

Title (en)

BURNER WITH FLUE GAS RECIRCULATION, ESPECIALLY FORCED-DRAUGHT BURNER

Publication

EP 0445393 A3 19920304 (DE)

Application

EP 90123830 A 19901211

Priority

DE 4006806 A 19900305

Abstract (en)

[origin: EP0445393A2] A burner, in particular a forced-draught burner for heating boilers, combustion installations or the like, is proposed, which is provided with an air supply device, a fuel supply device (15) which introduces liquid or gaseous fuel, a flame device (14) which penetrates into a combustion chamber (11) and forms the burner flame (18), and a waste gas return duct (20) which returns to the air supply device part of the waste gases formed during combustion. A region of the waste gas return duct (20), which during operation of the burner (13) has a temperature above the dew point of the waste gases, is provided with at least one supply opening (22) for outside air. By virtue of the inflowing dry outside air, which mixes with the waste gases, the dew point is on the whole reduced to such an extent that it lies below the temperatures prevailing in the waste gas return circuit. As a result of this, the condensation in the burner and thus the corrosion in the burner can be prevented in a simple manner. <IMAGE>

IPC 1-7

F23C 9/06

IPC 8 full level

F23C 9/06 (2006.01)

CPC (source: EP)

F23C 9/06 (2013.01)

Citation (search report)

- [X] EP 0226534 A1 19870624 - BATTELLE MEMORIAL INSTITUTE [CH]
- [A] DE 2365186 A1 19750710 - ELCO OELBRENNERWERK AG
- [A] US 2078884 A 19370427 - VOLLMER EARL C
- [A] DE 2056825 A1 19720531 - HERGT M

Cited by

DE4418537A1; CN107575856A; WO2020259576A1

Designated contracting state (EPC)

AT BE CH DE FR IT LI

DOCDB simple family (publication)

EP 0445393 A2 19910911; EP 0445393 A3 19920304; EP 0445393 B1 19940601; AT E106524 T1 19940615; DE 4006806 A1 19910912; DE 59005945 D1 19940707

DOCDB simple family (application)

EP 90123830 A 19901211; AT 90123830 T 19901211; DE 4006806 A 19900305; DE 59005945 T 19901211