Title (en)

FUEL COMBUSTOR

Publication

EP 0073830 B1 19880113 (EN)

Application

EP 82901239 A 19820311

Priority

US 24455381 A 19810317

Abstract (en)

[origin: WO8203261A1] A combustor and a corresponding method for its operation, wherein the fuel, which is pulverized coal in the illustrative embodiment, is first reacted with at least a portion of oxidizer gas flow directed to the head end (20) of the combustor. Combustion in the head end proceeds at a substantially lower stoichiometric ratio than the overall ratio for the combustor, which therefore operates at a relatively low temperature and high thermodynamic efficiency, while maintaining good slag removal characteristics. Of the several embodiments disclosed, one group has an oxidizer inlet (12) from which oxidizer gas splits into a component directed toward the head end, where the first phase of combustion takes place, head-end and a component directed toward the exit end (18), where a second phase of combustion takes place. In another group of embodiments, oxidizer is directed only toward the head-end, and the resultant exiting gas is rich in combustibles.

IPC 1-7

F23D 1/00; F23M 3/00

IPC 8 full level

F23C 3/00 (2006.01); **F23C 6/04** (2006.01); **F23D 1/00** (2006.01); **F23C 7/00** (2006.01); **F23C 7/02** (2006.01); **F23C 99/00** (2006.01); **F23J 1/00** (2006.01); **F23J 1/08** (2006.01); **F23M 3/00** (2006.01); **F23M 9/00** (2006.01); **F23M 9/06** (2006.01)

CPC (source: EP)

F23C 3/008 (2013.01); **F23C 6/045** (2013.01); **F23C 7/02** (2013.01); **F23J 1/08** (2013.01)

Designated contracting state (EPC)

BE CH FR GB LI LU SE

DOCDB simple family (publication)

WO 8203261 A1 19820930; AU 551776 B2 19860508; AU 8331382 A 19821006; CA 1181998 A 19850205; DE 3237454 C2 19950914; DE 3237454 T1 19830728; DK 509582 A 19821116; EP 0073830 A1 19830316; EP 0073830 A4 19851014; EP 0073830 B1 19880113; IL 65224 A0 19820531; IT 1155634 B 19870128; IT 8267327 A0 19820316; JP H0259362 B2 19901212; JP S58500420 A 19830317; MX 160386 A 19900214; NL 8220118 A 19830201; PL 235462 A1 19821108; ZA 821798 B 19830427

DOCDB simple family (application)

US 8200311 W 19820311; AU 8331382 A 19820311; CA 398337 A 19820315; DE 3237454 T 19820311; DK 509582 A 19821116; EP 82901239 A 19820311; IL 6522482 A 19820311; IT 6732782 A 19820316; JP 50124382 A 19820311; MX 19182282 A 19820316; NL 8220118 A 19820311; PL 23546282 A 19820316; ZA 821798 A 19820317