

Title (en)

PULSE WIDTH MODULATED DISPLAY WITH HYBRID CODING

Title (de)

IMPULSBREITENMODULIERTE ANZEIGE MIT HYBRIDCODIERUNG

Title (fr)

AFFICHAGE A MODULATION D'IMPULSION EN DUREE AVEC CODAGE HYBRIDE

Publication

EP 1546794 A2 20050629 (EN)

Application

EP 03785185 A 20030811

Priority

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Abstract (en)

[origin: WO2004015981A2] A field sequential pulse width modulated display system (10) comprises a digital micromirror device (DMD) (24) having a plurality of micromirrors that each selectively reflect light to illuminate a corresponding pixel. A driver circuit (30) controls the DMD (24) responsive to sequences of pulse width segments formed by a processor (31). The processor (31) increases the pixel brightness by actuating selected pulses such that within a first range of brightness levels between first and second pixel brightness boundaries, a first large-duration pulse (or combination of pulses) becomes actuated to reach the second pixel brightness boundary, and within a second range of pixel brightness levels between second and third pixel brightness boundaries, the first large duration pulse (or combination of pulses) remains actuated. Upon reaching the third pixel brightness boundary, a second large duration pulse (or combination of pulses) now becomes actuated with the first large duration pulse (or combination of pulses) remaining actuated. Forming the pulse width segments in this manner serves to reduce motion contouring.

IPC 1-7

G02F 1/03; G02F 1/07

IPC 8 full level

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CPC (source: EP KR)

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