

Title (en)

OPERATING PROCESS FOR PREMIX BURNERS AND BURNER FOR CARRYING OUT THE PROCESS

Publication

EP 0021035 B1 19830810 (DE)

Application

EP 80102799 A 19800521

Priority

DE 2926278 A 19790629

Abstract (en)

[origin: CA1142421A] A process for the operation of pre-mixing burners with gaseous fuels or vaporized fuels provides for the production in a mixer pipe of a homogeneous mixture consisting of the fuel, the quantity of combustion air required for the complete combustion of the fuel and additional cooling gas as needed for combustion between 1,100 and 1,700.degree.C. The mixture flows to a burner head with a widening cross section and a burner plate at the wide end where it is burnt at a central main flame bore, arranged at the burner plate, and several surrounding support flame bores. The flames then pass through a converging burner mouth and a downstream flame guard to protect the flames against the ingress of air or flue gas from the environment, against cooling and against heating until the completion of combustion. The burner mouth and the flame guard are coated with a non-catalytic material. The exhaust gas at the outlet of the flame guard contains very little nitrogen oxides and is therefore highly suited for further utilization such as food-stuff drying.

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IPC 8 full level

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Cited by

FR2618139A1; EP0085464A1; EP0440423A3; US5971745A; DE3630177A1; EP0262390A1; EP0242249A1; FR2595791A1; US4790744A; US7241135B2; US6299433B1; EP1583945A4

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