

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

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