

Publication

EP 0185179 A1 19860625 (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.

Abstract (de)

Zur Zündung von Niederdruckentladungslampen, insbesondere von Kompaktleuchtstofflampen, die mit Hochfrequenz betrieben werden, ist im Zündstromkreis eine Reihenschaltung zweier Resonanzkondensatoren (18, 19) angeordnet, von denen einer durch einen Kaltleiter (20) überbrückt ist. Mit den Resonanzkondensatoren (18, 19) stellt sich zusammen mit der im Betriebsstromkreis liegenden Induktivität (14) und dem Trennkondensator (15) nach genügender Vorheizung der Lampenelektroden (16, 17) eine Spannungsüberhöhung durch Resonanz ein, die zu einer schonenden Zündung der Lampe (1) führt.

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)

Citation (search report)

- [A] US 3882354 A 19750506 - MAY RANDALL L
- [A] US 4075476 A 19780221 - PITEL IRA J

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Designated contracting state (EPC)

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