CPC  COOPERATIVE PATENT CLASSIFICATION

B  PERFORMING OPERATIONS; TRANSPORTING
  (NOTES omitted)

SEPARATING; MIXING

B07  SEPARATING SOLIDS FROM SOLIDS; SORTING

B07B  SEPERATING SOLIDS FROM SOLIDS BY SIEVING, SCREENING, OR SIFTING
  OR BY USING GAS CURRENTS; OTHER SEPARATING BY DRY METHODS
  APPLICABLE TO BULK MATERIAL, e.g. LOOSE ARTICLES FIT TO BE HANDLED
  LIKE BULK MATERIAL (combinations of dry separating apparatus with wet separating
  apparatus B03B; hand sorting, postal sorting, sorting by switching or other devices actuated in
  response to detection or measurement of some feature of articles or samples of material B07C)

NOTE
  In this subclass any sorting or grading of bulk material or loose articles fit to be handled like bulk material results
  automatically from the construction of the apparatus and properties of the material, e.g. by a trap opening under an object of
  a certain minimum weight, by an aperture of graduated size. Sorting of articles is included in so far as the same conditions
  apply, e.g. sorting of timber by passing it over successively longer openings; the articles may or may not be orientated for the
  purpose of sorting.

WARNINGS
  1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following
     CPC groups:

     B07B 1/32  covered by  B07B 1/30

  2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the
     scheme.

1/00  Sieving, screening, sifting, or sorting solid
      materials using networks, gratings, grids, or
      the like {ash-sifters for domestic stoves or ranges
      F24B 15/007)}

1/005  .  [Transportable screening plants]
1/02  .  Hand screens
1/04  .  Stationary flat screens
1/06  .  Cone or disc shaped screens
1/08  .  Screens rotating within their own plane
1/10  .  Screens in the form of endless moving bands
1/12  .  Apparatus having only parallel elements
1/14  .  .  Roller screens
1/145  .  .  {the material to be screened moving along the
      axis of the parallel elements}
1/15  .  .  using corrugated, grooved or ribbed rollers
1/155  .  .  {the rollers having a star shaped cross
      section}
1/16  .  .  the elements being movable and in other than
      roller form
1/18  .  Drum screens
1/185  .  .  {provided with exchangeable sieve panels}
1/20  .  .  Stationary drums with moving interior agitators
1/22  .  Revolving drums
1/24  .  .  with fixed or moving interior agitators
1/26  .  .  with additional axial or radial movement of the
      drum
1/28  .  Moving screens not otherwise provided for, e.g.
      swinging, reciprocating, rocking, tilting or wobbling
      screens

1/282  .  .  {their jigging movement being a closed or open
      curvilinear path in a plane perpendicular to the
      plane of the screen and parallel or transverse to
      the direction of conveyance}
1/284  .  .  {with unbalanced weights}
1/286  .  .  {with excentric shafts}

NOTE
  Group B07B 1/40 takes precedence over
  groups B07B 1/30-B07B 1/38

1/288  .  {Tumbling screens}
1/30  .  {jigging or moving to-and-fro {within their own
      plane} in or approximately in {or transverse to} the
      direction of conveyance}
1/34  .  .  jigging or moving to-and-fro perpendicularly or
      approximately perpendiculary to the plane of the
      screen
1/343  .  .  {with mechanical drive elements other than
      electromagnets}
1/346  .  .  {with electromagnets}
1/36  .  {jigging or moving to-and-fro in more than one
      direction}
1/38  .  .  oscillating in a circular arc in their own plane;
      Plansifters
1/40  .  {Resonant vibration screens
1/42  .  .  Drive mechanisms, regulating or controlling
      devices, or balancing devices, specially adapted for
      screens
1/44  .  .  Balancing devices
Separating solids from solids using gas currents

4/00 Separating solids from solids by subjecting their mixture to gas currents (using tables or jigs B03B 4/00)
    4/02 while the mixtures fall
    4/025 (the material being slingered or fled out horizontally before falling, e.g. by dispersing elements)
    4/04 in cascades
    4/06 using revolving drums
    4/08 while the mixtures are supported by sieves, screens, or like mechanical elements

7/00 Selective separation of solid materials carried by, or dispersed in, gas currents (sieves or filters for separating dispersed particles from gases or vapours B01D)
    7/01 using gravity
    7/02 by reversal of direction of flow
    7/04 by impingement against baffle separators
    7/06 by impingement against sieves
    7/08 using centrifugal force (centrifuges B04B; cyclones B04C)
    7/083 generated by rotating vanes, discs, drums, or brushes
    7/086 generated by the winding course of the gas stream
    7/0865 (using the coanda effect of the moving gas stream)
    7/10 having air recirculating within the apparatus

7/12 with pulsating air currents

9/00 Combinations of apparatus for screening or sifting for or separating solids from solids using gas currents; General arrangement of plant, e.g. flow sheets
    9/02 Combinations of similar or different apparatus for separating solids from solids using gas currents

11/00 Arrangement of accessories in apparatus for separating solids from solids using gas currents
    11/02 Arrangement of air or material conditioning accessories
    11/04 Control arrangements
    11/06 Feeding or discharging arrangements
    11/08 Cleaning arrangements

Other separating, e.g. grading, resulting automatically from the construction of the apparatus used and properties of the material concerned: Combinations

13/00 Grading or sorting solid materials by dry methods, not otherwise provided for; Sorting articles otherwise than by indirectly controlled devices (grading eggs A01K 43/04)
    13/003 (Separation of articles by differences in their geometrical form or by difference in their physical properties, e.g. elasticity, compressibility, hardness)
    13/006 (Sorting molded pieces and runners)
    13/02 Apparatus for grading using buckets for taking out particles from aggregates
    13/04 according to size
    13/05 using material mover cooperating with retainer, deflector or discharger (B07B 13/065 - B07B 13/075 take precedence)
    13/065 Apparatus for grading or sorting using divergent conveyor belts or cables
    13/07 Apparatus in which aggregates or articles are moved along or past openings which increase in size in the direction of movement
    13/072 (the openings being rollers with a divergent axis and the material moving substantially along the rollers axis)
    13/075 Apparatus comprising moving article - receiving openings, the size of which varies as they move
    13/08 according to weight (B07B 13/10 takes precedence)
    13/10 using momentum effects
    13/11 involving travel of particles over surfaces which separate by centrifugal force or by relative friction between particles and such surfaces, e.g. helical sorters
    13/113 (shaking tables (for wet separating B03B 5/04; tables with water impulse B03B 5/70; pneumatic tables B03B 4/02; moving screens B07B 1/28))
    13/116 (stratification of dry granular material on a continuously travelling surface, e.g. belt conveyor (vanner for wet separation B03B 5/08))
    13/13 Details or accessories
    13/14 Feed or discharge arrangements
    13/16 Control
Other separating, e.g. grading, resulting automatically from the construction of the apparatus used and properties...

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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>15/00</td>
<td>Combinations of apparatus for separating solids from solids by dry methods applicable to bulk material, e.g. loose articles fit to be handled like bulk material (using wet methods B03B 7/00; using gas currents B07B 9/00)</td>
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### 2201/00 Details applicable to machines for screening using sieves or gratings
- 2201/02 Fastening means for fastening screens to their frames which do not stretch or sag the screening surfaces
- 2201/04 Multiple deck screening devices comprising one or more superimposed screens

### 2220/00 Type of materials being separated
- 2220/02 Plastics
- 2220/04 Batteries

### 2230/00 Specific aspects relating to the whole B07B subclass
- 2230/01 Wet separation
- 2230/04 The screen or the screened materials being subjected to ultrasonic vibration