

Title (en)

Burner for burning a liquid fuel.

Title (de)

Brenner zur Verbrennung von flüssigem Brennstoff.

Title (fr)

Brûleur pour brûler un combustible liquide.

Publication

EP 0002124 A1 19790530 (EN)

Application

EP 78300617 A 19781110

Priority

GB 4706677 A 19771111

Abstract (en)

A burner for burning a liquid fuel comprises a burner head (23) at which a mixture of air and the vapours of the fuel is burned in a substantially stable flame (24). At least some of the air for the mixture is supplied by a low pressure fan (16) or equivalent air supply device, and the fuel vapour is generated by a vapourizer (11) which operates independently of the presence of any flame at the burner head, the liquid fuel being converted to fuel vapour, without contacting hot gases and/or oxygen-containing gas, at atmospheric pressure or slightly above. A conduit (15) conducts air at approximately atmospheric pressure from the fan (16) to the burner head (23) via an air swirl device (21) which imparts a swirling or vortex flow to the air. Fuel vapour passes from the vapourizer (11) into the conduit (15) at, or downstream of, the location of the air swirl device (21) so that the fuel vapour is thoroughly mixed with the air.

IPC 1-7

F23D 11/44; **F24C 5/02**

IPC 8 full level

F23D 11/44 (2006.01); **F24C 5/02** (2006.01)

CPC (source: EP)

F23D 11/448 (2013.01); **F24C 5/02** (2013.01)

Citation (search report)

- DE 2633436 A1 19770210 - EXXON FRANCE
- CH 453630 A 19680331 - VAILLANT JOH KG [DE]
- [D] GB 1479686 A 19770713 - EXXON RESEARCH ENGINEERING CO

Cited by

CN102330975A; CN104067050A; US9170017B2; WO2011085105A3; WO2013127065A1; WO2013159267A1

Designated contracting state (EPC)

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