

Title (en)
GAS-FIRED WATER OR AIR HEATER

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Application
EP 82102802 A 19820402

Priority
DE 3114866 A 19810413

Abstract (en)
[origin: EP0062854A1] 1. Gas heated water or air heater including a control apparatus which controls the supply of gas and of combustion air to the burner, comprising the following features : a) a gas control valve (1-5) controls the supply of heating gas ; b) an air control valve (21-25) controls the supply of combustion air in the same sense as the gas supply ; c) a servopressure regulator (7) compares the pressure at the outlet (5 or 7) of the gas control valve (1-5) or of the air control valve (21 to 25), respectively, with a setpoint value determined by a temperature sensor (8) and controls with its outlet pressure the actuator (2, 4) of the gas control valve as well as the actuator (23, 24) of the air control valve ; d) the outlet (5) of the gas control valve is connected to an injector nozzle (34) positioned opposite the inlet (33) of the burner with said nozzle simultaneously drawing primary air for the burner ; e) the burner (30) and a heat exchanging surface (16) heated by the burner are surrounded by a closed housing (31) which is provided with an inlet (35) for secondary air and is provided with an outlet to the stack (32, 41) ; f) a second injector nozzle (36) located opposite of an inlet (35) for secondary air and during operation drawing secondary air to the burner is connected to the outlet (27) of the air control valve (21-25) characterized in that g) an air ejecting nozzle (42) is provided in the stack (32, 41) of the heater (31) and generates artificial draft ; h) an adjustable throttle (45, 47) is provided in the connecting pipe (43) to the air ejecting nozzle (42) ; i) the connecting pipe (43, 44) is with its inlet connected to the inlet (25) or to the outlet (27) of the air control valve (21-25).

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IPC 8 full level
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CPC (source: EP)
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Cited by
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