

Title (en)
Pulverized coal burner

Title (de)
Kohlenstaubbrenner

Title (fr)
Brûleur à charbon pulvérisé

Publication
EP 0976977 A1 20000202 (EN)

Application
EP 98114219 A 19980729

Priority
EP 98114219 A 19980729

Abstract (en)
In pulverized coal burning boiler for generating steam for power generation or factory, a larger capacity of the burner can be achieved without increasing number of the burners attached to the boiler and without increasing the capacity per each of the burners. A pulverized coal mixture to be supplied in tangential direction with respect to imaginary circle in horizontal plane of furnace is made rich on central side of the imaginary circle by arranging a rich/lean separating body within the pulverized coal mixture nozzle, or dividing front end of the pulverized coal mixture vertically into upper and lower portions so as to introduce ignition promoting air between the nozzle front end and injecting outlet port, or biasing the pulverized coal mixture nozzle with respect to the air nozzle, thereby making it possible to enlarge the capacity of the pulverized coal burner.

IPC 1-7
F23C 5/32; **F23D 1/00**

IPC 8 full level
F23C 5/32 (2006.01); **F23D 1/00** (2006.01)

CPC (source: EP)
F23C 5/32 (2013.01); **F23D 1/00** (2013.01); **F23D 2201/101** (2013.01); **F23D 2201/20** (2013.01)

Citation (search report)

- [X] EP 0405294 A2 19910102 - BALCKE DUERR AG [DE]
- [X] US 5593298 A 19970114 - HURLEY JOHN F [US], et al
- [A] US 5315939 A 19940531 - RINI MICHAEL J [US], et al
- [A] US 5329866 A 19940719 - LARUE ALBERT D [US]
- [A] DE 890254 C 19530917 - KOHLENSCHIEDUNGS GMBH
- [A] US 2343572 A 19440307 - OBERHUBER WILLIAM F
- [X] PATENT ABSTRACTS OF JAPAN vol. 007, no. 244 (M - 252) 28 October 1983 (1983-10-28)
- [X] PATENT ABSTRACTS OF JAPAN vol. 096, no. 011 29 November 1996 (1996-11-29)

Cited by
US8316782B2; JP2015096789A; DE10019114A1; CN108397766A; CN109458612A; CN104494034A; JP2013113501A; EP3438533A1; US2016356489A1; US2017045221A1; RU2635947C2; FR2848641A1; US2006254483A1; CN103322561A; CN107083258A; CZ303467B6; EP1306614A4; JP2018132278A; US11248785B2; WO2017108484A1; WO2004055435A1; US10746395B2; WO0177583A1; WO2019025289A1

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