

Title (en)

CONTROL DEVICE FOR A GAS-HEATED BOILER OF A WARM-WATER HEATING INSTALLATION

Publication

**EP 0062856 B1 19860716 (DE)**

Application

**EP 82102804 A 19820402**

Priority

DE 3114942 A 19810413

Abstract (en)

[origin: EP0062856A1] 1. Control device for a gas-fired boiler (33) of a warm-water heating installation comprising a gas control valve (1) provided in the gas pipe to the burner (26) with the closure member (5) of said gas valve being controlled by the control signal of a regulator (66) to which signals are fed as input variables which correspond to the temperature values in the hot water supply conduit (62) and in the return water conduit (64), respectively, and whereat said regulator delivers the control signal if the difference between said temperatures deviates from a predetermined set point value, characterized by the following features : a) the closure member (5) of the gas control valve (1) is positioned via a diaphragm actuator (8, 9, 10) by the outlet control pressure of a servopressure regulator (13) which is associated with said gas valve ; b) a first master controller (66) is provided for adjusting the set point of the servopressure regulator (13) ; c) the closure member (41) of an air control valve (38) connected in series with a fan (40) is positioned by the outlet control pressure of a second servopressure regulator (73) via a diaphragm actuator (42, 43) ; d) the set point of the second servopressure regulator (73) can be influenced by an associated solenoid operator (72) which is controlled by a second master controller (71) ; e) the control variable input of the second master controller (71) is connected to a sensor (70) which measures the oxygen concentration or the carbon dioxide concentration in the stack (54) of the boiler (33).

IPC 1-7

**F23N 5/02**

IPC 8 full level

**F23N 5/02** (2006.01); **F23N 5/00** (2006.01); **F23N 5/18** (2006.01)

CPC (source: EP)

**F23N 5/025** (2013.01); **F23N 5/006** (2013.01); **F23N 5/18** (2013.01); **F23N 2225/08** (2020.01); **F23N 2233/06** (2020.01); **F23N 2233/08** (2020.01); **F23N 2235/14** (2020.01); **F23N 2235/16** (2020.01); **F23N 2235/18** (2020.01); **F23N 2235/20** (2020.01); **F23N 2235/24** (2020.01)

Cited by

US4785846A; US6003544A; EP0229319A3; CN113587140A; WO9300559A1; US10100938B2

Designated contracting state (EPC)

BE DE FR GB IT NL

DOCDB simple family (publication)

**EP 0062856 A1 19821020**; **EP 0062856 B1 19860716**; DE 3114942 A1 19821028; DE 3271988 D1 19860821

DOCDB simple family (application)

**EP 82102804 A 19820402**; DE 3114942 A 19810413; DE 3271988 T 19820402