

Title (en)

OIL AND GAS BURNER FOR INSTALLATION IN A HEATING BOILER AND A STEAM GENERATING BOILER

Publication

EP 0048438 B1 19840912 (DE)

Application

EP 81107307 A 19810916

Priority

DE 3035707 A 19800922

Abstract (en)

[origin: US4441879A] An oil burner for installation in heating or steam-raising boilers. The burner has downstream of an oil atomization device a plate having a single opening or a plurality of openings arranged in a ring coaxially of the oil atomising device, the plate opening or openings being the only throughway for combustion air. A mixing tube is arranged coaxially at a distance downstream of the plate. The mixing tube has a diameter greater than the diameter of the single opening or of a circle which encloses the plurality of openings in the plate. A flame tube positioned coaxially around the mixing tube has a length such that the flow of combustion gases downstream of the mixing tube is applied against the internal wall of the flame tube. To enable the burner alternatively to be used for burning gaseous fuel at will, an annular chamber for the supply of a gaseous fuel and having gas outlet openings in the region of the plate opening or openings is also provided downstream of and close to the plate. By the use of substantially similar component parts it is possible to manufacture a burner solely for gaseous fuel comprising the plate having a coaxial single opening or a plurality of openings, a throughway for the combustion air and an annular chamber downstream of and close to the plate for the supply of the gaseous fuel and having gas outlet openings in the vicinity of the plate opening or openings.

IPC 1-7

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CPC (source: EP US)

F23D 11/40 (2013.01 - EP US); **F23D 17/002** (2013.01 - EP US)

Citation (examination)

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- US 3367394 A 19680206 - MANFRED RÖDER, et al
- US 2051397 A 19360818 - SCHMIDT CARLTON L
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EP 81107307 A 19810916; AT 404581 A 19810918; CA 386030 A 19810916; CH 608181 A 19810921; DE 3035707 A 19800922; DE 3166044 T 19810916; DK 416981 A 19810921; FI 812934 A 19810921; NO 813197 A 19810921; SE 8105566 A 19810921; US 30364081 A 19810918