

Title (en)

CIRCUIT ARRANGEMENT FOR OPERATING LOW-PRESSURE DISCHARGE LAMPS.

Title (de)

SCHALTUNGSANORDNUNG ZUM BETRIEB VON NIEDERDRUCKENTLADUNGSLAMPEN.

Title (fr)

CIRCUIT PERMETTANT DE FAIRE FONCTIONNER DES LAMPES A DECHARGE BASSE PRESSION.

Publication

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Application

EP 93924515 A 19931111

Priority

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- DE 4238409 A 19921113

Abstract (en)

[origin: DE4238409A1] A circuit arrangement for the high-frequency operation of a low-pressure discharge lamp (18) comprises a mains rectifier (10), an interference filter (12) connected to the mains rectifier (10), an r.f. inverter (14) connected to the d.c. output of the mains rectifier (10) with two alternately switching transistors (T1, T2), an inductance (LK), a drive circuit and a central tap (M) arranged between the two transistors (T1, T2). A filter capacitor (CS) is connected between the switching paths of the two transistors (T1, T2) of the r.f. inverter (14). The low-pressure discharge lamp (18) has an associated series resonant circuit (16) consisting of a resonant inductance (L3), a coupling capacitor (C3) and a resonant capacitance in parallel with the lamp. The connecting lines for the low-pressure discharge lamp (18) lead from the first electrode (E1) via the resonant inductance (L3) to the central tap (M) and from a second electrode (E2) via the central tap of a series diode circuit, connected in series with the filter capacitor (CS) and consisting of a first and a second diode (D1, D2), to the positive or negative terminal of the mains rectifier (10). The capacitance in parallel with the lamp and forming part of the series resonant circuit (16) associated with the low-pressure discharge lamp (18) consists of two capacitors (CR1, CR2) in parallel, one of which (CR2) is directly connected to the positive or negative terminal of the filter capacitor (CS).

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