

Title (en)

Separator for combustible particles above a boiler with valve

Title (de)

Abscheider für brennbare Partikel oberhalb eines Heizkessels mit einem Absperrventil

Title (fr)

Séparateur de particules combustibles disposé en amont d'une chaudière et comportant un unique clapet d'isolement

Publication

**EP 0950856 B1 20030806 (FR)**

Application

**EP 99400925 A 19990415**

Priority

FR 9804749 A 19980416

Abstract (en)

[origin: EP0950856A1] An isolation valve (21) moves inside the separator (1) in the axial direction (A) to allow or obstruct the flow (13B) of air carrying the particles through each transport pipe (19) to different outlet compartments (7) The separator is placed between a crusher and a heater to select by size particles made by crushing of a fuel in the crusher and transported by air flow to the separator and then the heater which extends axially. The separator has outlet compartments each with a transport pipe mounted on it connecting the separator to the heater. The isolation valve is fixed to a valve tube (23) which is translated in the axial direction by a control rod (25) operated by a jack (27) mounted outside the separator. The valve tube connects to a pressurized vessel (29) outside the separator with an inlet to communicate with a source of damming air. The isolation valve has two conical layers braced together and fixed to the valve tube which has openings between the layers or at the base of one of the layers. A valve (31) sealing the damming air is fixed to the command rod to isolate the valve tube from the pressurized vessel when the isolation valve is open. The sealing valve slides in a cylinder (33) fixed to the valve tube. The cylinder has openings.

IPC 1-7

**F23K 1/00**; **B01D 45/06**; **B02C 23/32**

IPC 8 full level

**B02C 23/30** (2006.01); **B02C 23/32** (2006.01); **B07B 7/01** (2006.01); **B07B 7/08** (2006.01); **B07B 11/06** (2006.01); **F23K 1/00** (2006.01); **B02C 15/00** (2006.01)

CPC (source: EP US)

**B02C 23/32** (2013.01 - EP US); **B07B 7/01** (2013.01 - EP US); **B07B 7/08** (2013.01 - EP US); **B07B 11/06** (2013.01 - EP US); **F23K 1/00** (2013.01 - EP US); **B02C 2015/002** (2013.01 - EP US); **F23K 2201/30** (2013.01 - EP US)

Cited by

EP1053797A3; CN107708867A; US10639639B2

Designated contracting state (EPC)

DE DK ES FR GB IT

DOCDB simple family (publication)

**EP 0950856 A1 19991020**; **EP 0950856 B1 20030806**; DE 69910104 D1 20030911; ES 2203027 T3 20040401; FR 2777476 A1 19991022; FR 2777476 B1 20000623; JP H11347494 A 19991221; US 6231273 B1 20010515; ZA 992746 B 20000131

DOCDB simple family (application)

**EP 99400925 A 19990415**; DE 69910104 T 19990415; ES 99400925 T 19990415; FR 9804749 A 19980416; JP 10578399 A 19990413; US 29233999 A 19990415; ZA 992746 A 19990415