

Title (en)

CIRCUIT ARRANGEMENT AND METHOD FOR RAPID COMMUTATION DURING SQUARE WAVE OPERATION OF HIGH-PRESSURE DISCHARGE LAMPS

Title (de)

SCHALTUNGSANORDNUNG UND VERFAHREN ZUR SCHNELLEN KOMMUTIERUNG BEIM RECHTECKBETRIEB VON HOCHDRUCKENTLADUNGSLAMPEN

Title (fr)

AGENCEMENT DE CIRCUITS ET PROCÉDÉ POUR LA COMMUTATION RAPIDE DE LAMPES À DÉCHARGE SOUS HAUTE PRESSION EN RÉGIME RECTANGULAIRE

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Application

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Abstract (en)

[origin: WO2012062346A1] The invention relates to a circuit arrangement for rapid commutation during square wave operation of high-pressure discharge lamps, comprising: a half bridge arrangement having a half bridge and a lamp inductor, a first switch for coupling the half bridge arrangement to the lamp, a second switch for completing the forward current commutation and for initiating a forward phase, a third switch for completing the reverse current commutation and for initiating a reverse phase, and a block capacitor. The invention likewise relates to a method for operating a high-pressure discharge lamp by means of a circuit arrangement having a half bridge and a lamp inductor and a block capacitor, characterized by the following steps: before initiating commutation, disconnecting the half bridge arrangement from the high-pressure discharge lamp by opening a first switch; completing the forward commutation by closing a second switch to initiate a forward phase and by opening a third switch, or completing the reverse commutation by closing the third switch to initiate a reverse phase and by opening the second switch; connecting the half bridge arrangement to the high-pressure discharge lamp by closing the first switch; and opening the second switch and the third switch.

IPC 8 full level

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