

Title (en)

ELECTRONIC DEVICE FOR CONTROLLING THE LIGHT INTENSITY OF A GASEOUS DISCHARGE LAMP WITHOUT A HEATED CATHODE

Publication

EP 0003528 B1 19810930 (DE)

Application

EP 79100202 A 19790124

Priority

- CH 148878 A 19780211
- CH 367978 A 19780406

Abstract (en)

[origin: WO7900615A1] A circuit (IC1, R3-R11, C4-C6, D1) is provided for controlling the electrical energy applied to a gas discharge lamp without incandescent cathode, in view of a direct controlling voltage (U<uS>u). This circuit allows the modification of the time or the firing angle of a thyristor (TR1) inside each half-wave of the alternative voltage. In order to avoid complete unwanted extinction during the adjustment of a minimum light intensity of the lamp (20), a second circuit (30, 42, R12-20, C7, D3, T1) is provided which ensures a minimum current strength through the lamp (20) irrespective of the continuous controlling voltage (U<uS>u). The second circuit comprises a transformer (30) and a rectifier (42) generating an adjusting voltage (U<uR>u) which depends from the current strength in the lamp. Said voltage (U<uR>u) controls an electronically variable resistance (T1). The latter acts on the voltage which controls the firing angle when the current strength in the lamp drops below the minimum permitted, so that a continuous decrease of the current strength be automatically opposed. The arrangement is used for example for adjusting the light intensity of lighting facilities for rooms, streets and tunnels comprising mercury-vapor bulbs or high-pressure sodium-vapor tubes.

IPC 1-7

H05B 41/392; **G05F 1/42**

IPC 8 full level

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CPC (source: EP US)

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Cited by

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