

Title (en)
Gas boiler with resonant combustion

Title (de)
Gasheizkessel mit schwingender Verbrennung

Title (fr)
Chaudière à combustion pulsatoire

Publication
EP 0806609 B1 20010816 (FR)

Application
EP 97450007 A 19970509

Priority
FR 9606117 A 19960509

Abstract (en)
[origin: EP0806609A1] A water heater consists of a housing (2) with an inlet unit (3) and an outlet unit (4), and contains a burner linked to the outlet unit by a heat exchanger immersed in the water to be heated. The burner has a valve (25) with an annular inlet for the combustible mixture. The housing is divided into three compartments, of which one (20) is connected to the intake unit, a second (21) is connected to the outlet unit and is in the form of a gas expansion chamber, while the third (22) is situated between the other two and contains the burner and heat exchanger. The combustion chamber comprises an explosion chamber (27) which is open at the opposite end to the intake, and has reinforcing and anti-vibration structure at its open end. The heat exchanger consists of a series of tubes (49) in an axial coil between the combustion chamber outlet and the expansion chamber.

IPC 1-7
F23C 11/04; **F24H 1/20**

IPC 8 full level
F23C 15/00 (2006.01); **F24H 1/20** (2006.01)

CPC (source: EP)
F23C 15/00 (2013.01); **F24H 1/205** (2013.01)

Cited by
FR2936299A1; FR2896306A1; RU186210U1; EP2169305A1; FR2936300A1; WO2010034940A1

Designated contracting state (EPC)
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