

Title (en)  
CYCLONIC COMBUSTOR AND BOILER INCORPORATING SUCH A COMBUSTOR

Publication  
**EP 0266857 A3 19881117 (EN)**

Application  
**EP 87304216 A 19870512**

Priority  
US 92809686 A 19861107

Abstract (en)  
[origin: EP0266857A2] 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  
**F23D 1/02** (2006.01); **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); **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)

Citation (search report)  
• [Y] EP 0143510 A1 19850605 - AQUA CHEM INC  
• [Y] EP 0130225 A1 19850109 - RUHRKOHLE CARBORAT GMBH [DE]

Cited by  
EP0525734A3; US5473881A; EP0866269A1; US5961315A

Designated contracting state (EPC)  
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0266857 A2 19880511**; **EP 0266857 A3 19881117**; AU 593104 B2 19900201; AU 7269187 A 19880512; DK 235287 A 19880508; DK 235287 D0 19870508; FI 872037 A0 19870508; FI 872037 A 19880508; JP S63131903 A 19880603; KR 880006498 A 19880723; MY 100885 A 19910516; NO 871975 D0 19870513; NO 871975 L 19880509; NZ 220266 A 19881129

DOCDB simple family (application)  
**EP 87304216 A 19870512**; AU 7269187 A 19870511; DK 235287 A 19870508; FI 872037 A 19870508; JP 11603487 A 19870514; KR 870004720 A 19870514; MY PI19870644 A 19870513; NO 871975 A 19870513; NZ 22026687 A 19870511