

Title (en)  
Control system for combustion equipment

Title (de)  
Steuersystem für eine Verbrennungsanlage

Title (fr)  
Système de commande pour une installation de combustion

Publication  
**EP 1219899 A1 20020703 (EN)**

Application  
**EP 00128025 A 20001220**

Priority  
EP 00128025 A 20001220

Abstract (en)

An Intake/exhaust type combustion equipment capable of permitting oxygen in a proper amount required for stable combustion to be constantly fed to the combustion equipment, irrespective of outdoor air conditions. An intake air temperature detection sensor (55) is arranged for detecting a temperature of combustion air fed to a burner (2) by a combustion air feed fan (16) and an oxygen data output element (53a) is arranged for outputting oxygen data corresponding to an oxygen concentration in combustion air depending on the temperature detected by the intake air temperature detection sensor. The oxygen data output element outputs oxygen data on the oxygen concentration or a variation in oxygen concentration based on the detected temperature. A combustion variation unit (53) is configured so as to output a feed rate variation command for varying balance between the amount of fuel fed to the burner and the amount of combustion air fed thereto to ensure that combustion air is fed in a proper amount to the burner, on the basis of the oxygen data. Thus, the combustion variation unit controls a fuel feed element (3) and the combustion air feed fan so that data on the amount of oxygen are obtained from data on a temperature of intake air, to thereby maintain balance between the amount of fuel fed to the burner and the amount of oxygen required for combustion in the burner. <IMAGE>

IPC 1-7  
**F23N 1/02**

IPC 8 full level  
**F23N 1/02** (2006.01)

CPC (source: EP)  
**F23N 1/022** (2013.01); **F23N 2221/08** (2020.01); **F23N 2225/04** (2020.01); **F23N 2225/12** (2020.01); **F23N 2225/13** (2020.01);  
**F23N 2225/21** (2020.01); **F23N 2227/42** (2020.01); **F23N 2233/08** (2020.01); **F23N 2233/10** (2020.01); **F23N 2235/30** (2020.01)

Citation (applicant)

- JP H05302712 A 19931116 - TOYOTOMI KOGYO CO LTD
- JP H08128623 A 19960521 - TOYOTOMI KOGYO CO LTD

Citation (search report)

- [X] DE 19906285 A1 20000831 - EBERSPAECHER J GMBH & CO [DE]
- [X] EP 0615095 A1 19940914 - LANDIS & GYR BUSINESS SUPPORT [CH]
- [X] PATENT ABSTRACTS OF JAPAN vol. 013, no. 161 (M - 815) 18 April 1989 (1989-04-18)
- [X] PATENT ABSTRACTS OF JAPAN vol. 017, no. 447 (M - 1464) 17 August 1993 (1993-08-17)

Cited by  
EP2362146A1; EP1843094A1; ITVI20100042A1; AU2011202376B2

Designated contracting state (EPC)  
BE DE DK FR IT NL

DOCDB simple family (publication)  
**EP 1219899 A1 20020703; EP 1219899 B1 20060426**; DE 60027582 D1 20060601; DE 60027582 T2 20070301; DK 1219899 T3 20060828

DOCDB simple family (application)  
**EP 00128025 A 20001220**; DE 60027582 T 20001220; DK 00128025 T 20001220