 7051190 A 19900320
- JP 7420591 A 19910315

Abstract (en)

A method of driving a liquid crystal display element in which a switching element is provided for each of pixel electrodes arranged in a matrix manner and a ferroelectric liquid crystal is sandwiched between the pixel electrodes and a counter electrode includes the steps of applying a reset voltage for resetting the entire pixel to a first stable state of the ferroelectric liquid crystal across the pixel electrode and the counter electrode, partially transiting the pixel to a second stable state by a tone signal voltage having a pole opposite to that of the reset voltage, and reversing the pole of the reset voltage every predetermined period. Assuming that a state reverse ratio of the ferroelectric liquid crystal is $T(V)\%$ when the tone signal voltage is V, a tone signal voltage V1 after negative resetting and a corresponding tone signal voltage -V2 after positive resetting satisfy the following relation: $T(V1) + T(V2) = 100$ <IMAGE>

IPC 1-7

G09G 3/36

IPC 8 full level

G02F 1/133 (2006.01); **G09G 3/18** (2006.01); **G09G 3/36** (2006.01); G09G 3/20 (2006.01)

CPC (source: EP)

G09G 3/3651 (2013.01); **G09G 3/367** (2013.01); G09G 3/2011 (2013.01); G09G 3/207 (2013.01); G09G 3/3614 (2013.01); G09G 2310/0251 (2013.01); G09G 2310/061 (2013.01)

Cited by

EP0528685A3; EP0536744A3; US5398043A; US5270844A; US5321538A; EP0552045A1; US5615026A; WO9606422A1

Designated contracting state (EPC)

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