

Title (en)  
Spark and flame monitoring system for burners

Title (de)  
Zünd- und Flammenüberwachungseinrichtung für Brenneranlagen

Title (fr)  
Système de surveillance d'étincelle et de flamme pour des brûleurs

Publication  
**EP 0732544 A3 19961127 (DE)**

Application  
**EP 96103931 A 19960313**

Priority  
DE 19509797 A 19950317

Abstract (en)  
[origin: DE19509797C1] The device has a flame sensor (FE, FV) for de-activating the ignition device (IG, ZE) when the flame is detected, with closure of the auxiliary gas valve (PV) supplying the ignition burner (PB) upon detection of the main burner flame. A clock source disconnects the gas when no main burner flame is detected after a given time has elapsed from the opening of the ignition burner valve, with a safety switch (S1,si) in the current path of the ignition device and the flame monitoring device requiring manual resetting.

IPC 1-7  
**F23N 5/10**

IPC 8 full level  
**F23D 14/72** (2006.01); **F23N 5/10** (2006.01); **F23N 5/20** (2006.01); **F23N 5/12** (2006.01)

CPC (source: EP)  
**F23D 14/725** (2013.01); **F23N 5/102** (2013.01); **F23N 5/203** (2013.01); **F23N 5/12** (2013.01); **F23N 2223/22** (2020.01); **F23N 2227/22** (2020.01);  
**F23N 2227/24** (2020.01); **F23N 2227/30** (2020.01); **F23N 2227/36** (2020.01); **F23N 2235/14** (2020.01); **F23N 2235/18** (2020.01)

Citation (search report)  
• [A] FR 2469744 A1 19810522 - HONEYWELL INC [US]  
• [A] US 4137035 A 19790130 - CADE PHILLIP J  
• [A] PATENT ABSTRACTS OF JAPAN vol. 007, no. 193 (M - 238) 24 August 1983 (1983-08-24)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 027 (M - 662) 27 January 1988 (1988-01-27)

Cited by  
IT201800005549A1; US7891972B2; WO2005088195A1; WO2019224128A1

Designated contracting state (EPC)  
DE FR GB IT NL

DOCDB simple family (publication)  
**DE 19509797 C1 19960627**; DE 59600927 D1 19990121; EP 0732544 A2 19960918; EP 0732544 A3 19961127; EP 0732544 B1 19981209;  
EP 0732544 B2 20051214

DOCDB simple family (application)  
**DE 19509797 A 19950317**; DE 59600927 T 19960313; EP 96103931 A 19960313