

Title (en)

SURFACE-COMBUSTION LIQUID-FUEL BURNER AND METHOD OF COMBUSTION

Title (de)

BRENNER ZUR OBERFLÄCHENVERBRENNUNG FÜR FLÜSSIGE BRENNSTOFFE UND VERFAHREN ZUM VERBRENNEN

Title (fr)

BRULEUR POUR LA COMBUSTION SUPERFICIELLE DE COMBUSTIBLES LIQUIDES ET PROCEDE DE COMBUSTION

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Application

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Abstract (en)

[origin: WO9749952A1] The invention concerns a method by which a (starter) burner can be combined with a porous element to make the surface combustion of liquid fuels possible. The burner is started up by means of an electric heater or by activating the starter burner. The transition to surface combustion is carried out by means of a short interruption in the fuel flow. With the same flow-rate settings, a fuel-vapour/air mixture which will burn on the porous element is then produced in the vicinity of the starter burner. The energy required to vaporize the fuel in steady-state operation can be provided in various ways. The surface can have a layered structure, thus enabling the energy flow to be regulated to the required rate. The surface can also have a special shape, enabling secondary air to be supplied, under certain conditions, without any danger of ignition before combustion at the surface.

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