

Title (en)

Burner with toric-cyclonic flow for boiler fired with liquid or gaseous fuel.

Title (de)

Brenner mit torisch-drallförmiger Strömung für einen mit flüssigem und gasförmigem Brennstoff beheizten Kessel.

Title (fr)

Brûleur à flux torique-cyclonique pour chaudière à combustible liquide et gazeux.

Publication

**EP 0404731 B1 19950125 (FR)**

Application

**EP 90810471 A 19900622**

Priority

FR 8908585 A 19890622

Abstract (en)

[origin: EP0404731A2] The burner comprises a tubular body composed of an inner bush (12) and an outer bush (10). The inner bush (12) carries a spray nozzle (11), an ignition electrode (23) and an observation tube (40). An annular space (E) arranged between the two bushes provides the inlet for a flow of oxidiser. A primary flow (A) of supply of oxidiser gas is led in through apertures (15) towards a deflector plate (18). This arrangement permits an area of toric-cyclonic combustion (33) to be obtained by virtue especially of the existence of slots (16) let into the deflector plate (18) and inclined blades (13) mounted in the space (E) located between the inner bush (12) and the outer bush (10). The advantages are a better homogeneity of the mixture, an increase in the dwell time of the mixture in the combustion area and better recycling of the combustion gases.

<IMAGE>

IPC 1-7

**F23D 11/40**; **F23C 9/00**

IPC 8 full level

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

CPC (source: EP)

**F23C 9/006** (2013.01); **F23D 11/402** (2013.01); **F23C 2202/40** (2013.01)

Cited by

ES2060486A2; EP0864812A3; CN104373963A; AT406706B; CN109237465A; AT406795B; EP0537491A3; AT401288B

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