

CPC COOPERATIVE PATENT CLASSIFICATION

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](#))

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| 1/00 | Conditioning for facilitating separation by altering physical properties of the matter to be treated (pretreatment of ores in general C22B {Pretreatment prior to magnetic separation B03C 1/00 }) | 5/36 | . . . Devices therefor, other than using centrifugal force (jigs B03B 5/10) |
| 1/02 | . Preparatory heating | 5/38 | of conical receptacle type |
| 1/04 | . by additives | 5/40 | of trough type |
| 1/06 | . by varying ambient atmospheric pressure | 2005/405 | {using horizontal currents} |
| 4/00 | Separating by pneumatic tables or by pneumatic jigs (sink-float separation using dry heavy media B03B 5/46) | 5/42 | of drum of lifting wheel type |
| NOTE | | 5/44 | . . . Application of particular media therefor |
| | Group B03B 4/005 takes precedence over groups B03B 4/02 - B03B 4/065 | 5/442 | {composition of heavy media} |
| 4/005 | . {the currents being pulsating, e.g. pneumatic jigs; combination of continuous and pulsating currents} | 5/445 | {composition of dry heavy media} |
| 4/02 | . using swinging or shaking tables | 5/447 | {recovery of heavy media} |
| 4/04 | . using rotary tables or tables formed by travelling belts (separating solids from solids using gas currents and revolving drums B07B 4/06) | 5/46 | . . using dry heavy media; Devices therefor |
| 4/06 | . using fixed and inclined tables; {using stationary pneumatic tables, e.g. fluidised beds} | 5/48 | . by mechanical classifiers (sink-float separation aspects B03B 5/28) |
| 4/065 | . . {having inclined portions} | 5/50 | . . Rake classifiers |
| 5/00 | Washing granular, powdered or lumpy materials; Wet separating (separating by pneumatic tables or by pneumatic jigs B03B 4/00) | 5/52 | . . Spiral classifiers |
| 5/02 | . using shaken, pulsated or stirred beds as the principal means of separation (B03B 5/28 , B03B 5/48 take precedence) | 5/54 | . . Drag classifiers |
| 5/04 | . . on shaking tables (on vanners B03B 5/08) | 5/56 | . . Drum classifiers |
| 5/06 | . . . Constructional details of shaking tables, e.g. riffing | 5/58 | . . Bowl classifiers |
| 5/08 | . . on vanners | 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) |
| 5/10 | . . on jigs | 5/62 | . by hydraulic classifiers, e.g. of launder, tank, spiral or helical chute concentrator type |
| 5/12 | . . . using pulses generated mechanically in fluid | 5/623 | . . {Upward current classifiers} |
| 5/14 | Plunger jigs | 5/626 | . . {Helical separators} |
| 5/16 | Diaphragm jigs | 5/64 | . . of the free settling type |
| 5/18 | Moving-sieve jigs | 5/66 | . . of the hindered settling type |
| 5/20 | . . . using pulses generated by air injection | 5/68 | . by water impulse (shaking tables B03B 5/04 ; jigs B03B 5/10 ; hydraulic classifiers B03B 5/62) |
| 5/22 | . . . using pulses generated by liquid injection | 5/70 | . . on tables or strakes |
| 5/24 | . . . Constructional details of jigs, e.g. pulse control devices | 5/72 | . . . which are movable |
| 5/26 | . . in sluices | 5/74 | Revolving tables |
| 5/28 | . by sink-float separation | 7/00 | Combinations of wet processes or apparatus with other processes or apparatus, e.g. for dressing ores or garbage |
| 5/30 | . . using heavy liquids or suspensions | 9/00 | General arrangement of separating plant, e.g. flow sheets |
| 5/32 | . . . using centrifugal force (centrifuges B04B ; cyclones B04C) | 9/005 | . {specially adapted for coal} |
| 5/34 | Applications of hydrocyclones | 9/02 | . specially adapted for oil-sand, oil-chalk, oil-shales, ozokerite, bitumen, or the like |
| | | 9/04 | . specially adapted for furnace residues, smeltings, or foundry slags |
| | | 9/06 | . specially adapted for refuse |
| | | 9/061 | . . {the refuse being industrial} |
| | | 9/062 | . . . {the refuse being glass} |
| | | 9/063 | . . . {the refuse being concrete slurry} |
| | | 9/065 | . . . {the refuse being building rubble} |

- 2009/066 . . {the refuse being batteries}
- 2009/067 . . {the refuse being carpets}
- 2009/068 . . {Specific treatment of shredder light fraction}

- 11/00 Feed or discharge devices integral with washing or wet-separating equipment (filling or emptying devices per se [B65G 65/30](#))**
- 2011/002 . {Rotary feeding devices}
- 2011/004 . {Lifting wheel dischargers}
- 2011/006 . {Scraper dischargers}
- 2011/008 . {Screw dischargers}

- 13/00 Control arrangements specially adapted for wet-separating apparatus or for dressing plant, using physical effects (detecting, measuring, or analysing devices [G01](#); control devices in general [G05](#))**
- 13/005 . {Methods or arrangements for controlling the physical properties of heavy media (in relation with groups [B03B 5/30](#) - [B03B 5/46](#)), e.g. density, concentration, viscosity}
- 13/02 . using optical effects
- 13/04 . using electrical or electromagnetic effects
- 13/06 . using absorption or reflection of radioactive emanation