

Title (en)

HIGH RESOLUTION ACTIVE MATRIX DISPLAY SYSTEM ON A CHIP WITH HIGH DUTY CYCLE FOR FULL BRIGHTNESS

Title (de)

HOCHAUFLÖSENDES FLÜSSIGKEITS-KRISTALL-ANZEIGESYSTEM AUF EINEM CHIP MIT HOHEM TASTVERHÄLTNIS FÜR MAXIMALE HELLGKEIT

Title (fr)

SYSTEME D'AFFICHAGE HAUTE RESOLUTION A MATRICE ACTIVE QUI EST MONTE SUR PUCE, POSSEDE UN COEFFICIENT D'UTILISATION ELEVE ET PERMET D'ASSURER UNE LUMINOSITE MAXIMALE

Publication

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Application

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Abstract (en)

[origin: WO9938148A1] An active matrix display device is disclosed. The display includes individual driver circuits for each pixel (100) to provide accurate, high resolution gray scale rendering and an almost 100 % duty cycle. The pixel circuit drivers (Figures 6(60) and 7(70)) minimize factors known to limit gray scale resolution, such as variations in threshold voltage, voltage drops in connecting lines and from leakage currents, and large peak currents. The present invention includes a line driver functioning initially as a low impedance voltage driver (Figure 6(60)), then converting to a high impedance current driver (Figure 7(70)). A method of driving a pixel (100) with sufficient circuitry to subtain the pixel's light output at a gray level determined by the input data fed to the pixel (100) is also disclosed. The display is capable of processing both digital and analog input data.

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IPC 8 full level

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