

Title (en)

Fuel/air ratio regulation device for a fuel-fired heat source.

Title (de)

Regeleinrichtung für das Brennstoff-Luftverhältnis einer brennstoffbeheizten Wärmequelle.

Title (fr)

Dispositif de régulation du rapport carburant/air d'une source de chaleur chauffée au carburant.

Publication

EP 0158842 A1 19851023 (DE)

Application

EP 85103055 A 19850316

Priority

DE 8409840 U 19840330

Abstract (en)

1. An apparatus for automatically controlling the fuel-air ratio of a fuel-firing heat source (1) comprising sensor means (40) for determining an actual value in dependence on at least the supply air, and a controller (11), which in dependence on the actual value and on a set point obtained from a set point generator (48) controls a final control element (17) for the control of the fresh air which is flowing to the heat source, characterized in that the sensor means consist of four temperature sensors, two of which constitute measuring sensors (21, 30), which are associated with the supply air path (14) and with the exhaust gas path (13) of the heat source (1), whereas the two others constitute temperature-compensating sensors (32, 33) for detecting temperature changes of the incoming fresh air and of the exhaust gas resulting from load changes, and that the temperature sensors consist of measuring resistors and are arranged in arms of a Wheatstone bridge (40) having one branch (41, 42) which is constituted by the two measuring resistors and another branch which is constituted by the two compensating resistors.

Abstract (de)

Regeleinrichtung für das Brennstoff-Luftverhältnis eines gasbeheizten Umlaufwasserheizers, wobei die Zuluftzu- und Abgasabfuhr über zwei konzentrische Rohrleitungen vorgenommen wird mit einem Meßglied, das aus vier Temperaturfühlern besteht, von denen zwei als eigentliche meßfühler dem Zuluftzu- und dem Abgasabfuhrweg zugeordnet sind, während die anderen beiden als Temperaturkompensationsfühler für die Temperaturänderungen der zuströmenden Zuluft wie auch des Abgases auf Grund von Belastungsänderungen vorgesehen sind.

IPC 1-7

F23N 1/02; **F23N 5/00**

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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