

Title (en)

GAS BURNER FOR HEATING AN AIR STREAM OR OTHER OXIDANT GAS

Publication

**EP 0313469 B1 19901227 (FR)**

Application

**EP 88402659 A 19881021**

Priority

FR 8714686 A 19871023

Abstract (en)

[origin: EP0313469A1] Burner arranged transversely in a pipe to heat an oxidant gas (air) circulating at high speed in this pipe, and consisting of a tube (10) supplied with fuel gas and pierced with holes, which are possibly provided with injectors, making it possible to emit jets of gas directed downstream, and a flame stabiliser (12) comprising two diverging wings forming a deflector and delimiting a zone which is sheltered from the flow of gas to be heated. <??>In order to maintain a practically constant aeration rate of the air/fuel mixture in spite of the variations of the flow of fuel and/or the speed of the gases to be heated, the burner comprises, downstream of each hole (14) and coaxially therewith, a converging/diverging nozzle (26) arranged in such a manner that the jet of gas emerging from said hole creates a low pressure at the entrance of the nozzle, and the entrance of the nozzle is made to communicate with the internal space of said pipe surrounding the burner by at least one opening (24) arranged so as to eliminate the influence of the dynamic pressure of gas to be heated on the flow of gas drawn in by the nozzle through said opening. <IMAGE>

IPC 1-7

**F23D 14/20; F23D 14/34; F23D 14/74**

IPC 8 full level

**F23D 14/02** (2006.01); **F23D 14/20** (2006.01); **F23D 14/34** (2006.01); **F23D 14/64** (2006.01); **F23D 14/66** (2006.01); **F23D 14/74** (2006.01);  
**F23G 7/06** (2006.01)

CPC (source: EP KR US)

**F23D 14/02** (2013.01 - KR); **F23D 14/20** (2013.01 - EP US); **F23D 14/34** (2013.01 - EP US); **F23D 14/74** (2013.01 - EP US);  
**F23C 2201/20** (2013.01 - EP US); **F23C 2201/30** (2013.01 - EP US)

Cited by

FR2804748A1; EP1122494A1; WO9004740A1; US6409502B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**EP 0313469 A1 19890426; EP 0313469 B1 19901227**; AT E59452 T1 19910115; CA 1326810 C 19940208; DE 3861454 D1 19910207;  
ES 2019469 B3 19910616; FR 2622277 A1 19890428; FR 2622277 B1 19900223; GR 3001650 T3 19921123; JP H01134107 A 19890526;  
JP H0549888 B2 19930727; KR 890007021 A 19890617; KR 910004773 B1 19910713; US 4895514 A 19900123

DOCDB simple family (application)

**EP 88402659 A 19881021**; AT 88402659 T 19881021; CA 580005 A 19881013; DE 3861454 T 19881021; ES 88402659 T 19881021;  
FR 8714686 A 19871023; GR 910400363 T 19910322; JP 26070188 A 19881018; KR 880013821 A 19881022; US 25677788 A 19881011