

Title (en)

Device for cleaning and separating light and heavy articles contained in bulk material

Title (de)

Vorrichtung zum Waschen und Sortieren von Schwergut und Leichtgut enthaltendem Schüttgut

Title (fr)

Dispositif permettant le lavage et le tri de particules de densités différentes contenues dans des produits en vrac

Publication

EP 1566219 B1 20060712 (DE)

Application

EP 05090030 A 20050212

Priority

DE 102004008126 A 20040218

Abstract (en)

[origin: EP1566219A1] The extraction opening (17) for lighter materials is located eccentrically with respect to the drum (3) rotary axis (M), and/or is non-circular. Rotation of the drum, with charging of fluid and bulk materials, causes periodic extraction of fluid and light material, at the light material extraction opening. The extraction opening for light material has a curved edge profile (18) including at least one section of an ellipse. It has a spiral edge profile. It has a stepped cut-out or circumferential shoulder (also causing period extraction). The extraction opening for heavy materials is flush with the inside of the cylindrical drum. The drum may be pivoted about an axis perpendicular to its axis of rotation. An adjuster inclines it with respect to the horizontal. The fluid is introduced in an axial section of the drum, located between the extraction opening for light material and the center of the drum. A jet pipe (22) one third of the way along the drum, projects fluid at an acute angle, onto the fluid surface inside the drum. Lifting flights are built into the drum in its middle third, to raise heavy material out of the fluid and drop it back in, as the drum rotates. Further refinements include spiral lifting flights, a plastic plate with reduced outlet for the light materials and a rubber or plastic lining inside the drum, covering all internal fittings.

IPC 8 full level

B03B 5/42 (2006.01); **B03B 5/56** (2006.01); **B09C 1/02** (2006.01)

CPC (source: EP)

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Cited by

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