

Title (en)

Liquid fuel burner with low NOx and dust emission and atomizer therefor

Title (de)

Brenner für flüssige Brennstoffe mit niedriger NOx- und Staubemission und Düse dafür

Title (fr)

Brûleur à combustible liquide à basse émission de NOx et de poussières et atomiseur associé

Publication

**EP 1058052 A1 20001206 (FR)**

Application

**EP 00430024 A 20000530**

Priority

FR 9907030 A 19990531

Abstract (en)

The burner is in the form of a tube with an end or head connected to fuel and auxiliary atomising fluid feed ducts, a detachable atomiser and a carrier with a number of jets. The atomiser (1) is in one piece, has guides (8) for the auxiliary atomising fluid, and recesses (10, 11) in its opposite faces around a central orifice (2). The recess (11) in one face has a truncated conical shape and is linked to the inner ends of tangential grooves (9). An outer annular rib (15) separates the centre of the atomiser from a ring of holes (3) carrying the auxiliary fluid, which passes through guide channels (8) to the recess (10) in the opposite face.

IPC 1-7

**F23D 11/10**

IPC 8 full level

**F23D 11/10** (2006.01)

CPC (source: EP US)

**F23D 11/103** (2013.01 - EP US)

Citation (search report)

- [AD] FR 2641365 A1 19900706 - PILLARD CHAUFFAGE [FR]
- [AD] US 5622489 A 19970422 - MONRO RICHARD J [US]
- [AD] EP 0435735 A1 19910703 - INST FRANCAIS DU PETROLE [FR], et al

Cited by

FR3118135A1; KR100771965B1; EP2314921A2; WO2022136296A1; WO0212792A1

Designated contracting state (EPC)

DE ES FR IT

DOCDB simple family (publication)

**EP 1058052 A1 20001206; EP 1058052 B1 20040519;** DE 60010798 D1 20040624; DE 60010798 T2 20050609; ES 2219285 T3 20041201;  
FR 2794221 A1 20001201; FR 2794221 B1 20010824; US 6425755 B1 20020730

DOCDB simple family (application)

**EP 00430024 A 20000530;** DE 60010798 T 20000530; ES 00430024 T 20000530; FR 9907030 A 19990531; US 58325300 A 20000531