

Title (en)

Device for mixing of two gaseous components and burner in which this device is applied.

Title (de)

Vorrichtung für die Vermischung zweier gasförmiger Komponenten und Brenner, in welchem diese Vorrichtung eingesetzt wird.

Title (fr)

Dispositif servant à mélanger deux composants gazeux et brûleur dans lequel ce dispositif est appliqué.

Publication

EP 0548396 B1 19950222 (DE)

Application

EP 91122141 A 19911223

Priority

EP 91122141 A 19911223

Abstract (en)

[origin: US5340306A] A device for mixing two gaseous components, particularly in the context of a burner in which it is desired to mix the two gaseous components prior to combustion. The device includes a tangential inlet flow duct which opens into an inlet flow gap. A first gaseous component flows in through this inlet flow gap, and a second gaseous component flows through inlet flow nozzles provided in the region of the inlet flow gap. The arrangement achieves particularly intimate mixing, such that an improved burner is provided. Ramps are disposed in the region of the inlet flow duct, with the ramps including an end having a separation edge in the inlet flow gap. The inlet flow nozzles are arranged in the region around the separation edge such that mixing is promoted by longitudinal vortices occurring in the region.

IPC 1-7

B01F 5/00; F15D 1/00; F23D 14/24; F23D 17/00

IPC 8 full level

B01F 5/00 (2006.01); **F15D 1/00** (2006.01); **F23C 7/00** (2006.01); **F23D 14/24** (2006.01); **F23D 17/00** (2006.01); **F23R 3/12** (2006.01);
F23R 3/30 (2006.01)

CPC (source: EP US)

B01F 25/10 (2022.01 - EP US); **F15D 1/0015** (2013.01 - EP US); **F23C 7/002** (2013.01 - EP US); **F23D 14/24** (2013.01 - EP US);
F23D 17/002 (2013.01 - EP US); **F23R 3/12** (2013.01 - EP US); **F23C 2900/07002** (2013.01 - EP US)

Cited by

CN109854574A; DE102006033214A1; EP0881431A3; WO9829649A1

Designated contracting state (EPC)

CH DE FR GB LI

DOCDB simple family (publication)

US 5340306 A 19940823; DE 59104727 D1 19950330; EP 0548396 A1 19930630; EP 0548396 B1 19950222; JP 3219875 B2 20011015;
JP H05240437 A 19930917

DOCDB simple family (application)

US 98531692 A 19921204; DE 59104727 T 19911223; EP 91122141 A 19911223; JP 34202992 A 19921222