

Title (en)

Method and device for the concentration of solid particles

Title (de)

Verfahren und Vorrichtung zur Konzentration von Feststoffteilchen

Title (fr)

Procédé et appareil pour la concentration de matières à l'état de particules solides

Publication

**EP 1767273 A1 20070328 (FR)**

Application

**EP 05020997 A 20050927**

Priority

EP 05020997 A 20050927

Abstract (en)

The procedure, designed to concentrate and separate fine particles (9, 10) of various solid substances of different densities, including minerals, consists of creating a pulp which is subjected to centrifuging and centripetal pulses. The centripetal pulses are created by injecting a fluid into the pulp in a direction that provides a component that is tangential to the centrifuging direction. The pulp is introduced into the centrifuging chamber (11) tangentially to its outer wall (2), and the denser fraction is withdrawn tangentiall to the same wall.

IPC 8 full level

**B03B 5/22** (2006.01); **B03B 5/32** (2006.01)

CPC (source: EP US)

**B03B 5/22** (2013.01 - EP US); **B03B 5/32** (2013.01 - EP US)

Citation (search report)

- [XY] US 4574046 A 19860304 - SPROW EARNEST A [US]
- [Y] US 4071440 A 19780131 - JEDO ANTONI, et al
- [A] US 4279741 A 19810721 - CAMPBELL THOMAS P

Cited by

US11737912B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1767273 A1 20070328**; AT E537904 T1 20120115; AU 2006297017 A1 20070405; AU 2006297017 B2 20110908; CA 2623875 A1 20070405; CN 101326010 A 20081217; CN 101326010 B 20130529; EA 014356 B1 20101029; EA 200800934 A1 20081230; EP 1931476 A1 20080618; EP 1931476 B1 20111221; US 2009014365 A1 20090115; US 8317033 B2 20121127; WO 2007036006 A1 20070405; ZA 200803661 B 20091028

DOCDB simple family (application)

**EP 05020997 A 20050927**; AT 06804565 T 20060927; AU 2006297017 A 20060927; BE 2006000106 W 20060927; CA 2623875 A 20060927; CN 200680035899 A 20060927; EA 200800934 A 20060927; EP 06804565 A 20060927; US 8841706 A 20060927; ZA 200803661 A 20060927