

Title (en)

Cyclonic combustor and boiler incorporating such a combustor.

Title (de)

Drehströmungsfeuerung und damit ausgerüsteter Heizkessel.

Title (fr)

Chambre de combustion cyclonique et chaudière équipée d'une telle chambre.

Publication

EP 0266857 A2 19880511 (EN)

Application

EP 87304216 A 19870512

Priority

US 92809686 A 19861107

Abstract (en)

A boiler with a cyclonic combustor includes a first chamber (22) which is substantially uncooled and has a refractory lining (30), a second chamber (24) in fluid communication with the first chamber (22), ducts (28, 40) for supplying air and fuel directly into the first chamber (22) and for forming a cyclonic flow pattern of hot gases for combustion within the first and second chambers (22, 24), an exit throat (42) at the end of the second chamber (24) and a heat exchanger (48, 50, 52) surrounding the second chamber (24) for keeping the combustion temperature in both chambers low.

IPC 1-7

F23C 3/00; **F23M 5/00**; **F23M 9/00**; **F24H 1/28**

IPC 8 full level

F22B 7/12 (2006.01); **F22B 7/20** (2006.01); **F22B 31/00** (2006.01); **F23C 3/00** (2006.01); **F23C 99/00** (2006.01); **F23D 1/02** (2006.01); **F23M 5/08** (2006.01); **F23M 9/06** (2006.01); **F24H 1/28** (2006.01)

CPC (source: EP KR)

F22B 7/12 (2013.01 - KR); **F23C 3/006** (2013.01 - EP); **F23M 5/08** (2013.01 - EP); **F23M 9/06** (2013.01 - EP); **F24H 1/285** (2013.01 - EP)

Cited by

EP0525734A3; US5473881A; EP0866269A1; US5961315A

Designated contracting state (EPC)

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