

Title (en)

PROCESS FOR THE OPERATION OF AN AIR-CURRENT EXPOSED GAS BURNER, AND BURNER FOR CARRYING OUT SAID PROCESS

Publication

EP 0062797 B1 19850911 (DE)

Application

EP 82102431 A 19820324

Priority

DE 3113416 A 19810403

Abstract (en)

[origin: US4457704A] The method and apparatus sucks the entire combustion air volume in laterally with respect to the direction of flow of the air current with the help of the impulse of a fuel gas jet out of the air current into a mixing pipe and the formation of a differential pressure between the mixing pipe input and the waste gas output into the air current is prevented with the help of current guidance sheet metal pieces. The burner is arranged in a shaft-like housing, the fuel gas nozzle and the lower part of mixing pipe are surrounded by a pot-shaped current guidance sheet metal piece. A cylindrical current guidance sheet metal piece adjoins the cooled burner plate. The burner which, for example, can be used in dryers, for heating room air with so-called make-up air units and in gas water heaters, operates completely independently of the air flowing around it in a wide heat load range, without any change in the air coefficient. Because of the super-stoichiometric premixing of the burning gas with the air, the NO_x content of the waste gas is extraordinarily small.

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IPC 8 full level

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CPC (source: EP US)

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Cited by

US5423675A; US5658139A; CN110822424A; US4752213A; CN107013912A; FR2658268A1; WO9212381A1; WO2019001486A1

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DE 3113416 C2 19891123; US 4457704 A 19840703

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