

# CPC COOPERATIVE PATENT CLASSIFICATION

## B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

### SEPARATING; MIXING

## B09 DISPOSAL OF SOLID WASTE; RECLAMATION OF CONTAMINATED SOIL

### B09B DISPOSAL OF SOLID WASTE

#### NOTES

1. This subclass covers only single or combined, e.g. multistage, operations not fully classifiable in a single other subclass
2. In this subclass the following terms or expressions are added with the meanings indicated :
  - "disposal" means the discarding, e.g. dumping, or destroying of waste or its transformation into something useful or harmless;
  - "solid waste" includes waste which, although it has liquid content, is for practical purposes handled as solid
3. Attention is drawn to the following places:
 

<a href="#">A23J 1/16</a>	Obtaining proteins from waste water of starch manufacturing plants of like wastes
<a href="#">A23K 10/26</a> , <a href="#">A23K 10/37</a>	Animal feeding-stuffs from waste products of animal origin or of plant origin
<a href="#">A23K 10/38</a>	Animal feeding-stuffs from distillers' or brewers' waste
<a href="#">A23K 10/28</a>	Animal feeding-stuffs from waste dairy products
<a href="#">A23K 10/20</a>	Animal feeding-stuffs from kitchen waste
<a href="#">A43B 1/12</a>	Footwear made of rubber waste
<a href="#">A61L 11/00</a>	Disinfection or sterilisation methods specially adapted for refuse
<a href="#">A62D 3/00</a>	Chemical means for combatting harmful chemical agents; processes for making harmful chemical agents harmless
<a href="#">B01D 53/34</a>	Chemical purification of smoke or fumes, e.g. flue gas
<a href="#">{B02C 18/0084}</a>	Disintegrating by knives or other cutting or tearing members, which chop material into fragments, specially adapted for disintegrating garbage, waste or sewage
<a href="#">B03B 7/00</a>	Combinations of wet processes or apparatus with other processes or apparatus, e.g. for dressing ores or garbage
<a href="#">B03B 9/06</a>	General arrangement of separating plant, e.g. flow sheets, specially adapted for refuse
<a href="#">B05B 12/16</a> , <a href="#">B05B 14/00</a>	Control of spray area of spraying plant, e.g. masking, side shields; Means for collection or re-use of excess material
<a href="#">B08B 15/00</a>	Prevent escape of dirt or fumes from the area where they are produced; Collecting or removing dirt or fumes from that area
<a href="#">B22F 8/00</a>	Manufacture of articles from scrap or waste metal particles
<a href="#">B23D 25/14</a>	Machines or arrangements for shearing stock while the latter is travelling otherwise than in the direction of the cut without regard to the exact dimensions of the resulting material, e.g. for cutting up scrap
<a href="#">B24B 55/12</a>	Devices for recovering materials from grinding or polishing
<a href="#">B27B 33/20</a>	Edge trimming saw blades or tools combined with means to disintegrate waste
<a href="#">B29B 17/00</a>	Recovery of plastics or other constituents of waste material containing plastics
<a href="#">B30B 9/32</a>	Presses for consolidating scrap metal or for compacting used cars
<a href="#">B62D 67/00</a>	Systematic disassembly of vehicles for recovery of salvageable components, e.g. for recycling
<a href="#">B63B 17/06</a>	Refuse discharge from vessels, e.g. for ash
<a href="#">{B63J 4/006}</a>	Arrangements of installation for treating waste water or sewage on vessels
<a href="#">B63J 4/00</a>	Arrangements of installations for treating waste water or sewage on vessels
<a href="#">B65F 1/00</a>	Refuse receptacles
<a href="#">B65F 3/00</a>	Vehicles particularly adapted for collecting refuse
<a href="#">B65F 5/00</a>	Gathering or removal of refuse otherwise than by receptacles or vehicles
<a href="#">B65F 7/00</a>	Cleaning or disinfecting devices combined with refuse receptacles or refuse vehicles
<a href="#">C03C 1/00</a>	Ingredients generally applicable to manufacture of glasses, glazes or vitreous enamels
<a href="#">C04B 7/24</a>	Hydraulic cements from oil shales, residues or waste other than slag
<a href="#">C04B 11/26</a>	Calcium sulfate cements from phosphogypsum or from waste, e.g. purification products of smoke
<a href="#">C04B 18/04</a>	Waste materials or refuse used as fillers for mortars, concrete, artificial stone or the like
<a href="#">{C04B 22/0006}</a>	Waste inorganic materials used as active ingredients for mortars, concrete, artificial stone or the like
<a href="#">{C04B 24/001}</a>	Waste organic materials used as active ingredients for mortars, concrete, artificial stone or the like
<a href="#">C04B 33/132</a>	Waste materials or refuse used as compounding for clay-ware
<a href="#">C05F 9/00</a>	Fertilisers made from household or town refuse

