

Title (en)

Burner for the combustion of liquid fuel in the gaseous phase.

Title (de)

Brenner zur Verbrennung von flüssigen Brennstoffen in gasförmigem Zustand.

Title (fr)

Brûleur pour la combustion de combustibles liquides en état gazeux.

Publication

EP 0346284 B1 19940831 (DE)

Application

EP 89810413 A 19890602

Priority

CH 220188 A 19880609

Abstract (en)

[origin: JPH0233505A] PURPOSE: To perform clean combustion, to reduce a rate of the generation of nitrogen oxide to a slight value, and to prevent the generation of an unburnt hydrogen carbide during starting and a stop, by a method wherein a stationary mixing head having an opening for a combustible gas mixture is positioned at the outlet of a gasifying device. CONSTITUTION: A unit 27 comprises a gasifying device 17 a mixing head 29 an air aperture plate 35, and an electric heater 39. The mixing head 29 and the gasifying device 17 consists of integral parts, and a deflector part 31 is provided. The unit 27 is surrounded with a flame tube 21. A space 40 between the gasifying device 17 and the flame tube 21 forms a recirculation passage for high temperature combustion gas to an inlet 41. A hollow rotary body consists of the gasifying device 17 and the mixing head 29, and the front part thereof is formed in a form of a single cylindrical tube part 30 closed by a disc 31. The disc 31 is operated as a deflector part from a gas mixture, and the gas mixture flows out through the outlet opening 33 having a plurality of slots. The outlet opening 33 is positioned at a tubular part 36 of the mixing head and gas substantially radially flows out from the mixing head 29.

IPC 1-7

F23D 11/00; **F23D 11/40**

IPC 8 full level

F23D 11/00 (2006.01); **F23D 11/02** (2006.01); **F23D 11/40** (2006.01); **F23D 11/44** (2006.01)

CPC (source: EP KR US)

F23D 11/008 (2013.01 - EP US); **F23D 11/12** (2013.01 - KR); **F23D 11/402** (2013.01 - EP US)

Cited by

EP0378517A3; EP0867658A1; EP0558455A1; CN103471096A; US6579086B2

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0346284 A2 19891213; **EP 0346284 A3 19910731**; **EP 0346284 B1 19940831**; AT E110836 T1 19940915; CA 1325168 C 19931214; DE 58908259 D1 19941006; ES 2060809 T3 19941201; JP H0233505 A 19900202; KR 900000646 A 19900130; US 5015173 A 19910514

DOCDB simple family (application)

EP 89810413 A 19890602; AT 89810413 T 19890602; CA 601894 A 19890606; DE 58908259 T 19890602; ES 89810413 T 19890602; JP 14552089 A 19890609; KR 890007924 A 19890609; US 35867389 A 19890530