

Title (en)

Burner for the stoichiometric combustion of a liquid or gaseous fuel.

Title (de)

Brenner zur stöchiometrischen Verbrennung flüssiger oder gasförmiger Brennstoffe.

Title (fr)

Brûleur à combustion stoechiométrique de combustible liquide ou gazeux.

Publication

EP 0114610 A1 19840801 (DE)

Application

EP 84100182 A 19840110

Priority

DE 3301083 A 19830114

Abstract (en)

1. Burner for the stoichiometric combustion of a liquid or gaseous fuel comprising a fuel line (2) having a spray nozzle (3), an air tube (4) surrounding the fuel line which air tube is adapted to feed combustion air from a fan to the spray nozzle (3) and having a combustion tube (11) shaping the combustion chamber (12) and being connected to the air tube which combustion tube is made from a material having high temperature storing capacity, the end of which combustion tube facing the air tube (4) has an inlet opening (13) with a throttle (14) and to the opposite end of the combustion tube a cover plate (15) with a number of outlet openings (16, 16') is inserted, characterized in that the throttle (14) is shaped as a thickening (21) having in longitudinal section a triangular configuration and situated around the inner wall of the combustion tube (11) which thickening has inner wall surfaces (22, 23) each of which surrounding a truncated cone as a part of the inlet opening (13) respectively which inner wall surfaces merge in a concatenation region via a rounded region (24), and that the spray nozzle (3) is located where the throttle has its narrowest opening.

Abstract (de)

Bei einem Brenner (1) zur stöchiometrischen Verbrennung flüssiger oder gasförmiger Brennstoffe mit einer Zerstäuberdüse (3) ist an die diese umgebende Luftzuführungsleitung (4) ein die Brennkammer (12) bildendes Flammrohr (11) aus einem Werkstoff mit hoher Wärmespeicherkapazität angeschlossen, dessen dem Luftzuführungsrohr (4) zugekehrtes End eine mit einer Drossel versehene Eingangsöffnung (13) aufweist und an dessen gegenüberliegendem Ende eine mit einer Vielzahl von Austrittsöffnungen (16, 16') ausgestattete Verschußplatte (15) vorgesehen ist. Des weiteren ist die Zerstäuberdüse (3) im Bereich des engsten Querschnittes der Drossel angeordnet.

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F23D 11/40

IPC 8 full level

F23D 11/40 (2006.01)

CPC (source: EP)

F23D 11/404 (2013.01)

Citation (search report)

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