

Title (en)

Wall-mounted gas boiler with premixing burner, particularly for domestic use.

Title (de)

Wandgasheizkessel mit Vormischbrenner, insbesondere für den Hausbedarf.

Title (fr)

Chauffe-eau à gaz mural avec brûleur de pré-mélange, en particulier pour usage domestique.

Publication

EP 0493345 A2 19920701 (EN)

Application

EP 91830573 A 19911218

Priority

IT 4861090 A 19901221

Abstract (en)

This invention relates to a wall-mounted gas boiler, particularly useful for domestic employment, of the type comprising a pre-mix burner (13), a heat exchanger (12), a circuit (8) for allowing the combustion air to circulate, means (5) for causing said air to circulate, a chamber (18) for mixing air with the gas, in which chamber an opening (19) is provided, upstream of said mixing chamber (18) in the circuit (8) for the circulation of air, said opening being closed by valve means (20) and allowing the dilution air to flow towards the openings (21) without becoming mixed with the gas at the point corresponding to the mixing chamber (18), means (22, 23 and 24) being provided for changing the amount of gas introduced in proportion to the flowrate of the air flowing through the same. The boiler according to this invention can also be provided with a single-piece container (2) having a pressurized inner chamber (9), inside which both the burner (13) and the heat exchanger (12) are arranged, and an outer depressurized chamber (8) through which the air sucked in by the fan (5) flows, the outflow of smokes from the inner chamber (9) and the inflow of air into the outer chamber (8) occurring through an upper coaxial pipe (14); a closure member (3) of the container, said member being provided with a double seal for closing both the inner chamber (9) and the outer chamber (8) tightly; and a lower Archimedean screw (4) inside which the fan (5) is housed. <IMAGE>

IPC 1-7

F24H 1/40; F24H 9/00; F24H 9/14; F28F 1/32

IPC 8 full level

F24H 1/40 (2006.01); **F24H 9/00** (2006.01); **F24H 9/14** (2006.01); **F28F 1/32** (2006.01)

CPC (source: EP)

F24H 1/40 (2013.01); **F24H 9/0036** (2013.01); **F24H 9/14** (2013.01); **F24H 9/148** (2013.01); **F28F 1/325** (2013.01)

Cited by

CN102393067A; US11512871B2; EP0532165A3; DE19711141A1; DE19711141C2; DE19633880B4

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR LI LU MC NL SE

DOCDB simple family (publication)

EP 0493345 A2 19920701; EP 0493345 A3 19920902; EP 0493345 B1 19960131; AT E133777 T1 19960215; DE 493345 T1 19921217; DE 69116842 D1 19960314; DE 69116842 T2 19960905; ES 2033617 T1 19930401; ES 2033617 T3 19960601; IT 1241559 B 19940117; IT 9048610 A0 19901221; IT 9048610 A1 19920622

DOCDB simple family (application)

EP 91830573 A 19911218; AT 91830573 T 19911218; DE 69116842 T 19911218; DE 91830573 T 19911218; ES 91830573 T 19911218; IT 4861090 A 19901221