

Title (en)

LED lamp brightness adjusting circuit connectable to AC power and LED lighting device using the same

Title (de)

Ans Wechselstromnetz anschließbare Schaltung zur Einstellung der Helligkeit einer LED-Lampe und LED-Beleuchtungsvorrichtung damit

Title (fr)

Circuit d'ajustement de la luminosité d'une lampe DEL pouvant être connectée à une alimentation CA et dispositif d'éclairage DEL l'utilisant

Publication

**EP 2405717 A1 20120111 (EN)**

Application

**EP 10168978 A 20100709**

Priority

EP 10168978 A 20100709

Abstract (en)

A LED lamp brightness adjusting circuit has a regulating circuit (10), multiple rectification diodes (D1, D2) and filtering capacitors (C1, C2). Each filtering capacitor (C1, C2) is connectable to a LED module in parallel (20, 30). The LED lamp brightness adjusting circuit is connected to an output terminal of a light regulator (102). Based on the control of light regulator (102), the regulating circuit (10) produces a regulated AC input voltage. The positive and negative half cycles of the regulated AC input voltage are further rectified and filtered to drive different corresponding LED modules (20, 30). Therefore, the amplitude of the drive voltages for the LED modules (20, 30) are controllable to adjust the brightness of the emitted light.

IPC 8 full level

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

CPC (source: EP US)

**H05B 45/40** (2020.01 - EP US)

Citation (search report)

- [I] US 2009251059 A1 20091008 - VELTMAN ANDRE [NL]
- [I] WO 2005115058 A1 20051201 - POLYBRITE INTERNATIONAL INC [US], et al
- [I] GB 2435724 A 20070905 - MOOD CONCEPTS LTD [GB], et al
- [I] US 5661645 A 19970826 - HOCHSTEIN PETER A [US]
- [I] US 2002158590 A1 20021031 - SAITO YUTAKA [JP], et al
- [I] JP S62147366 U 19870917
- [I] US 2002047606 A1 20020425 - GUTHRIE DON W [US], et al
- [I] WO 2006004337 A1 20060112 - SEOUL OPTO DEVICE CO LTD [KR], et al
- [A] US 2007182338 A1 20070809 - SHTEYNBERG ANATOLY [US], et al
- [A] ECKOLD F: "LEUCHTDIODEN RICHTIG EINGESETZT//CORRECT APPLICATIONS OF LIGHT EMITTING DIODES", E. ELEKTRONIK-TECHNOLOGIE, ELEKTRONIK-ANWENDUNGEN,ELEKTRONIK-MARKETING, KONRADIN VERLAG, LEINFELDEN-ECHTERDINGEN, DE, vol. 4, no. 5, 1 March 1986 (1986-03-01), pages 49 - 54, XP001086420, ISSN: 0174-7452

Cited by

CN104780695A; CN106982495A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

BA ME RS

DOCDB simple family (publication)

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