

Title (en)
Blue-flame burner with optimized combustion characteristics

Title (de)
Verbrennungsoptimierter Blaubrenner

Title (fr)
Bruleur à flamme bleue optimisant la combustion

Publication
EP 1030106 B1 20041124 (DE)

Application
EP 00111167 A 19941217

Priority
• DE 4343430 A 19931218
• DE 4430889 A 19940831
• EP 95905077 A 19941217

Abstract (en)
[origin: EP1030106A2] The burner has a housing (10) with a flame tube (14) enclosing the combustion chamber (92) and behind this is an pre-combustion chamber (48) with a central nozzle assembly (24) from where the fuel stream broadens out within the combustion chamber. A dividing wall separates a fan in the pre-combustion chamber from the combustion chamber, the fan forcing sufficient air (102) through for approximately stoichiometric combustion with a blue flame. There is a second stream of combustion air (106) entering the chamber a short distance away from the first stream and radially outside it. Its purpose is to stabilise recirculation in the chamber.

IPC 1-7
F23D 11/40; **F23C 9/00**

IPC 8 full level
F23C 9/00 (2006.01); **F23D 11/28** (2006.01); **F23D 11/40** (2006.01)

CPC (source: EP)
F23C 9/00 (2013.01); **F23C 9/006** (2013.01); **F23D 11/28** (2013.01); **F23D 11/40** (2013.01); **F23C 2202/40** (2013.01)

Cited by
CN116642180A; US2010015562A1; US8622737B2; DE102007053658A1; DE102007053658B4; US9234659B2

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)
DE 4430889 A1 19950706; DE 4430888 A1 19950706; DE 59409666 D1 20010405; DE 59409667 D1 20010405; DE 59410396 D1 20041230; EP 1030106 A2 20000823; EP 1030106 A3 20001122; EP 1030106 B1 20041124

DOCDB simple family (application)
DE 4430889 A 19940831; DE 4430888 A 19940831; DE 59409666 T 19941217; DE 59409667 T 19941217; DE 59410396 T 19941217; EP 00111167 A 19941217