

Title (en)

Method and burner for reducing the formation of NO_x when burning pulverized coal

Title (de)

Verfahren und Brenner zur Verminderung der Bildung von NO_x bei der Verbrennung von Kohlenstaub

Title (fr)

Procédé et brûleur pour la réduction de la production de NO_x lors de la combustion de charbon pulvérisé

Publication

EP 0756134 B1 20000628 (DE)

Application

EP 96106401 A 19960424

Priority

DE 19527083 A 19950725

Abstract (en)

[origin: EP0756134A1] The burner involves connecting a primary dust pipe (6) to a dust pipe (7) and conveying a mixed flow of primary air and coal dust. The primary dust pipe is enclosed by a secondary and tertiary air pipes (10,11), both of which continue into a conically widening section. The pipes have a swirling appliance (22,23) and are connected to a spiral inlet housing (16,17). The outlet end of the primary dust pipe has a stabiliser ring (8), the primary dust pipe is enclosed by a primary gas pipe (9) forming a ring channel. A dust-free part-flow of the mixed current flows through the primary gas pipe. A part-flow rich in dust flows through the primary dust pipe. The dust pipe contains a swirl piece (24) downstream from which is an immersion pipe (25) connected to the primary gas pipe by an outward leading pipe (26) via a spiral inlet housing.

IPC 1-7

F23D 1/00

IPC 8 full level

F23C 99/00 (2006.01); **F23D 1/00** (2006.01); **F23D 1/02** (2006.01); **F23D 17/00** (2006.01)

CPC (source: EP US)

F23D 1/00 (2013.01 - EP US); **F23D 1/02** (2013.01 - EP US); **F23D 17/005** (2013.01 - EP US); **F23C 2201/20** (2013.01 - EP US); **F23C 2202/10** (2013.01 - EP US); **F23D 2201/20** (2013.01 - EP US)

Cited by

DE102010030904A1; CN104832918A; CN102213422A; DE102006011326C5; EP1862737A3; EP1998112A3; CN105910101A; CN106765075A; EP2141413A1; DE102010030904B4; EP0926434A1; FR2772887A1; CN102183022A; CN104566357A; EP2009351A3; DE102007030269B4; EP3318801A4; EP2369230A2

Designated contracting state (EPC)

DE DK ES FI FR GB NL

DOCDB simple family (publication)

EP 0756134 A1 19970129; EP 0756134 B1 20000628; AU 5461196 A 19970130; AU 727761 B2 20001221; CA 2175113 A1 19970126; CN 1152686 A 19970625; DE 19527083 A1 19970130; DE 59605487 D1 20000803; DK 0756134 T3 20001106; ES 2149402 T3 20001101; JP H0942611 A 19970214; PL 181172 B1 20010629; PL 314866 A1 19970203; RU 2147708 C1 20000420; UA 45963 C2 20020515; US 5832847 A 19981110; US 5979342 A 19991109; ZA 963667 B 19961120

DOCDB simple family (application)

EP 96106401 A 19960424; AU 5461196 A 19960530; CA 2175113 A 19960426; CN 96109931 A 19960722; DE 19527083 A 19950725; DE 59605487 T 19960424; DK 96106401 T 19960424; ES 96106401 T 19960424; JP 17746496 A 19960618; PL 31486696 A 19960619; RU 96109202 A 19960516; UA 96072777 A 19960710; US 13484598 A 19980814; US 66607796 A 19960619; ZA 963667 A 19960509