

Title (en)

Multiplex driving method of a matrix type liquid crystal electro-optical device

Title (de)

Verfahren zur Multiplexsteuerung einer elektrooptischen Matrix-Flüssigkristallvorrichtung

Title (fr)

Méthode de commande multiplexée pour un dispositif électrooptique à cristaux liquides du type matriciel

Publication

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Application

EP 97120078 A 19930510

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- JP 12362392 A 19920515
- JP 19907792 A 19920702

Abstract (en)

[origin: EP0836173A2] In a multiplex driving method of a matrix type liquid crystal electro-optical device comprising a liquid crystal layer provided between a first substrate carrying row electrodes (X1, X2,...) and a second substrate carrying column electrodes (Y1, Y2,...) wherein said row and column electrodes define a matrix of pixels, said row electrodes are divided into groups and, during a selection period, the row electrodes of one group are simultaneously selected by applying a respective row voltage waveform to each of them while applying a non-selection voltage to the row electrodes of all other groups. The groups are sequentially selected. The row voltage waveforms are composed of a plurality of successive row select pulses defining a corresponding plurality of successive row select patterns. To each column electrode is applied a respective column voltage determined in response to each row select pattern and display data. The selection period is divided into plural subperiods (t1, t2, t3) and and, when a frame is defined as the time period equal to said selection period times the number of row electrode groups and a picture period comprises a certain number of frames, said column voltages are modulated during said picture period in accordance with gradation information of grey scale display data,. <IMAGE>

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G09G 3/36

IPC 8 full level

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