

Title (en)
Circuit for operating a dielectric barrier discharge lamp with overvoltage protection

Title (de)
Betriebsschaltung für dielektrisch behinderte Entladungslampe mit Überspannungsschutzschaltung

Title (fr)
Circuit pour alimenter une lampe à barrière diélectrique muni d'une protection contre les surtensions

Publication
EP 1526761 B1 20070404 (DE)

Application
EP 04022966 A 20040927

Priority
DE 10349548 A 20031022

Abstract (en)
[origin: EP1526761A2] The circuit has an inductive converter for coupling power into the lamp, a switching transistor in a supply line to the converter and an overvoltage protection circuit. The operating circuit applies at least one test pulse to the converter for a re-start of lamp operation that is made too small to damage the switching transistor and the overvoltage protection circuit responds to the voltage produced at the transistor by the test pulse if no lamp is present and does not respond if a lamp is present. Independent claims are also included for the following: (A) an illumination system with an operating circuit and discharge lamp (B) a monitor with an inventive illumination system (C) and a method of igniting a dielectrically inhibited discharge lamp.

IPC 8 full level
H05B 41/24 (2006.01); **H05B 41/26** (2006.01); **H05B 41/28** (2006.01); **H05B 41/288** (2006.01); **H05B 41/292** (2006.01)

CPC (source: EP KR US)
H05B 41/24 (2013.01 - EP US); **H05B 41/26** (2013.01 - KR); **H05B 41/288** (2013.01 - KR); **H05B 41/292** (2013.01 - KR)

Cited by
EP1753272A3; EP1760996A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1526761 A2 20050427; EP 1526761 A3 20060329; EP 1526761 B1 20070404; AT E358963 T1 20070415; CA 2485618 A1 20050422; CN 100531505 C 20090819; CN 1610476 A 20050427; DE 10349548 A1 20050525; DE 502004003381 D1 20070516; JP 2005129523 A 20050519; JP 4739723 B2 20110803; KR 100658233 B1 20061214; KR 20050039606 A 20050429; TW 200527974 A 20050816; TW I285520 B 20070811; US 2005088116 A1 20050428; US 7045973 B2 20060516

DOCDB simple family (application)
EP 04022966 A 20040927; AT 04022966 T 20040927; CA 2485618 A 20041020; CN 200410087042 A 20041022; DE 10349548 A 20031022; DE 502004003381 T 20040927; JP 2004303446 A 20041018; KR 20040084332 A 20041021; TW 93131748 A 20041020; US 96353504 A 20041014