

Title (en)

Process for controlling and supervising a fuel-heated apparatus with the use of at least one microcomputer system, and apparatus to carry out this process.

Title (de)

Verfahren zum Steuern und Überwachen eines brennstoffbeheizten Gerätes unter Verwendung zumindest eines Mikrocomputersystems und Vorrichtung zur Durchführung des Verfahrens.

Title (fr)

Méthode de commande et de surveillance d'un appareil chauffé au fuel par l'utilisation d'au moins un système à micro-ordinateur et dispositif d'exécution de cette méthode.

Publication

EP 0352217 B1 19940914 (DE)

Application

EP 89710062 A 19890718

Priority

- DE 3825038 A 19880720
- DE 3827181 A 19880808
- DE 3827295 A 19880811

Abstract (en)

[origin: EP0352217A2] The present invention relates to a process and apparatus for controlling and supervising a fuel-heated apparatus, in particular a circulation water heater, with the use of at least one microcomputer system which has a plurality of sensors which are present for sensing digital and analog values and positions. The invention is characterised in that, when two microcomputer systems (22, 25) are used, the safety-relevant input signals are input in both systems, whereupon each microcomputer system calculates for itself the corresponding adjusting signals and an output signal is only forwarded to the respective output stages (35, 36, 37, 45) when the adjusting commands of both microcomputer systems (22, 25) are identical, each microcomputer system additionally independently having the possibility of switching without current, with the aid of a safety cut-out (28), all output stages and actuators and consequently bringing the fuel-heated apparatus into the safe state, a number of safety-relevant functions, for example flame supervision, temperature limiters, supervision of water shortage, air and waste gas, being brought about in the same microcomputer system (Figure 2). <IMAGE>

IPC 1-7

F23N 5/24

IPC 8 full level

F23N 5/24 (2006.01); **F23N 1/08** (2006.01)

CPC (source: EP)

F23N 5/242 (2013.01); **F23N 1/08** (2013.01); **F23N 2223/08** (2020.01); **F23N 2225/08** (2020.01); **F23N 2225/19** (2020.01); **F23N 2231/00** (2020.01); **F23N 2231/10** (2020.01); **F23N 2241/04** (2020.01)

Cited by

CN113513767A; EP1479984A1; EP0687965A3; US5673680A; EP1195558A1; AT14475U1; DE102006008475A1; EP0614049A1; US5513062A; WO9115716A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0352217 A2 19900124; **EP 0352217 A3 19901212**; **EP 0352217 B1 19940914**; AT E111587 T1 19940915; DE 58908350 D1 19941020

DOCDB simple family (application)

EP 89710062 A 19890718; AT 89710062 T 19890718; DE 58908350 T 19890718