

**ECLA****EUROPEAN CLASSIFICATION****B03D**

**FLOTATION; DIFFERENTIAL SEDIMENTATION** (sedimentation in general B01D 21/00; in combination with other separation of solids B03B; sink-float separation B03B5/28; detergents, soaps C11D) [C9603]

**[N: WARNING**

[N1112] The following groups are not complete: B03D1/02C, see also B03D1/02 B03D1/02F, see also B03D1/02 B03D1/02L, see also B03D1/02 B03D1/02R, see also B03D1/02 B03D1/08D, see also B03D1/08 B03D1/08F, see also B03D1/08 B03D1/08T, see also B03D1/08 B03D1/14A, see also B03D1/14 B03D1/14F, see also B03D1/14 B03D1/14F1, see also B03D1/14 B03D1/14F3, see also B03D1/14 B03D1/14F5, see also B03D1/14 B03D1/14F7, see also B03D1/14 B03D1/14F9, see also B03D1/14 B03D1/14M, see also B03D1/14 B03D1/14S, see also B03D1/14 B03D1/24N, see also B03D1/24 B03D1/24R, see also B03D1/24]

**B03D1/00**

**Flotation** (conditioning for flotation, general arrangement of plan B03B)

**Note**

[N9603] In groups B03D1/001 to B03D1/018, in the absence of an indication to the contrary, classification is made in the last appropriate place.

- B03D1/001 . Flotation agents (conditioners B03B1/00) [N9603]
- B03D1/002 . . Inorganic compounds [N9603]
- B03D1/004 . . Organic compounds [N9603]
- B03D1/004E . . . [N: modified so as to contain a polyether group] [N1201]
- B03D1/004S . . . [N: containing silicon] [N1201]
- B03D1/006 . . . Hydrocarbons [N9603]
- B03D1/008 . . . containing oxygen [N9603]
- B03D1/01 . . . containing nitrogen [N9603]
- B03D1/01Q . . . . [N: Quaternary ammonium compounds] [N1112]
- B03D1/012 . . . containing sulfur [N9603]
- B03D1/014 . . . containing phosphorus [N9603]
- B03D1/016 . . . Macromolecular compounds [N9603]
- B03D1/018 . . Mixtures of inorganic and organic compounds [N9603]
- B03D1/02 . Froth-flotation processes
- B03D1/02B . . [N: for treatment of phosphate ores]
- B03D1/02C . . [N: Carrier flotation; Flotation of a carrier material to which the target material attaches] [N1112]
- B03D1/02F . . [N: adapted for the flotation of fines] [N1112]
- B03D1/02L . . [N: Using an immiscible liquid in place of a gas for flotation] [N1112]
- B03D1/02R . . [N: Control and monitoring of flotation processes; computer models therefor] [N1112]
- B03D1/04 . . by varying ambient atmospheric pressure
- B03D1/06 . . differential

- B03D1/08 . Subsequent treatment of concentrated product (froth dispersion [B01D19/02](#))
- B03D1/08D . . [N: of the froth product, e.g. washing] [N1112]
- B03D1/08F . . [N: of the feed, e.g. conditioning, de-sliming] [N1112]
- B03D1/08T . . [N: of the sediment, e.g. regrinding] [N1112]
- B03D1/10 . . Removing adhering liquid from separated materials (processes or devices capable of general use [B01D](#))
- B03D1/12 . Agent recovery
- B03D1/14 . Flotation machines (devices for feeding measured quantities of reagents [B01J4/02](#); flotation apparatus for enzymology or microbiology [C12M1/09](#)) [C9603]
- B03D1/14A . . [N: with special arrangement of a plurality of flotation cells, e.g. positioning a flotation cell inside another] [N1112]
- B03D1/14B . . [N: with baffles, e.g. at the wall for redirecting settling solids] [N1112]
- B03D1/14C . . [N: using centrifugal forces] [N0005]
- B03D1/14C1 . . . [N: air-sparged hydrocyclones] [N1112]
- B03D1/14D . . [N: Dissolved air flotation machines] [N1201]
- B03D1/14E . . [N: using electroflotation (waste water treatment using electroflotation [C02F1/465](#))] [C1112]
- B03D1/14F . . [N: Feed or discharge mechanisms for flotation tanks] [N1112]
- B03D1/14F1 . . . [N: Feed mechanisms for reagents (devices for feeding measured quantities of reagents [B01J4/02](#))] [N1112]
- B03D1/14F3 . . . [N: Feed mechanisms for the slurry] [N1112]
- B03D1/14F5 . . . [N: Discharge mechanisms for the froth] [N1112]
- B03D1/14F7 . . . [N: Discharge mechanisms for the sediments] [N1112]
- B03D1/14F9 . . . [N: Flotation tanks having means for discharging the pulp, e.g. as a bleed stream] [N1112]
- B03D1/14L . . [N: with a plurality of parallel plates] [N1112]
- B03D1/14M . . [N: Means for cleaning or maintenance] [N1112]
- B03D1/14S . . [N: with means for establishing a specified flow pattern] [N1112]
- B03D1/16 . . with impellers; Subaeration machines [N: (mixing gases or vapours with liquids [B01F3/04](#))] [C1112]
- B03D1/18 . . . without air supply
- B03D1/20 . . . with internal air pumps
- B03D1/22 . . . with external blowers
- B03D1/24 . . Pneumatic [N: (mixing gases or vapours with liquids [B01F3/04](#))] [C1112]
- B03D1/24N . . . [N: Nozzles for injecting gas into the flotation tank] [N1112]
- B03D1/24P . . . [N: Injecting gas through perforated or porous area] [N1112]
- B03D1/24R . . . [N: Mixing gas and slurry in a device separate from the flotation tank, i.e. reactor-separator type] [N1112]
- B03D1/26 . . . Air lift machines
- B03D3/00 Differential sedimentation**
- B03D3/02 . Coagulation

B03D3/04 . . assisted by vibrations

B03D3/06 . Flocculation