

Title (en)
FORCED-DRAFT PREMIX GAS BURNER

Publication
EP 0269487 B1 19900919 (FR)

Application
EP 87402425 A 19871027

Priority
FR 8615556 A 19861107

Abstract (en)
[origin: JPS6488015A] PURPOSE: To stabilize a flame over the entire changing range of the supply ratio of air and gas by providing a device with a correction orifice at a flammable gas entrance passage, providing a diaphragm-type passage with a small sectional area at an air entrance passage and then generating an excessive pressure at air being supplied to a pre-mixing room. CONSTITUTION: Air and a flammable gas are supplied from entrance passages 3 and 4 to a pre-mixing room 2 of a low-output burner 1. An orifice is provided at a grill 5 with a proper diameter and distribution state, and flame is adhered or stabilized at the entrance of a combustion room 6 of the burner. The burner I is dipped into a liquid 7 to be heated greatly and ignition is made by supplying a high voltage to an electrode II. For adjusting the flow rate of air and the flammable gas to a proper and needed state over the entire fluctuation range of a supply pressure, a passage 16 with a small sectional area is provided at the air entrance passages 3 and a device 18 with a correction orifice 19 is provided at the flammable gas entrance passage 4. A mixed gas flows to the side of the combustion room 6 and a slightly excessive pressure is formed at the part of the room 2 whose pressure becomes slightly low. The flow rate of the air and the flammable gas is adjusted to a needed value by pressure sensors 20 and 21 and static pressure is secured positively at the air entrance passages 3 and the pre-mixing room.

IPC 1-7
F23C 3/00; **F23D 14/02**; **F23Q 9/00**

IPC 8 full level
F23C 3/00 (2006.01); **F23D 14/02** (2006.01); **F23D 14/62** (2006.01); **F23D 14/74** (2006.01); **F23Q 3/00** (2006.01); **F23Q 9/00** (2006.01)

CPC (source: EP KR US)
F23C 3/004 (2013.01 - EP US); **F23D 14/02** (2013.01 - EP KR US); **F23Q 9/00** (2013.01 - EP US)

Cited by
GB2342984A; AP1090A; GB2270750A; GB2270750B; CN109059003A; US6648932B1; US6250913B1; WO9966263A1

Designated contracting state (EPC)
AT BE CH DE ES GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0269487 A1 19880601; **EP 0269487 B1 19900919**; **EP 0269487 B2 19930811**; AT E56806 T1 19901015; CA 1303476 C 19920616; DE 3765092 D1 19901025; ES 2017742 B3 19910301; ES 2017742 T5 19950801; FR 2606490 A1 19880513; FR 2606490 B1 19900713; GR 3000846 T3 19911115; JP S6488015 A 19890403; KR 880006505 A 19880723; KR 950013963 B1 19951118; US 4875850 A 19891024

DOCDB simple family (application)
EP 87402425 A 19871027; AT 87402425 T 19871027; CA 551191 A 19871106; DE 3765092 T 19871027; ES 87402425 T 19871027; FR 8615556 A 19861107; GR 900400398 T 19900920; JP 28194087 A 19871107; KR 870012012 A 19871029; US 11572887 A 19871102