

Title (en)

Premixing burner arrangement and method for operating a combustion chamber

Title (de)

Vormischbrenneranordnung sowie Verfahren zum Betreiben einer Brennkammer

Title (fr)

Brûleur à prémélange et procédé permettant de faire fonctionner une chambre de combustion

Publication

EP 1706672 A1 20061004 (DE)

Application

EP 05701493 A 20050112

Priority

- EP 2005050105 W 20050112
- CH 722004 A 20040120

Abstract (en)

[origin: WO2005068913A1] The invention relates to a premixing burner which is used to operate a combustion chamber (4) by means of a fluid and/or gaseous fuel. Said premixing burner comprises a turbulence generator (1) for a combustion air flow in order to form a turbulence flow and means for dosing fuel into the turbulence flow. The turbulence generator (1) is adjacent to the combustion chamber (4), directly via a combustion outlet, or indirectly via a mixing area. An uneven cross-sectional expansion is created on the combustion outlet (3) in the direction of the turbulence flow through which the turbulence flow bursts by forming a return flow area (5). The invention is characterised in that, upstream of the combustion outlet (3), a locally tapering contour (9) is provided in the cross-sectional flow of the turbulence generator (1) or the mixing area in a direction of the flow.

IPC 8 full level

F23R 3/28 (2006.01); **F23C 7/00** (2006.01); **F23D 14/02** (2006.01)

CPC (source: EP US)

F23C 7/002 (2013.01 - EP US); **F23D 14/02** (2013.01 - EP US); **F23C 2900/07002** (2013.01 - EP US); **F23D 2209/20** (2013.01 - EP US)

Citation (search report)

See references of WO 2005068913A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005068913 A1 20050728; AT E414874 T1 20081215; CN 100538183 C 20090909; CN 1910403 A 20070207; DE 502005005999 D1 20090102; EP 1706672 A1 20061004; EP 1706672 B1 20081119; US 2008227039 A1 20080918; US 7896646 B2 20110301

DOCDB simple family (application)

EP 2005050105 W 20050112; AT 05701493 T 20050112; CN 200580002729 A 20050112; DE 502005005999 T 20050112; EP 05701493 A 20050112; US 58681605 A 20050112