

Title (en)

Burner for liquid fuel

Title (de)

Brenner für flüssige Brennstoffe

Title (fr)

Brûleur à combustible liquide

Publication

EP 1731834 A1 20061213 (DE)

Application

EP 06011721 A 20060607

Priority

DE 102005026649 A 20050609

Abstract (en)

The burner has a housing, which comprises a support tube with an antechamber and a fire tube. A nozzle holder is provided in the support tube with a nozzle, which generates a fuel jet. An orifice (3) with a central opening (4) is arranged between a combustion chamber and the antechamber. The opening comprises fan-shaped extensions (5) running from a core region that is close to the fuel jet in radial direction. Combustion air in combination with the core flow that is close to the fuel jet enters into a turbofan stabilizing an inner recirculation flow of hot gases in the combustion chamber.

IPC 8 full level

F23D 11/24 (2006.01); **F23C 9/00** (2006.01); **F23D 11/40** (2006.01)

CPC (source: EP)

F23C 9/00 (2013.01); **F23D 11/24** (2013.01); **F23D 11/402** (2013.01); **F23D 11/408** (2013.01)

Citation (search report)

- [XY] US 4427367 A 19840124 - YAGISAWA KENZI [JP]
- [Y] US 5015174 A 19910514 - DREIZLER WALTER [DE], et al
- [X] WO 2004048850 A2 20040610 - AALBORG IND AS [DK], et al
- [X] FR 1484973 A 19670616 - OPTIMAL OLFEUERUNGSMASCHB GMBH
- [A] NL 28403 C
- [A] FR 1448198 A 19660128
- [DA] EP 0683883 B1 20010228 - DEUTSCH ZENTR LUFT & RAUMFAHRT [DE]

Citation (examination)

WO 2004038291 A1 20040506 - SWISS E TECHNIC AG [CH], et al

Cited by

EP3315861A1; CN107975796A; IT201600106728A1; US10584872B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1731834 A1 20061213; DE 102005026649 A1 20061228

DOCDB simple family (application)

EP 06011721 A 20060607; DE 102005026649 A 20050609