

Title (en)

ELECTRONIC BALLAST FOR OPERATING AT LEAST ONE DISCHARGE LAMP

Title (de)

ELEKTRONISCHES VORSCHALTGERÄT ZUM BETREIBEN MINDESTENS EINER ENTLADUNGSLAMPE

Title (fr)

BALLAST ÉLECTRONIQUE PERMETTANT DE FAIRE FONCTIONNER AU MOINS UNE LAMPE À DÉCHARGE

Publication

**EP 2420109 A1 20120222 (DE)**

Application

**EP 10728160 A 20100621**

Priority

- EP 2010058685 W 20100621
- DE 102009035371 A 20090730

Abstract (en)

[origin: WO2011012373A1] The present invention relates to an electronic ballast (10) for operating at least one discharge lamp having an input having a first and a second input connection for coupling to a DC supply voltage, wherein the second input connection is connected to an external reference potential (Mext); a load circuit (RL) having an output having a first and a second output connection for connecting the at least one discharge lamp; a constant-current transformer (12) comprising a converter throttle (L1), a converter diode (D1) and a converter switch (S1), wherein the converter throttle (L1) is coupled serially between the first input connection (E1) and the load circuit (RL); an activation circuit that is configured to activate the converter switch (S1) in operation with an HF signal; wherein a first capacity (Chi) is defined by the regions of the electronic ballast (10) that are connected in operation to an HF voltage, whereby a first voltage (Uchi) is defined that drops in operation via the first capacity (Chi) with respect to the external reference potential (Mext); and wherein a second capacity (Clo) is defined by the regions of the electronic ballast (10) that are supplied in operation with respect to HF on an internal reference potential (Mint) by a DC voltage; wherein at least one component is coupled between the internal (Mint) and the external reference potential (Mext) via which a second voltage (Uclo) that is counter-phased to the first voltage (Uchi) drops in operation.

IPC 8 full level

**H05B 41/282** (2006.01); **H05B 44/00** (2022.01)

CPC (source: EP KR US)

**H05B 41/28** (2013.01 - KR); **H05B 41/2822** (2013.01 - EP US); **H05B 41/292** (2013.01 - KR)

Citation (search report)

See references of WO 2011012373A1

Designated contracting state (EPC)

AL 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)

**DE 102009035371 A1 20110203; DE 102009035371 B4 20171026;** AU 2010278193 A1 20120119; CN 102422720 A 20120418;  
CN 102422720 B 20140709; EP 2420109 A1 20120222; JP 2013500557 A 20130107; JP 5538538 B2 20140702; KR 20120052379 A 20120523;  
US 2012112653 A1 20120510; US 8587210 B2 20131119; WO 2011012373 A1 20110203

DOCDB simple family (application)

**DE 102009035371 A 20090730;** AU 2010278193 A 20100621; CN 201080017793 A 20100621; EP 10728160 A 20100621;  
EP 2010058685 W 20100621; JP 2012522058 A 20100621; KR 20127005577 A 20100621; US 201013382301 A 20100621