

Title (en)

METHOD FOR SINK AND FLOAT SEPARATION OF FINE GRAINED MINERAL RAW MATERIALS

Title (de)

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Title (fr)

PROCEDE DE SEPARATION DE MATIERES BRUTES MINERALES A GRAINS FINS PAR MILIEU DENSE

Publication

**EP 1372859 B1 20040811 (DE)**

Application

**EP 02733122 A 20020301**

Priority

- DE 10116027 A 20010330
- IB 0202016 W 20020301

Abstract (en)

[origin: WO02078850A2] The invention relates to a device for the sink and float separation of mineral raw materials, particularly coal, according to density by means of a liquid, particularly a dense medium. The device comprises a separating container (1) with a cylinder (2) arranged in a rotatable manner therein for extracting the sunken items. The separating container comprises inlets (6; 10, 11) for the liquid and for the raw material which is to be separated, in addition to at least one outlet (12, 13) for the liquid, and one overflow (13) for separating the floating items. The inlets and outlets (10, 11; 12, 13) are arranged in a parallel position with respect to the axis of rotation of the cylinder (2). According to the invention, at least two respective inlets and outlets (10; 11; 12, 13) are provided for the liquid, being arranged, respectively, opposite each other in pairs on a specific height. At least one inlet and one outlet (10; 13) and the overflow (13) are arranged on the same levels as the liquid and at least one pair of inlets and outlets (11, 12) are disposed directly above the pockets of the sunken items (3) which are distributed over the periphery of the outer surface of the drum. The invention also relates to a corresponding method for the sink and float separation of mineral raw materials.

IPC 1-7

**B03B 5/42**

IPC 8 full level

**B03B 5/42** (2006.01)

CPC (source: EP US)

**B03B 5/42** (2013.01 - EP US); **B03B 2011/004** (2013.01 - EP US)

Designated contracting state (EPC)

BE DE GB IE NL

DOCDB simple family (publication)

**WO 02078850 A2 20021010; WO 02078850 A3 20021205**; DE 10116027 A1 20021010; DE 50200821 D1 20040916; EP 1372859 A2 20040102; EP 1372859 B1 20040811; US 2004164002 A1 20040826; US 7004327 B2 20060228

DOCDB simple family (application)

**IB 0202016 W 20020301**; DE 10116027 A 20010330; DE 50200821 T 20020301; EP 02733122 A 20020301; US 47351404 A 20040405