

Title (en)

LED driving apparatus and method of driving LED

Title (de)

LED-Ansteuerungsvorrichtung und Verfahren zur LED-Ansteuerung

Title (fr)

Appareil de commande de DEL et procédé de commande de DEL

Publication

EP 2605620 A1 20130619 (EN)

Application

EP 12275020 A 20120302

Priority

KR 20110136102 A 20111216

Abstract (en)

There are provided a light emitting device (LED) driving apparatus and a method of driving an LED. The LED driving apparatus includes a voltage detection unit detecting a driving voltage supplied from a driving unit for a light emitting unit having a plurality of light emitting devices; a current detection unit detecting a driving current flowing in the light emitting unit; and a control unit setting a reference current according to detected voltage from the voltage detection unit and controlling the driving unit according to the reference current and the detected current from the current detection unit.

IPC 8 full level

H05B 44/00 (2022.01)

CPC (source: EP KR US)

H05B 45/14 (2020.01 - EP KR US); **H05B 45/3725** (2020.01 - EP KR US); **H05B 45/46** (2020.01 - EP KR); **H05B 45/48** (2020.01 - KR)

Citation (search report)

- [X] EP 2204856 A1 20100707 - PANASONIC ELEC WORKS CO LTD [JP]
- [X] WO 2010118944 A1 20101021 - TRIDONIC GMBH & CO KG [AT], et al
- [X] US 2011140616 A1 20110616 - YAN TIESHENG [CN], et al
- [A] D. MAKSIMOVIC, R. ZANE, R.ERICKSON: "Impact of digital control in power electronics", PROCEEDINGS OF 2004 INTERNATIONAL SYMPOSIUM ON POWER SEMICONDUCTOR DEVICES & ICS, 31 December 2004 (2004-12-31), Boulder,Co,USA, pages 13 - 22, XP002694419
- [A] PRODICA ET AL: "Design of a digital PID regulator based on look-up tables for control of high-frequency DC-DC converters", IEEE WORKSHOP ON COMPUTERS IN POWER ELECTRONICS, XX, XX, 3 June 2002 (2002-06-03), pages 18 - 22, XP002444875

Cited by

CN106413196A; EP3541149A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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