Title (en)

Electronic starter for fluorescent lamps.

Title (de)

Elektronische Zündschaltung für Leuchtstofflampen.

Title (fr)

Starter électronique pour lampes fluorescentes.

Publication

EP 0520735 A1 19921230 (EN)

Application

EP 92305744 A 19920623

Priority

GB 9113813 A 19910627

Abstract (en)

A starter circuit of the half-wave (rectifying) type has terminals (X,Y) connected between the cathodes of a fluorescent tube (T) which are in turn connected in series with a ballast inductor L to the mains supply. The starter circuit includes a Fluoractor device (F) which is controllably triggered to operate in a first phase providing heater current for the cathodes and in a subsequent phase to generate high voltage ignition pulses with the aid of the inductor L. The gate circuit of the Fluoractor device (F) is shunted by a bipolar or field effect transistor (TR2, TR1) to divert current entirely from the Fluoractor if the fluorescent tube (T) fails to strike after a certain period. A timing circuit including two capacitors (C3, C4) in a charge pump arrangement is connected through a diode (D5) between terminals (X,Y) to charge one of the capacitors (C4) in the supply half-cycles of opposite polarity to those to which the Fluoractor (F) responds. Charge increments are transferred to the other capacitor (C3) building up a bias voltage applied to the transistor (TR2, TR1) to turn it on and cause the starter circuit to enter first a pulsing mode and then a quiescent mode. <IMAGE>

IPC 1-7

H05B 41/04

IPC 8 full level

H05B 41/04 (2006.01)

CPC (source: EP) H05B 41/046 (2013.01)

Citation (search report)

• [A] EP 0170528 A2 19860205 - MARTIN DAVID JOHN

• [A] EP 0333359 A1 19890920 - EMI PLC THORN [GB]

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Designated contracting state (EPC) DE ES FR GB IT SE

DOCDB simple family (publication)

EP 0520735 A1 19921230; GB 9113813 D0 19910814

DOCDB simple family (application)

EP 92305744 A 19920623; GB 9113813 A 19910627