

Title (en)

An automatic control system with double safety protection for intermittently-operated gas burners

Title (de)

Selbsttätiges Regelsystem mit doppeltem Sicherheitsschutz für einen intermittierend funktionierenden Gasbrenner

Title (fr)

Système de commande automatique avec une protection de sécurité double pour des brûleurs à gaz à fonctionnement intermittent

Publication

**EP 0837283 A1 19980422 (EN)**

Application

**EP 96830531 A 19961016**

Priority

EP 96830531 A 19961016

Abstract (en)

In an automatic control system with double intrinsic safety protection for gas burners, a first, safety solenoid valve (1) and a second, regulation solenoid valve (2) in cascade control the supply of gas to a burner (16), detector means (51) recognize whether the voltage generated by a thermocouple (7) heated by a pilot light (19) supplied by means of the safety valve (1) is above or below a predetermined threshold value sufficient to keep the first solenoid valve (1) open, and control means (3, 50, 52, 53, 73) generate control signals (EV1, EV2) for opening the first and second solenoid valves mutually exclusively of one another, the opening of the second solenoid valve being dependent on the recognition of a thermocouple voltage above the predetermined value. <IMAGE>

IPC 1-7

**F23N 1/00**; **F23N 5/10**; **F23N 5/20**

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

- WO 9312378 A1 19930624 - ELECTROLUX AB [SE]
- EP 0109155 A1 19840523 - WEBBER ELECTRO COMPONENTS PLC [GB]
- EP 0439417 A1 19910731 - RV CONST ELECTRIQUES [FR]

Citation (search report)

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- [AD] WO 9312378 A1 19930624 - ELECTROLUX AB [SE]
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- [A] GB 2170932 A 19860813 - STELRAD GROUP LTD
- [A] EP 0573222 A1 19931208 - BLUE CIRCLE HEATING LTD [GB]
- [A] PATENT ABSTRACTS OF JAPAN vol. 007, no. 223 (M - 247) 4 October 1983 (1983-10-04)
- [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 121 (M - 0946) 7 March 1990 (1990-03-07)

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