

Title (en)
STARTING CIRCUIT FOR LOW-PRESSURE DISCHARGE LAMPS

Publication
EP 0185179 B1 19890322 (DE)

Application
EP 85113901 A 19851031

Priority
DE 3441992 A 19841116

Abstract (en)
[origin: US4647817A] To provide for reliable ignition of low-pressure discharge lamps, particularly compact fluorescent lamps, operated at high frequency, for example in the order of about 45 kHz, an ignition circuit is connected in parallel to the lamp and serially with the electrodes (16, 17) thereof, which comprises a limiting capacitor (19) and the parallel circuit of a positive temperature coefficient (PTC) resistor (20) and a starting capacitor (18). The two capacitors (18, 19), together with an inductance (13, 14) in the operating circuit of the lamp, and a further capacity formed by a blocking capacitor (15), after preheating of the lamp electrodes by current flowing through the initially cold PTC resistor, will cause voltage rise across the resonance capacitors (18, 19) which will cause ignition of the lamp. The ratio of the limiting capacitor to the starting capacitor is in the order of 1:1 to 5:1, preferably about 2:1, resulting in gentle ignition in minimum time, for example about 1/2 second after energization of the lamp.

IPC 1-7
H05B 41/29

IPC 8 full level
H05B 41/16 (2006.01); **H05B 41/18** (2006.01); **H05B 41/24** (2006.01); **H05B 41/295** (2006.01)

CPC (source: EP KR US)
H05B 41/231 (2013.01 - KR); **H05B 41/295** (2013.01 - EP US); **Y10S 315/07** (2013.01 - EP US)

Cited by
EP0449127A1; EP0310218A1; DE3835121A1; EP0320944A1; EP0752804A1; EP0779768A2; WO9107070A1

Designated contracting state (EPC)
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DE 3441992 A1 19860522; DE 3569072 D1 19890427; EP 0185179 A1 19860625; EP 0185179 B1 19890322; HK 91493 A 19930910; JP H079836 B2 19950201; JP S61126795 A 19860614; KR 860004563 A 19860623; KR 940010821 B1 19941116; US 4647817 A 19870303

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