

Title (en)

An air-gas mixer device for gas burners with pre-mixing

Title (de)

Luft-Gas-Mischvorrichtung für Brenner mit Vormischung

Title (fr)

Dispositif de mélange air-gaz pour brûleurs à gaz avec prémélange

Publication

**EP 2597370 A1 20130529 (EN)**

Application

**EP 12193782 A 20121122**

Priority

IT PD20110373 A 20111124

Abstract (en)

This is a description of a mixing device for combustible gas burners comprising a fan unit (2) with bladed impeller (3) driven around an axis of rotation (X) and having an axial intake section (5) and a radially opposed delivery section (6), a Venturi tube (11) coaxial with the axis of rotation (X), having a first portion (12) converging into a minimum cross section (13) and a second portion (14) diverging from the minimum cross section (13) and extending the first portion (12), the diverging portion (14) developing as far as the level of the intake section (5), the portions (12, 14) being reciprocally separated at the level of the minimum cross section (13), the first portion (12) having a respective first section at the level of the end profile having dimensions smaller than the corresponding dimensions of a second section associated to the second portion (14) at the level of the minimum cross section (13) of the Venturi.

IPC 8 full level

**F23D 14/64** (2006.01); **F23D 14/70** (2006.01); **F23L 5/02** (2006.01)

CPC (source: EP)

**F23D 14/36** (2013.01); **F23D 14/64** (2013.01); **F23D 14/70** (2013.01); **F23L 5/02** (2013.01); **F23D 2203/007** (2013.01)

Citation (search report)

- [Y] DE 19729047 C1 19980924 - HONEYWELL BV [NL]
- [Y] US 1739161 A 19291210 - MCKEE GARNET W
- [A] DE 102007022008 A1 20081113 - SAIA BURGESS DRESDEN GMBH [DE]
- [A] DE 19839729 A1 19991202 - MICRO COMPACT CAR SMART GMBH [DE]
- [A] DE 392521 C 19240326 - EISENWERKE GAGGENAU AKT GES
- [A] EP 1443270 A1 20040804 - VAILLANT GMBH [DE]
- [A] US 4686957 A 19870818 - KOZIOL WALTER [US]

Cited by

EP3015768A1; US10317086B2; CN113739149A; CN104776433A; CN104964279A; EP3064778A1; US10815863B2; US9746176B2; US10161627B2

Designated contracting state (EPC)

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BA ME

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DOCDB simple family (application)

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