

Title (en)  
CIRCUIT ARRANGEMENT FOR OPERATING AT LEAST ONE DISCHARGE LAMP

Title (de)  
SCHALTUNGSANORDNUNG UND VERFAHREN ZUM BETREIBEN MINDESTENS EINER ENTLADUNGSLAMPE

Title (fr)  
AGENCEMENT DE CIRCUITS ET PROCÉDÉ DE FONCTIONNEMENT D'AU MOINS UNE LAMPE À DÉCHARGE

Publication  
**EP 2484184 A1 20120808 (DE)**

Application  
**EP 10784291 A 20101122**

Priority  
• DE 102009047714 A 20091209  
• EP 2010067900 W 20101122

Abstract (en)  
[origin: WO2011069813A1] The invention relates to a circuit arrangement for operating at least one discharge lamp (La) having an input having a first (E1) and a second input connection (E2) for coupling to a DC supply voltage (U<sub>Zw</sub>); an output having a first (A1) and a second output connection (A2) for coupling to the at least one discharge lamp (La); a bridge circuit having at least one first (S1) and one second electronic switch (S2), wherein a series circuit of the first (S1) and the second electronic switch (S2) is coupled between the first (E1) and the second input connections (E2) forming a first bridge center point (HBM); an LRC resonance load circuit of at least the second degree having a lamp throttle (L1) coupled between the first bridge center point (HBM) and the first output connection (A1), and having at least one trapezoidal capacitor (Ct) coupled in parallel to one of the electronic switches (S1, S2), and a control device (10) for actuating at least the first (S1) and the second electronic switch (S2) by means of an actuating signal (AH, AL), wherein the actuating signal (AH, AL) comprises an operating frequency (f) for operating the LRC resonance load circuit in the frequency range having inductive phase position; wherein the circuit arrangement further comprises: A detection device (L2) designed for detecting the time derivative of the current (Is2) by at least one of the electronic switches (S1, S2); and a comparison device (R2, D3, R3, S3, C1, R4) coupled to the detection device (L2) and designed for comparing the value of the time derivative of the current (Is2) through at least one of the electronic switches (S1, S2) to a predefinable threshold value, wherein the comparison device (R2, D3, R3, S3, C1, R4) is further designed for actuating the control device (10) upon determining that the predefinable threshold value has been exceeded, such that said control device increases the operating frequency (f) of the actuating signal (AH, AL). The invention further relates to a corresponding method for operating at least one discharge lamp (La) of such a circuit arrangement.

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

CPC (source: EP)  
**H05B 41/2825** (2013.01)

Citation (search report)  
See references of WO 2011069813A1

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 RS SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102009047714 A1 20110616**; AU 2010330179 A1 20120621; CN 203072233 U 20130717; EP 2484184 A1 20120808;  
WO 2011069813 A1 20110616

DOCDB simple family (application)  
**DE 102009047714 A 20091209**; AU 2010330179 A 20101122; CN 201090001368 U 20101122; EP 10784291 A 20101122;  
EP 2010067900 W 20101122