

Title (en)
A PREMIX GAS BURNER

Title (de)
VORMISCHGASBRENNER

Title (fr)
BRÛLEUR À GAZ À PRÉ-MÉLANGE

Publication
EP 2368069 A1 20110928 (EN)

Application
EP 09807503 A 20091216

Priority
• IT 2009000566 W 20091216
• IT PD20080381 A 20081223

Abstract (en)
[origin: WO2010073282A1] A modulating gas burner which is designed for operation with premixing of a combustible air and gas mixture is described and comprises a burner body (2) which can be mounted on a shutter element (5) for sealing a combustion chamber (1a) of the burner, in the region of a through aperture (6) in the shutter (5) through which the combustible mixture is supplied to the burner, a burner head (3) to which the combustible air and gas mixture, which is introduced into the combustion chamber (1a) through the aperture, can be supplied, a device (10) for guiding the flow of the mixture, which device can impart rotational components to the velocity of the flow to the burner head (3), a flash-back prevention device, which is positioned in the burner head (3) in a manner such that the power at the burner can be modulated within a predetermined modulation range between a minimum power condition in which the burner operates predominantly in the manner of a premix burner without flame detachment or flash-back, and a maximum power condition in which the burner operates predominantly in the manner of a burner with recirculation of the flows of the reagents of the combustible mixture. The flow guide device (10) is structurally independent of the flash-back prevention device and is produced integrally with the shutter element (5), in the region of the through aperture (6).

IPC 8 full level
F23D 14/62 (2006.01); **F23D 14/70** (2006.01); **F23D 14/82** (2006.01)

CPC (source: EP)
F23D 14/62 (2013.01); **F23D 14/70** (2013.01); **F23D 14/82** (2013.01); **F23D 2203/102** (2013.01); **F23D 2209/10** (2013.01); **F23D 2900/14021** (2013.01)

Citation (search report)
See references of WO 2010073282A1

Cited by
EP3361153A3; CN107969144A; EP3295083A4; US11530711B2; EP4006417A1; CN111033123A; EP3642537A4; US10767900B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
WO 2010073282 A1 20100701; EP 2368069 A1 20110928; EP 2368069 B1 20170726; IT 1392713 B1 20120316; IT PD20080381 A1 20100624

DOCDB simple family (application)
IT 2009000566 W 20091216; EP 09807503 A 20091216; IT PD20080381 A 20081223