

Title (en)  
PROCESS FOR THE CONTROL OF EXCESS AIR IN FIRING EQUIPMENTS AND CONTROL EQUIPMENT FOR THE REALIZATION OF THE PROCESS

Publication  
**EP 0086337 B1 19870325 (DE)**

Application  
**EP 83100320 A 19830115**

Priority  
DE 3203675 A 19820204

Abstract (en)  
[origin: EP0086337A1] 1. A process for controlling the excess air in a furnace in which the air flow and/or fuel flow is corrected on the basis of measurement of the excess air in the flue gas after a prescribed value/actual value comparison of the excess air in a control device, the proportional sensitivity (gain) of the control device being varied according to the load rate (beta), and at least some of the time parameters of the control device are automatically adapted to the load rate (beta) of the furnace, the prescribed excess air value (w, w') fed as command variable (reference variable) to a controller (11, 28) of the control device being varied according to the load rate (beta), characterized in that the prescribed excess air value (w, w') is fed to the controller (11, 28) through a signal filter (10, 26) having at least one time constant, at least one of the time constants (TF ) being varied according to the load rate (beta).

IPC 1-7  
**F23N 1/02**; **F23N 5/20**

IPC 8 full level  
**F23N 1/02** (2006.01); **F23N 5/00** (2006.01); **F23N 5/20** (2006.01)

CPC (source: EP)  
**F23N 1/022** (2013.01); **F23N 5/003** (2013.01); **F23N 5/006** (2013.01)

Citation (examination)  
• Art. "Adaptive-Steuerung der Reglereinstellung mit einfachen Mitteln" v. W. Peinke, in Regelungstechnik, Heft 6 (1966), Seiten 274 ff  
• Art. "Regelung der Verbrennung mittels Prozessrechner" aus Gas/Erdgas, Zeitschrift des DVGW Deutscher Verein des Gas- und Wasserfaches, Jahrgang 1980, Heft 4, Seiten 141 ff

Cited by  
GB2224105B; EP0339135A1; EP0183990A1; DE3812697A1; US5106294A; EP0342347B1

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0086337 A1 19830824**; **EP 0086337 B1 19870325**; AT E26166 T1 19870415; DE 3203675 A1 19830811; DE 3203675 C2 19851003; DE 3370527 D1 19870430; ZA 83648 B 19831026

DOCDB simple family (application)  
**EP 83100320 A 19830115**; AT 83100320 T 19830115; DE 3203675 A 19820204; DE 3370527 T 19830115; ZA 83648 A 19830201