

Title (en)
Combustion apparatus

Title (de)
Feuerungsanlage

Title (fr)
Appareil de combustion

Publication
EP 0905442 A3 19991103 (DE)

Application
EP 98117792 A 19980918

Priority
DE 19743338 A 19970930

Abstract (en)
[origin: EP0905442A2] The plant has a firebox (50), which is separate from the combustion chamber (16), which has a secondary air supply (20) from a blower (24), and the cylindrical combustion chamber is located within a horizontal boiler (10). Wood is burned on an inclined grate (58) in the natural-draught firebox, which has automatic stoking and ash removal systems, and the emitted gases rise through a flue (52) past a fireclay baffle (55) into the combustion chamber. The forced draught secondary air supply is discharged through a pipe (27), which is concentric with the combustion chamber and extends over and beyond the flue. Towards the end of the combustion chamber, helical fireclay vanes (29) promote rotation of the gas stream, as it enters the ashbox (34), and the hot gases are drawn from the center of the ashbox into the water-tube boiler.

IPC 1-7
F23B 1/14; **F23B 5/04**; **F23B 1/08**; **F23L 9/00**; **F23L 5/02**; **F23M 9/06**; **F23M 9/08**

IPC 8 full level
F23L 5/02 (2006.01); **F23L 9/00** (2006.01); **F23M 9/06** (2006.01); **F23M 9/08** (2006.01)

CPC (source: EP US)
F23B 5/04 (2013.01 - EP); **F23B 10/00** (2013.01 - EP); **F23B 30/02** (2013.01 - EP); **F23B 40/08** (2013.01 - EP); **F23B 80/04** (2013.01 - EP); **F23B 90/06** (2013.01 - EP); **F23L 5/02** (2013.01 - EP); **F23L 9/00** (2013.01 - EP US); **F23M 9/06** (2013.01 - EP); **F23M 9/08** (2013.01 - EP)

Citation (search report)
• [DY] DE 29707032 U1 19970605 - KOEB & SCHAEFER KG [AT]
• [Y] FR 2304031 A1 19761008 - EXXON RESEARCH ENGINEERING CO [US]
• [A] DE 3434970 A1 19861016 - THERMO ANLAGEN TECHNIK MIEHE G [DE]
• [A] EP 0340859 A1 19891108 - BREUKELN JOHANNES HUBERTUS VA
• [A] WO 8201931 A1 19820610 - PASSAT 81 AS [DK], et al
• [A] CH 687346 A5 19961115 - CHIQUET ENERGIE-TECHNIK AG [CH]

Cited by
EP1122495A1; CN103822203A; CN102261734A; CN114877364A; AT502684B1; CN110319434A; US7942666B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0905442 A2 19990331; **EP 0905442 A3 19991103**; **EP 0905442 B1 20011031**; AT E208025 T1 20011115; DE 19743338 A1 19990401; DE 59802108 D1 20011206

DOCDB simple family (application)
EP 98117792 A 19980918; AT 98117792 T 19980918; DE 19743338 A 19970930; DE 59802108 T 19980918