

Title (en)

Circuit and method for starting and operating gas discharge lamps with preheating filaments

Title (de)

Schaltungsanordnung und Verfahren zum Start und Betrieb von Gasentladungslampen mit heizbaren Elektrodenwendeln

Title (fr)

Circuit et méthode d'allumage et de commande du fonctionnement des lampes à décharge de gaz avec filaments de préchauffage

Publication

EP 1443808 A3 20060322 (DE)

Application

EP 03029437 A 20031219

Priority

DE 10303277 A 20030128

Abstract (en)

[origin: EP1443808A2] The gas discharge lamps [LP1,LP2] are supplied by a system with a rectifier [D1-4] having an output coupled to an electronic pumping circuit [UN1,D7,D8] and a capacitor [C31]. An AC inverter [INV] connects with a resonator circuit [L3,C6,C7] having a regulator [CONT] and a preheater resistor controls attenuation. This operates to limit values from a switch.

IPC 8 full level

H05B 41/285 (2006.01); **H05B 41/295** (2006.01)

CPC (source: EP KR US)

H05B 41/285 (2013.01 - KR); **H05B 41/295** (2013.01 - EP US); **Y10S 315/05** (2013.01 - EP US); **Y10S 315/07** (2013.01 - EP US)

Citation (search report)

- [XY] EP 1049361 A2 20001102 - MITSUBISHI ELECTRIC CORP [JP], et al
- [Y] US 6144169 A 20001107 - JANCZAK JERZY [US]
- [Y] EP 0621743 A1 19941026 - KONINKL PHILIPS ELECTRONICS NV [NL]
- [Y] HESTERMAN B L ET AL: "A novel parallel-resonant programmed start electronic ballast", INDUSTRY APPLICATIONS CONFERENCE, 1999. THIRTY-FOURTH IAS ANNUAL MEETING. CONFERENCE RECORD OF THE 1999 IEEE PHOENIX, AZ, USA 3-7 OCT. 1999, PISCATAWAY, NJ, USA,IEEE, US, 3 October 1999 (1999-10-03), pages 249 - 255, XP010355161, ISBN: 0-7803-5589-X

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 PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1443808 A2 20040804; EP 1443808 A3 20060322; EP 1443808 B1 20081008; AT E410911 T1 20081015; CA 2456367 A1 20040728; CN 100551197 C 20091014; CN 1558706 A 20041229; DE 10303277 A1 20040729; DE 50310605 D1 20081120; KR 101009518 B1 20110118; KR 20040069291 A 20040805; TW 200414827 A 20040801; TW I333804 B 20101121; US 2004150356 A1 20040805; US 6936976 B2 20050830

DOCDB simple family (application)

EP 03029437 A 20031219; AT 03029437 T 20031219; CA 2456367 A 20040127; CN 200410003526 A 20040129; DE 10303277 A 20030128; DE 50310605 T 20031219; KR 20040005394 A 20040128; TW 93100143 A 20040105; US 76225304 A 20040123