

Title (en)
Ignition and safety circuit for gas burners.

Title (de)
Zünd- und Sicherheitsschaltung für Gasbrenner.

Title (fr)
Circuit d'allumage et de sécurité pour brûleur à gaz.

Publication
EP 0440872 B1 19940921 (DE)

Application
EP 90105518 A 19900323

Priority
DE 4003467 A 19900206

Abstract (en)
[origin: EP0440872A2] In an intrinsically safe igniting and safety circuit for a gas burner, for the temporal determination of a purging period, a first charging capacitor (C2) is charged via a first diode (D1) and the series circuit of the exciter windings of a closing relay (GR) for the solenoid valve (V) and of a bistable safety valve (SR), without in the course of this one of the two relays responding. As soon as the voltage at the first charging capacitor exceeds a predetermined value, an operational amplifier (OP) switches through a first electronic switch (T2) connected from the junction (P1) of the two exciter windings to earth. The closing relay responds, opens the gas supply via the solenoid valve and sets an ignition spark generator in operation. A delay circuit, consisting of a second charging capacitor (C4) which can be charged from the first charging capacitor (C2), two voltage dividers (R4, R5; R7, R8) and an operational amplifier (OP), lays down a given delay time by discharging the second capacitor (C4), after which the first electronic switch (T2) closes again. The installation is thus cut out by dropout of the safety relay, unless a flame detector circuit (FS) connected to a flame detector (FL) previously switches through, on the appearance of a flame within said safety time, a second electronic switch (T1) connected parallel to the first electronic switch (T2) and thus forms a holding circuit for the closing relay. <IMAGE>

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IPC 8 full level
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CPC (source: EP)
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Cited by
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