

Title (en)
PREMIX BURNER

Title (de)
VORMISCHBRENNER

Title (fr)
BRULEUR A PREMELANGE

Publication
EP 1504222 A1 20050209 (DE)

Application
EP 03732592 A 20030514

Priority
• CH 8302002 A 20020516
• EP 0350163 W 20030514

Abstract (en)
[origin: WO03098110A1] The invention relates to a premix burner comprising a turbulence generator (7) for a combustion air flow and means for injecting the fuel into the combustion air flow. The turbulence generator (7) comprises one or more combustion air inlets for the combustion air flow entering the burner. The means for injecting fuel into the combustion air flow comprise one or more first fuel feed elements (8) with first fuel outlets (4). The opening diameter of the outlets and/or the injection angle thereof relative to the axial and/or radial direction is configured differently. Alternatively or additionally, some of the first fuel outlets (4) can be arranged in one or several first groups of fuel outlets which are arranged close to each other, such that each of the first groups produce a fuel jet having a large jet cross-section. The inventive burner enables improved premixing of fuel with the combustion air, especially when the fuel is injected into the combustion chamber end of the burner.

IPC 1-7
F23D 14/62; **F23R 3/28**; **F23D 17/00**

IPC 8 full level
F23D 14/62 (2006.01); **F23D 17/00** (2006.01); **F23R 3/28** (2006.01)

CPC (source: EP US)
F23D 14/62 (2013.01 - EP US); **F23D 17/002** (2013.01 - EP US); **F23R 3/286** (2013.01 - EP US); **F23R 3/36** (2013.01 - EP US); **F23C 2900/07002** (2013.01 - EP US); **F23C 2900/9901** (2013.01 - EP US); **F23R 2900/00002** (2013.01 - EP US)

Citation (search report)
See references of WO 03098110A1

Designated contracting state (EPC)
DE GB

DOCDB simple family (publication)
WO 03098110 A1 20031127; AU 2003238524 A1 20031202; DE 50307654 D1 20070823; EP 1504222 A1 20050209; EP 1504222 B1 20070711; US 2005115244 A1 20050602; US 7013648 B2 20060321

DOCDB simple family (application)
EP 0350163 W 20030514; AU 2003238524 A 20030514; DE 50307654 T 20030514; EP 03732592 A 20030514; US 98902904 A 20041116