Title (en)

CIRCUIT FOR OPERATING A GAS DISCHARGE LAMP

Title (de)

SCHALTUNGSANORDNUNG ZUM BETREIBEN EINER GASENTLADUNGSLAMPE

Title (fr)

MONTAGE DE CIRCUITS PERMETTANT LE FONCTIONNEMENT D'UNE LAMPE A DECHARGE GAZEUSE

Publication

EP 1243165 A1 20020925 (DE)

Application

EP 00974462 A 20001026

Priority

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• EP 0010557 W 20001026

Abstract (en)

[origin: US2003025466A1] In a circuit configuration to operate a gas discharge lamp (LA) the lamp (LA) is arranged in a full bridge circuit. A control circuit in normal operation actuates the four switches (S1-S4) in such a way that it changes over with a first frequency (f1) alternately between a first and a second state (T1, T2), whereby in the first state (T1) the two switches (S2, S3) of a first bridge diagonal are opened, one switch (S1) of the second bridge diagonal is closed and the other switch (S4) with a second frequency (f2), which is higher than the first frequency (f1), is alternately opened and closed. In the second state (T2) the four switches (S1-S4) are actuated in such a way that the lamp (LA) is pole reversed. In a start phase (TS) on the contrary the switch connected to the DC voltage source (S4) of a half-bridge is opened, the second switch (S3) of this half-bridge is closed, and the two switches (S1, S2) of the other half-bridge are with a third frequency (f3) alternately opened and closed. As a result reliable lamp starting is rendered possible and at the same time the generation of high-frequent alternating fields in normal operation is reduced.

IPC 1-7

H05B 41/282; H05B 41/298

IPC 8 full level

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CPC (source: EP US)

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