

Title (en)

OPERATING CIRCUIT FOR LIGHT-EMITTING DIODES

Title (de)

BETRIEBSSCHALTUNG FÜR LEUCHTDIODEN

Title (fr)

CIRCUIT POUR FAIRE FONCTIONNER DES DIODES LUMINESCENTES

Publication

**EP 2425680 A2 20120307 (DE)**

Application

**EP 10721272 A 20100430**

Priority

- AT 2010000139 W 20100430
- AT 2802009 U 20090430

Abstract (en)

[origin: WO2010124313A2] The invention relates to a method for operating at least one LED by means of a switched-mode regulator circuit to which a DC voltage or a rectified AC voltage is supplied and which provides a supply voltage for at least one LED by means of a coil (L1) and a switch (S1) that is clocked by a control/regulation unit (SR). When the switch (S1) is activated, power is temporarily stored in the coil (L1) and is discharged through a diode (D1) and through at least one LED when the switch (S1) is deactivated and the current flows through the LED through a first power storage element which is coupled to a second power storage element. The first power storage element just reaches its maximum capability of storing power due to the current (iLED) flowing through the LED. A rising current is supplied to the second power storage element such that the time can be detected when the first power storage element recovers its capability of storing power due to the current flowing through the second power storage element.

IPC 8 full level

**H05B 44/00** (2022.01)

CPC (source: EP US)

**H05B 45/14** (2020.01 - EP US); **H05B 45/327** (2020.01 - EP US); **H05B 45/3725** (2020.01 - EP US)

Citation (search report)

See references of WO 2010124313A2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**WO 2010124313 A2 20101104; WO 2010124313 A3 20110526;** AT 508195 A1 20101115; AT 508195 B1 20120315; CN 102415214 A 20120411; CN 102415214 B 20141210; DE 112010001827 A5 20120531; EP 2425680 A2 20120307; EP 2425680 B1 20140305; US 2012104958 A1 20120503; US 8664873 B2 20140304

DOCDB simple family (application)

**AT 2010000139 W 20100430;** AT 7042010 A 20100428; CN 201080018943 A 20100430; DE 112010001827 T 20100430; EP 10721272 A 20100430; US 201013318083 A 20100430