

Title (en)

Drying method for moist fuel by direct contact with hot granular solid residue

Title (de)

Verfahren zum Trocknen eines wasserhaltigen Brennstoffs durch direkten Kontakt mit heissem, körnigem Feststoffrückstand

Title (fr)

Procédé de séchage d'un combustible humide par contact direct avec du résidu solide granulaire chaud

Publication

EP 0632230 B1 19961227 (DE)

Application

EP 94201088 A 19940421

Priority

DE 4321680 A 19930630

Abstract (en)

[origin: DE4321680C1] In an eddy combustion chamber (1) granular fuel, e.g. brown coal, is burnt with an input of eddy air from a conduit (2) and sec. air from a further conduit (3), and at temps. in the range of 600 to 1200 deg.C. The fuel is fed through its own conduit (4). Hot flue gas, carrying with it combustion residues, reaches through a channel (5) a cyclone (6), in which gas and solid matter are sepd. The flue gas leaves the cyclone in a conduit (7) and is cooled and cleaned. Hot combustion residue flows out of the cyclone (6) through a conduit (8) into a mixt. unit (9), and any excess can be fed away via a further conduit (10). Fuel contg. water is fed to the mixt. unit via a conduit (11) from a storage bunker (12), and is mixed with the hot residues, which rapidly reduces the temp. of the combustion residues. From an outlet (14) comes water-free fuel-contg. mixt. at a temp. of pref. 103 to 130 deg.C. USE/ADVANTAGE - To dry fuel contg. water.

IPC 1-7

F23K 1/04; **F23C 11/02**; **F26B 1/00**; **F26B 17/20**

IPC 8 full level

C10J 3/46 (2006.01); **C10J 3/54** (2006.01); **F23C 10/10** (2006.01); **F23K 1/04** (2006.01); **F26B 1/00** (2006.01); **F26B 3/20** (2006.01); **F26B 17/20** (2006.01)

CPC (source: EP US)

C10J 3/463 (2013.01 - EP US); **C10J 3/54** (2013.01 - EP US); **C10K 1/026** (2013.01 - EP US); **F23C 10/10** (2013.01 - EP US); **F23K 1/04** (2013.01 - EP US); **F26B 1/00** (2013.01 - EP US); **F26B 3/205** (2013.01 - EP US); **C10J 2300/093** (2013.01 - EP US); **C10J 2300/0956** (2013.01 - EP US)

Designated contracting state (EPC)

DE ES FR GB GR NL

DOCDB simple family (publication)

DE 4321680 C1 19940414; AU 6602994 A 19950112; AU 665312 B2 19951221; CA 2123763 A1 19941231; DE 59401384 D1 19970206; EP 0632230 A1 19950104; EP 0632230 B1 19961227; ES 2096405 T3 19970301; GR 3022187 T3 19970331; US 5394811 A 19950307

DOCDB simple family (application)

DE 4321680 A 19930630; AU 6602994 A 19940628; CA 2123763 A 19940517; DE 59401384 T 19940421; EP 94201088 A 19940421; ES 94201088 T 19940421; GR 960403657 T 19961230; US 26035294 A 19940615