

Title (en)

Combustion furnace for a fluidised-bed boiler.

Title (de)

Verbrennungsofen für Wirbelbettkessel.

Title (fr)

Foyer de combustion pour chaudière à lit fluidisé.

Publication

EP 0147275 A2 19850703 (FR)

Application

EP 84402448 A 19841129

Priority

FR 8319321 A 19831202

Abstract (en)

1. A fluidised bed combustion chamber of variable heat output, delimited by a side wall (1) surrounding a central zone (6) and a fluidisation grid (2), in which the fluidised bed has a lower level (13) at the lowest output of the combustion chamber and an upper level (14) at the highest output of the combustion chamber, containing a tubular heat exchanger having tubes (7, 8) which extend in a vertical direction at least between the lower level (13) and the upper level (14) characterised in that injectors (12) for injecting air for confining the combustion zone are disposed above the upper level (14) in the vicinity of the side wall (1) and are directed towards the central zone (6) of the combustion chamber with an inclination relative to the vertical at an angle (a) of between 15 degrees and 75 degrees, the total flow rate of the confinement air injected by said injectors (12) being controllable at between 5% and 20% of the total flow rate of the air introduced into the combustion chamber.

Abstract (fr)

Dans le foyer limité par une paroi latérale (1) et une grille de fluidisation (2) des tubes (7,8) d'un échangeur de chaleur s'étendent verticalement à partir de la grille (2) jusqu'au niveau supérieur (14) du lit fluidisé quand le foyer fonctionne à sa puissance maximum, cependant que des injecteurs d'air (12) sont placés au-dessus de ce niveau supérieur (14) et dirigés vers la zone centrale (6) du foyer, de sorte que la puissance peut varier notamment sans que la température dépasse 850 - 950°C et sans entraînement excessif de combustible incomplètement brûlé.

IPC 1-7

F23C 11/02; F22B 31/00

IPC 8 full level

F23C 10/28 (2006.01); **F22B 31/00** (2006.01); **F23C 10/00** (2006.01)

CPC (source: EP)

F22B 31/0038 (2013.01); **F23C 10/002** (2013.01)

Cited by

EP0319722A1; FR2581161A1; US5311842A; EP0566099A3

Designated contracting state (EPC)

AT BE CH DE GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0147275 A2 19850703; EP 0147275 A3 19850814; EP 0147275 B1 19890419; AT E42390 T1 19890515; AU 3609184 A 19850606; AU 577073 B2 19880915; BR 8406082 A 19850924; CA 1270706 A 19900626; DE 3477833 D1 19890524; ES 538183 A0 19860101; ES 8603988 A1 19860101; FR 2556075 A1 19850607; FR 2556075 B1 19880819; IN 162288 B 19880423; JP H0235889 B2 19900814; JP S60248907 A 19851209; ZA 849114 B 19850731

DOCDB simple family (application)

EP 84402448 A 19841129; AT 84402448 T 19841129; AU 3609184 A 19841130; BR 8406082 A 19841129; CA 469040 A 19841130; DE 3477833 T 19841129; ES 538183 A 19841130; FR 8319321 A 19831202; IN 928MA1984 A 19841128; JP 25206484 A 19841130; ZA 849114 A 19841122