Title (en)

Control circuit for LEDs

Title (de)

Steuerkreis für LEDs

Title (fr)

Circuit de contrôle pour LEDs

Publication

EP 1411751 B1 20120530 (EN)

Application

EP 03103461 A 20030919

Priority

- EP 03103461 A 20030919
- EP 02079326 A 20021014

Abstract (en)

[origin: EP1411751A2] A control loop (CC123) limits duty cycle of control signal for driving red, green and blue (RGB) LEDs by decreasing the reference signal for red, green and blue light. Independent claims are also included for the following: (1) backlight; and (2) LCD unit.
[origin: EP1411751A2] In a circuit arrangement for driving a LED array comprising red, green and blue LEDs, a control loop is added for limiting the duty cycles of the control signals for driving the red, green and blue LEDs. In case one of the duty cycles reaches the limit value, the reference signals for the red, green and blue light are decreased with the same relative amount. The color point of the light is thereby maintained, even when the efficiency of part of the LEDs decreases.

IPC 8 full level

H05B 33/08 (2006.01)

CPC (source: EP)

H05B 45/20 (2020.01)

Cited by

US9035568B2; US7656100B2; US8937930B2; WO2013086036A1; WO2006011108A1; US10230783B2

Designated contracting state (EPC)

DE

DOCDB simple family (publication)

EP 1411751 A2 20040421; **EP 1411751 A3 20070418**; **EP 1411751 B1 20120530**

DOCDB simple family (application)

EP 03103461 A 20030919