

Title (en)

Method for optimizing brightness in a display device and apparatus for implementing the method

Title (de)

Verfahren zur Optimierung der Helligkeit in einer Anzeigevorrichtung und Anordnung zur Durchführung des Verfahrens

Title (fr)

Procédé pour optimiser la luminosité dans un dispositif d'affichage et dispositif pour la mise en oeuvre de ce procédé

Publication

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Application

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Abstract (en)

The invention relates to a method for optimizing brightness in a display device having a plurality of luminous elements corresponding to the pixels of a picture, wherein the time duration of a video frame or video field is divided into a plurality of sub fields during which the luminous elements can be activated for light emission with sustain pulses corresponding to a sub field code word which is used for brightness control, the total number of sustain pulses being determined in view of a selected power mode function of picture load the method including the following steps: - setting a threshold value in relation to the picture load, - comparing, for a frame, the number of the current sustain pulse to said threshold value, - if the number of the current sustain pulses is below the threshold value, the sustain pulses are generated at a fixed frequency, - if the number of the current sustain pulses is above the threshold value, the sustain pulses are generated at an evolving frequency. This invention applies mainly to PDP and all displays controlled by using a PWM.

The method involves setting a threshold value in relation to a picture load and comparing a number of a current sustain pulse to the threshold value, for a frame. The sustain pulses are generated at a fixed frequency when the number of the current sustain pulses is below the threshold value. The sustain pulses are generated at an evolving frequency when the number of current sustain pulses is above the threshold value. An independent claim is also included for an apparatus for carrying out the method for optimizing brightness in a display device having many luminous units.

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Cited by

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