

Title (en)  
OPERATING CIRCUIT FOR LEDS

Title (de)  
BETRIEBSSCHALTUNG FÜR LEDS

Title (fr)  
CIRCUIT DE FONCTIONNEMENT DESTINÉ À DES LED

Publication  
**EP 2345308 B1 20120829 (DE)**

Application  
**EP 09752099 A 20091016**

Priority  
• EP 2009007455 W 20091016  
• AT 5992008 U 20081020

Abstract (en)  
[origin: WO2010046065A1] The invention relates to an operating circuit for at least one LED, which receives a DC voltage or a rectified AC voltage, and which supplies a supply voltage for at least one LED via a coil (L1) and a first switch (S1) clocked by a control/regulating unit (SR), wherein power is stored temporarily in the coil (L1) when the first switch (S1) is activated, said power being discharged via a diode (D1) and via at least one LED when the first switch (S1) is turned off, wherein a capacitor (C1) is present, which is arranged in parallel to the at least one LED, and which maintains the current through the LED during the phase of demagnetization of the coil (L1), wherein a first sensor unit (SE1) is present, which generates a first sensor signal (SESI) depending on the current flow through the first switch (S1), and/or a second sensor unit (SE2), which detects that the demagnetization of the coil (L1) has been reached and generates a sensor signal (SES2), and the sensor signals (SESI, SES2) are fed to the control/regulating unit (SR) and processed, wherein the control/regulating unit (SR) reactivates the first switch (S1) at the time when the coil (L1) is demagnetized and/or the diode (D1) is blocking.

IPC 8 full level  
**H05B 44/00** (2022.01)

CPC (source: EP GB US)  
**H05B 45/37** (2020.01 - GB); **H05B 45/375** (2020.01 - EP US); **H05B 45/3725** (2020.01 - EP US)

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 2010046065 A1 20100429**; CN 102187736 A 20110914; CN 102187736 B 20130619; DE 112009002593 A5 20110929; EP 2345308 A1 20110720; EP 2345308 B1 20120829; GB 201106312 D0 20110601; GB 2476609 A 20110629; GB 2476609 B 20140219; US 2011199023 A1 20110818; US 8525442 B2 20130903

DOCDB simple family (application)  
**EP 2009007455 W 20091016**; CN 200980141488 A 20091016; DE 112009002593 T 20091016; EP 09752099 A 20091016; GB 201106312 A 20091016; US 200913125022 A 20091016