

Title (en)

Device for controlling the fuel/air ratio in a premix combustion apparatus

Title (de)

Vorrichtung zum Regeln des Gas/Luft-Verhältnisses für eine vormischende Verbrennungseinrichtung

Title (fr)

Dispositif de réglage du rapport air/carburant d'un appareil de combustion à prémélange

Publication

EP 1482245 B1 20060222 (DE)

Application

EP 03024295 A 20031023

Priority

DE 10324706 A 20030530

Abstract (en)

[origin: EP1482245A1] Device for regulating the gas/air ratio for a pre-mixing combustion device comprises a pneumatic regulator holding constant the ratio between the pressure in a gas line (1) and the pressure in an air line (2), a mixing device (4) arranged downstream of the regulator, and a fan (5) with speed control for conveying the mixture from the mixing chamber to the combustion device. The mixing device comprises a mixing chamber (7) that widens in the manner of a venturi nozzle from its inlet opening in the flow direction, a nozzle (8) connected to the air line and protruding into the inlet opening, an annular gap (10) connected to the gas line and formed between the edge (9) of the inlet opening and the nozzle, and a cone (11) arranged in the air line and adjusted according to the signal of a sensor in the axial direction relative to the nozzle.

IPC 8 full level

F23N 1/02 (2006.01); **F23D 14/60** (2006.01); **F23D 14/64** (2006.01)

CPC (source: EP US)

F23D 14/60 (2013.01 - EP US); **F23D 14/64** (2013.01 - EP US); **F23N 1/027** (2013.01 - EP US)

Cited by

CN103228989A; CN106662323A; DE102013220954A1; CN103917767A; CN107830520A; ITPD20110372A1; EP2597369A1; CN101893238A; CN111895410A; EP3203151A1; EP2278224A3; ITPD20090215A1; WO2015187290A1; US9746176B2; US10161627B2; US11933250B2; EP3064778B1

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