

Title (en)

Circuit for operating a fluorescent lamp with a current measuring circuit

Title (de)

Schaltungsanordnung zum Betrieb einer Leuchtstofflampe und zur Messung des Lampenstroms

Title (fr)

Circuit pour alimenter une lampe fluorescente avec mesure du courant passant par la lampe

Publication

EP 0589081 B1 19970115 (DE)

Application

EP 92116334 A 19920924

Priority

EP 92116334 A 19920924

Abstract (en)

[origin: EP0589081A1] A series-resonant circuit having a first winding of a feedback transformer (Tr1.1), having a resonance inductor (L1), having a coupling capacitor (C1), having a first lamp cathode (LK1), having a resonance capacitor (C2) and having a first winding of an isolating transformer (Tr4.1) is formed in the circuit arrangement for supplying a fluorescent lamp (LL) and is connected between the output of an inverter, which operates on a supply voltage (Ub), and one pole of the supply voltage (Ub). The second coupling of the isolating transformer (Tr4.2) is connected in parallel with the second lamp cathode (LK2). As a result of this circuitry of the second lamp cathode (LK2), the same currents I_{heat} flow through the two lamp cathodes (LK1, LK2) with the same number of windings of the windings of the isolating transformer (Tr4.1, Tr4.2), and in consequence the same heating of the two lamp cathodes (LK1, LK2) is achieved. The parallel circuit formed by the second lamp cathode (LK2) and the second winding of the isolating transformer (Tr4.2) is connected to one terminal of the supply voltage Ub, via a resistor (R1), at a potential. The lamp current IL flows through the resistor (R1). The voltage dropped across the resistor (R1) is thus proportional to the actual value of the lamp current I_{act} and can thus be supplied to the main circuit (HS), which is also provided for regulating the lamp current. <IMAGE>

IPC 1-7

H05B 41/29

IPC 8 full level

H05B 41/295 (2006.01)

CPC (source: EP US)

H05B 41/295 (2013.01 - EP US); **Y10S 315/02** (2013.01 - EP)

Cited by

DE19501695B4; EP0852453A1; EP0693864A3; EP1191824A3; US5656891A; EP0707438A3; EP0707438A2; WO2007039010A1; WO2008128573A1; WO2009089918A1

Designated contracting state (EPC)

AT CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0589081 A1 19940330; EP 0589081 B1 19970115; AT E147926 T1 19970215; DE 59207908 D1 19970227; US 5504399 A 19960402

DOCDB simple family (application)

EP 92116334 A 19920924; AT 92116334 T 19920924; DE 59207908 T 19920924; US 12516793 A 19930923