

Title (en)

Combustion chamber with heat exchanger for fluids and heater provided with such a combustion chamber.

Title (de)

Brennkammer mit einer Flüssigkeits-Wärmetauscheinrichtung und damit ausgerüsteter Kessel.

Title (fr)

Chambre de combustion avec un échangeur de chaleur pour fluides et chaudière équipée d'une telle chambre de combustion.

Publication

EP 0529299 B1 19940921 (DE)

Application

EP 92112405 A 19920720

Priority

CH 249091 A 19910823

Abstract (en)

[origin: EP0529299A1] The heater has a tank (6) with a water bath. Situated in this water bath is a heating coil (9) for heating water. The water bath in the tank is heated by the hot gases emerging from the combustion chamber (4) through the smoke gas outlet (5). Accordingly, the heating coil (9) and consequently the heating water in the water bath are heated. For the heating water, there is provided in the combustion chamber (4) a lens-shaped heat exchanger (17) which is flowed around by the smoke gas. A second, bowl-shaped heat exchanger (12) is arranged directly outside the combustion-chamber wall (16). At the same time, the combustion-chamber wall (16) forms the inner wall of the bowl-shaped second heat exchanger (12). The heating water flows through this first heat exchanger (17) and second heat exchanger (12) in two parallel flows, to emerge at the forward-run connection (14). By means of this arrangement, in particular of the lens-shaped heat exchanger, high heating-water forward-run temperatures can be achieved in spite of relatively low set heater temperature values, with which an optimum degree of efficiency is achieved. <IMAGE>

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F24H 1/44; **F24H 1/10**

IPC 8 full level

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CPC (source: EP)

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