

Title (en)
BURNER SYSTEM FOR NOX-POOR COMBUSTION OF HEAVY OIL

Publication
EP 0314910 B1 19930707 (DE)

Application
EP 88115443 A 19880921

Priority
DE 3737321 A 19871104

Abstract (en)
[origin: JPH01163512A] PURPOSE: To provide a combustion system which can completely burn heavy oil, by suppressing the occurrence of NOx by resupplying a flue gas to a burner after separating such coarse dust particles as the ashes, unburned matters, etc., from the gas by means of a separator connected to a flue-gas pipeline. CONSTITUTION: A flue-gas pipeline 19 is connected to the flue-gas outlet 7 of a flame-tube boiler, and a centrifugal separator 20 and a device 21 which removes dust, sulfur, and nitrogen are connected to the pipeline 19. A flue-gas blower 23 sucks up the flow of a mixture composed of a flue gas including unburned matters and relatively coarse dust particles from the solid output of a separator 20, and blows out the mixture from nozzle pipes 24 arranged on a circle in the wall body of a chamber 15. The flow of the mixture becomes revolving motions with respect to the axis of a burner. When the mixture is blown from the nozzle pipes 24, secondary fuel feed and secondary air feed are introduced to the flame tube 1 of the boiler through the openings 29 and 30 of a lance 28 protruded into the end section of the flame tube 1 on the opposite side of the burner and reduce the nitrogen oxides formed in flames.

IPC 1-7
F23C 9/06

IPC 8 full level
F23C 99/00 (2006.01); **F23C 9/06** (2006.01)

CPC (source: EP US)
F23C 9/06 (2013.01 - EP US); **F23C 2201/30** (2013.01 - EP US)

Cited by
BE1004941A3; EP2218965A1; WO2010092150A1

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

DOCDB simple family (publication)
EP 0314910 A2 19890510; EP 0314910 A3 19910828; EP 0314910 B1 19930707; AT E91330 T1 19930715; DE 3737321 C1 19890427; DE 3882201 D1 19930812; ES 2041290 T3 19931116; JP 2762085 B2 19980604; JP H01163512 A 19890627; US 4862835 A 19890905

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EP 88115443 A 19880921; AT 88115443 T 19880921; DE 3737321 A 19871104; DE 3882201 T 19880921; ES 88115443 T 19880921; JP 23748388 A 19880921; US 25799488 A 19881014