

Title (en)

GAS HEATED BOILER PLANT AND USE THEREOF

Publication

EP 0225929 B1 19900228 (DE)

Application

EP 85115685 A 19851210

Priority

EP 85115685 A 19851210

Abstract (en)

[origin: US4721068A] A gas-fired boiler plant comprises a burner bed (10) extending over a flat surface and heat exchanger pipes (61, 62) arranged above the burner bed (10), parallel to the said surface. The heat exchanger tubes (61, 62) comprise pipes (63, 64) equipped with a plurality of flat ribs (65, 65a . . . , 66, 66a . . .) which extend substantially radially from the said pipes and which are provided in spaced arrangement over the length of the said heat exchanger pipes (61, 62). The ribs are provided with bent-off portions (70, 71, 72, 73, 74, 75). The hot flue gases (82) rising from the burner bed (10) flow through the gaps (84, 84a) formed between the said ribs (65, 65a . . . , 66, 66a . . .) and pipes (63, 65). In order to improve both the convective heat transmission and the utilization of the radiant heat, the bent-over edges (70, 71, 74, 75) are inclined, at least partly, relative to the surface of said burner bed (10), the arrangement being selected in a manner to ensure that bent-over portions (70, 75) point towards the burner bed and the rising flue gases (82) are guided around the pipes (63, 64) along a roughly semi-circular path (85).

IPC 1-7

F24H 1/14; F24H 1/40; F24H 1/44; F28F 1/36; F28F 13/00

IPC 8 full level

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CPC (source: EP KR US)

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F28F 13/06 (2013.01 - EP US)

Cited by

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