

Title (en)

Control method for a cold start of a liquid crystal display and control unit therefor

Title (de)

Verfahren und Einrichtung zum Steuern des Kaltstarts eines Flüssigkristallanzeigeräts

Title (fr)

Méthode et dispositif de commande d' un démarrage à froid d' un dispositif d'affichage à cristaux liquides

Publication

EP 1291842 A1 20030312 (EN)

Application

EP 02256154 A 20020905

Priority

GB 0121663 A 20010907

Abstract (en)

A method of enhancing the response time of a liquid crystal display comprises the steps of measuring the temperature (TLC) of a liquid crystal material forming part of the display, applying a drive voltage signal to the liquid crystal material at a selected frame refresh frequency so as to display an image and selecting the frame refresh frequency depending upon the measured temperature of the liquid crystal material. In the event that the measured temperature is less than the predetermined temperature (step 38), a cold kick time period (Tcoldkick) is determined (steps 36) depending upon the measured temperature. A negative bias voltage is applied (step 44) across the liquid crystal material for the duration of the cold kick time period. The effect of adjusting the frame refresh frequency in accordance with the measured temperature and of applying a negative bias voltage to the display serves to significantly enhance the response time of the device. <IMAGE>

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IPC 8 full level

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Citation (search report)

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