

B03 SEPARATION OF SOLID MATERIALS USING LIQUIDS OR USING PNEUMATIC TABLES OR JIGS; MAGNETIC OR ELECTROSTATIC SEPARATION OF SOLID MATERIALS FROM SOLID MATERIALS OR FLUIDS; SEPARATION BY HIGH-VOLTAGE ELECTRIC FIELDS (separating isotopes B01D 59/00; crushing or disintegrating B02C; centrifuges or vortex apparatus for carrying out physical processes B04) [5]

B03B SEPARATING SOLID MATERIALS USING LIQUIDS OR USING PNEUMATIC TABLES OR JIGS (removing fluids from solids B01D; magnetic or electrostatic separation of solid materials from solid materials or fluids, separation by high voltage electric fields B03C; flotation, differential sedimentation B03D; separating by dry methods B07; screening or sifting B07B; by picking B07C; separating peculiar to particular materials and provided for in other single classes, see the relevant classes)

PRETREATMENT..... 1/00
WASHING, WET SEPARATING,
SEPARATING BY PNEUMATIC JIGS;
FEEDING AND DISCHARGING
PRODUCTS TREATED THEREBY 4/00, 5/00;
11/00

COMBINATIONS OF PROCESSES OR
APPARATUS..... 7/00
ARRANGEMENTS OF PLANT 9/00
CONTROL BY PHYSICAL EFFECTS..... 13/00

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| <p>1/00 Conditioning for facilitating separation by altering physical properties of the matter to be treated (pretreatment of ores in general C22B)</p> <p>1/02 . Preparatory heating</p> <p>1/04 . by additives</p> <p>1/06 . by varying ambient atmospheric pressure</p> <p>4/00 Separating by pneumatic tables or by pneumatic jigs (sink-float separation using dry heavy media B03B 5/46) [2]</p> <p>4/02 . using swinging or shaking tables [6]</p> <p>4/04 . using rotary tables or tables formed by travelling belts (separating solids from solids using gas currents and revolving drums B07B 4/06) [6]</p> <p>4/06 . using fixed and inclined tables [6]</p> <p>5/00 Washing granular, powdered or lumpy materials; Wet separating (separating by pneumatic tables or by pneumatic jigs B03B 4/00) [2]</p> <p>5/02 . using shaken, pulsated or stirred beds as the principal means of separation (B03B 5/28, B03B 5/48 take precedence) [2]</p> <p>5/04 . . on shaking tables (on vanners B03B 5/08) [2]</p> <p>5/06 . . . Constructional details of shaking tables, e.g. riffing [2]</p> <p>5/08 . . on vanners [2]</p> <p>5/10 . . on jigs [2]</p> <p>5/12 . . . using pulses generated mechanically in fluid [2]</p> <p>5/14 . . . Plunger jigs [2]</p> <p>5/16 . . . Diaphragm jigs [2]</p> <p>5/18 . . . Moving-sieve jigs [2]</p> <p>5/20 . . . using pulses generated by air injection [2]</p> <p>5/22 . . . using pulses generated by liquid injection [2]</p> <p>5/24 . . . Constructional details of jigs, e.g. pulse control devices [2]</p> <p>5/26 . . in sluices [2]</p> <p>5/28 . by sink-float separation [2]</p> <p>5/30 . . using heavy liquids or suspensions [2]</p> <p>5/32 . . . using centrifugal force (centrifuges B04B; cyclones B04C) [2]</p> <p>5/34 . . . Applications of hydrocyclones [2]</p> <p>5/36 . . . Devices therefor, other than using centrifugal force (jigs B03B 5/10) [2]</p> <p>5/38 . . . of conical receptacle type [2]</p> | <p>5/40 . . . of trough type [2]</p> <p>5/42 . . . of drum or lifting wheel type [2]</p> <p>5/44 . . . Application of particular media therefor [2]</p> <p>5/46 . . using dry heavy media; Devices therefor [2]</p> <p>5/48 . by mechanical classifiers (sink-float separation aspects B03B 5/28) [2]</p> <p>5/50 . . Rake classifiers [2]</p> <p>5/52 . . Spiral classifiers [2]</p> <p>5/54 . . Drag classifiers [2]</p> <p>5/56 . . Drum classifiers [2]</p> <p>5/58 . . Bowl classifiers [2]</p> <p>5/60 . by non-mechanical classifiers, e.g. slime tanks (using shaken, pulsated or stirred beds as the principal means of separation B03B 5/02; hydraulic classifiers B03B 5/62; water impulse classifiers B03B 5/68) [2]</p> <p>5/62 . by hydraulic classifiers, e.g. of launder, tank, spiral or helical chute concentrator type [2]</p> <p>5/64 . . of the free settling type [2]</p> <p>5/66 . . of the hindered settling type [2]</p> <p>5/68 . by water impulse (shaking tables B03B 5/04; jigs B03B 5/10; hydraulic classifiers B03B 5/62) [2]</p> <p>5/70 . . on tables or strakes [2]</p> <p>5/72 . . . which are movable [2]</p> <p>5/74 Revolving tables [2]</p> <p>7/00 Combinations of wet processes or apparatus with other processes or apparatus, e.g. for dressing ores or garbage</p> <p>9/00 General arrangement of separating plant, e.g. flow sheets</p> <p>9/02 . specially adapted for oil-sand, oil-chalk, oil-shales, ozokerite, bitumen, or the like</p> <p>9/04 . specially adapted for furnace residues, smeltings, or foundry slags</p> <p>9/06 . specially adapted for refuse</p> <p>11/00 Feed or discharge devices integral with washing or wet-separating equipment (filling or emptying devices <u>per se</u> B65G 65/30)</p> |
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B03B

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| 13/00 Control arrangements specially adapted for wet-separating apparatus or for dressing plant, using physical effects (detecting, measuring, or analysing devices G01) | <div>13/02 . using optical effects</div> <div>13/04 . using electrical or electromagnetic effects</div> <div>13/06 . using absorption or reflection of radioactive emanation</div> |
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