

Title (en)

Circuit for operating light emitting diodes (LEDs)

Title (de)

Schaltkreis zum Betreiben von Leuchtdioden (LED)

Title (fr)

Circuit pour le fonctionnement de diodes électroluminescentes (DEL)

Publication

EP 2341760 A1 20110706 (EN)

Application

EP 10151196 A 20100120

Priority

- EP 09180513 A 20091223
- EP 10151196 A 20100120

Abstract (en)

The invention proposes a driving circuit for provision of an operating current for at least one lighting means, such as e.g. a light emitting diode, the driving circuit comprising a switched converter (130) having a switch (S1) controlled by a control circuitry, wherein a choke (L1) is charged when the control circuitry control the switch in its conducting state and the choke is de-charged when the control circuits controls the switch in its non-conducting state, wherein by supplying an external signal or an internal feedback signal to the control circuitry, the control circuitry is designed to adapt the clocking of the switch in order to adapt the operating mode of the switched converter to either of a continuous, borderline (transition, critical) and discontinuous conduction mode, CCM, BCM or DCM.

IPC 8 full level

H05B 44/00 (2022.01)

CPC (source: EP US)

H05B 45/14 (2020.01 - EP US); **H05B 45/3725** (2020.01 - EP US); **H05B 45/375** (2020.01 - EP US); **H05B 45/44** (2020.01 - EP)

Citation (search report)

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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

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2341760 A1 20110706; CN 102812779 A 20121205; CN 102812779 B 20160525; DE 112010004983 B4 20240418; DE 112010004983 T5 20130124; EP 2517535 A1 20121031; EP 2517535 B1 20170524; WO 2011076898 A1 20110630

DOCDB simple family (application)

EP 10151196 A 20100120; CN 201080058870 A 20101222; DE 112010004983 T 20101222; EP 10798097 A 20101222; EP 2010070587 W 20101222