

Title (en)

Electronic ballast with charge pump for discharge lamps with pre-heated electrodes

Title (de)

Elektronisches Vorschaltgerät mit Pumpschaltung für Entladungslampe mit vorheizbaren Elektroden

Title (fr)

Ballast électronique de pompe a charge pour lampes a décharge avec électrodes de préchauffage

Publication

EP 1635620 B1 20071128 (DE)

Application

EP 05017529 A 20050811

Priority

DE 102004044180 A 20040913

Abstract (en)

[origin: EP1635620A1] The ballast has a pump circuit and a preheating transformer (TR2) supplying preheating power to preheatable electrodes connected to a secondary side of a discharge lamp. The ballast operates a converter during preheating with a frequency raised by comparison with open circuit resonant frequency of the ballast to supply a primary side of the transformer, during a preheating phase before the lamp is ignited. An independent claim is also included for a method for operating a discharge lamp.

IPC 8 full level

H05B 41/04 (2006.01)

CPC (source: EP KR US)

H05B 41/26 (2013.01 - KR); **H05B 41/295** (2013.01 - EP US); **Y10S 315/05** (2013.01 - EP US); **Y10S 315/07** (2013.01 - EP US)

Cited by

DE202008008165U1; DE102009020884A1; EP2317828A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 1635620 A1 20060315; **EP 1635620 B1 20071128**; AT E379953 T1 20071215; CA 2518768 A1 20060313; CN 1750731 A 20060322; CN 1750731 B 20110126; DE 102004044180 A1 20060316; DE 502005002087 D1 20080110; KR 101171686 B1 20120806; KR 20060051258 A 20060519; TW 200618676 A 20060601; US 2006055339 A1 20060316; US 7193375 B2 20070320

DOCDB simple family (application)

EP 05017529 A 20050811; AT 05017529 T 20050811; CA 2518768 A 20050912; CN 200510099504 A 20050913; DE 102004044180 A 20040913; DE 502005002087 T 20050811; KR 20050085282 A 20050913; TW 94131294 A 20050912; US 21380205 A 20050830