

Title (en)

LED driving device with pulse width modulation

Title (de)

LED-Ansteuervorrichtung mit Pulsweitenmodulation

Title (fr)

Dispositif de commande à DEL avec modulation de largeur d'impulsion

Publication

EP 1814365 A1 20070801 (EN)

Application

EP 06005074 A 20060313

Priority

CN 200610001583 A 20060124

Abstract (en)

The present invention discloses an LED driving device with pulse width modulation (PWM) capable of preventing the LED display from flickering. The LED driving device primarily comprises a PWM unit for modulating the ON/OFF signal with a PWM cycle from one signal of higher resolution to two or more signals of lower resolution. The modulation is executed with the proviso that the duty cycle of the PWM cycle is almost or completely preserved. Accordingly, the LED will be lit more frequently and perform preset brightness with a higher refresh rate.

IPC 8 full level

G09G 3/32 (2006.01); **H05B 33/08** (2006.01); **H05B 44/00** (2022.01)

CPC (source: EP US)

G09G 3/32 (2013.01 - EP US); **H05B 45/20** (2020.01 - EP US); **H05B 45/325** (2020.01 - EP US); **G09G 3/2018** (2013.01 - EP); **G09G 2320/0247** (2013.01 - EP)

Citation (applicant)

US 2003076048 A1 20030424 - RUTHERFORD JAMES C [US]

Citation (search report)

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- [X] US 2002012008 A1 20020131 - TAKAGI YUICHI [JP]
- [A] US 2005184933 A1 20050825 - TOMOHARA KIYOHIDE [JP]
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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 06005074 A 20060313; CN 200610001583 A 20060124; ES 06005074 T 20060313; PL 06005074 T 20060313