

Title (en)
HEATING BOILER

Title (de)
HEIZKESSEL

Title (fr)
CHAUDIÈRE DE CHAUFFAGE CENTRAL

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Application
EP 12864957 A 20121108

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Abstract (en)
[origin: CN103196161A] The invention relates to a design for solid fuel boilers for heating domestic and industrial premises with the possibility of utilizing carbon-containing waste. The invention addresses the technical problem of improving performance indicators by increasing fuel combustion efficiency. The problem of interest is solved in that the heating boiler comprises a burner, the combustion chamber of which contains an afterburn chamber in the form of a horizontal cylindrical closed-end tube with openings in the surface thereof, and an ash box, which are connected to a source for the forced supply of an oxidizing agent, as well as a heat exchanger and a smoke exhaust pipe, which are interconnected by gas flue channels. The afterburn chamber has longitudinal inclined fins on the lateral surface thereof with openings therebetween and is provided with a reaction chamber in the form of a cylinder with openings in the lateral surface, which is disposed inside the afterburn chamber coaxially therewith and with an annular gap between the cylinders, said annular gap being associated with a channel for the forced supply of an oxidizing agent, wherein the reaction chamber is connected to the heat exchanger via a catalyst situated in the free end of the reaction chamber. The directrices of the cylindrical pipe of the afterburn chamber and of the reaction chamber are in the form of ovals, the major axes of which are perpendicular to the base of the combustion chamber.

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