## B09B

### B09B

(continued)

<a href="#">C08B 16/00</a>	Regeneration of cellulose
<a href="#">C08J 11/00</a>	Recovery of waste materials of macromolecular substances
<a href="#">C08L 17/00</a>	Compositions of reclaimed rubber
<a href="#">C09K 11/01</a>	Recovery of luminescent materials
<a href="#">C10B 53/00</a>	Destructive distillation, specially adapted for particular solid raw materials or solid raw materials in special form
<a href="#">C10B 57/00</a>	Other processes not covered before; Features of destructive distillation processes in general
<a href="#">C10G 1/10</a>	Production of liquid hydrocarbon mixtures from rubber or rubber waste
<a href="#">C10L 5/46</a>	Solid fuels essentially based on sewage, house or town refuse
<a href="#">C10L 5/48</a>	Solid fuels essentially based on industrial residues and waste materials
<a href="#">C10M 175/02</a>	Working-up used lubricants based on mineral oils
<a href="#">C11B 13/00</a>	Recovery of fats, fatty oils, or fatty acids from waste materials
<a href="#">C11D 19/00</a>	Recovery of glycerol from a saponification liquor
<a href="#">C12F 3/00</a>	Recovery of by-products
<a href="#">C12F 3/08</a>	Recovery of alcohol from press residues or other waste material
<a href="#">C12P 7/08</a>	Biochemical production of ethanol from waste
<a href="#">C22B 7/00</a>	Working-up raw materials other than ores, e.g. scrap, to produce non-ferrous metals or compounds thereof
<a href="#">C22B 19/28</a>	Obtaining zinc or zinc oxide from muffle furnace residues
<a href="#">C22B 19/30</a>	Obtaining zinc or zinc oxide from metallic residues or scrap
<a href="#">C22B 25/06</a>	Obtaining tin from scrap
<a href="#">C25D 13/24</a>	Regeneration of process liquids used in electrophoretic coatings
<a href="#">C25D 21/16</a>	Regeneration of process solutions used in electrolytic coating
<a href="#">D01B</a>	Mechanical treatment of natural fibrous or filamentary material to obtain fibres or filaments, e.g. for spinning
<a href="#">D01C 5/00</a>	Carbonising rags to recover animal fibres
<a href="#">D01F 13/00</a>	Recovery of starting material, waste material or solvents during the manufacture of artificial filaments or the like
<a href="#">D01G 11/00</a>	Disintegrating fibre-containing articles to obtain fibres for re-use
<a href="#">D01H 11/00</a>	Arrangements for confining or removing dust, fly, or the like
<a href="#">D06L 1/10</a>	Regeneration of used chemical baths used for dry-cleaning or washing fibres, fabrics or the like
<a href="#">D21B 1/08</a>	Dry treatment of waste paper or rags for making paper or for the production of cellulose
<a href="#">D21B 1/32</a>	Defibrating waste paper
<a href="#">D21C 5/02</a>	Processes for obtaining cellulose by working-up waste paper
<a href="#">D21C 11/14</a>	Regeneration of pulp liquors by wet combustion
<a href="#">D21F 1/66</a>	Re-use of pulp-water in wet end machines for making continuous webs of paper
<a href="#">D21H 17/01</a>	Waste products added to the pulp or used in paper-impregnating material
<a href="#">E03F</a>	Sewers, Cesspools
<a href="#">E04F 17/10</a>	Arrangements in building for the disposal of refuse
<a href="#">F23B 5/00</a>	Combustion apparatus arrangements for burning uncombusted material from primary combustion
<a href="#">F23G</a>	Consuming waste products by combustion
<a href="#">F23J</a>	Removal or treatment of combustion products or combustion residues
<a href="#">G03C 11/24</a>	Removing emulsion from waste photographic material
<a href="#">G03G 21/10</a>	Collecting or recycling waste developer used in electrography, electrophotography, magnetography
<a href="#">G21F 9/28</a>	Treating radioactively contaminated solids
<a href="#">H01B 15/00</a>	Apparatus or processes for salvaging material from electric cables
<a href="#">H01J 9/52</a>	Recovery of material from discharge tubes or lamps
<a href="#">H01M 6/52</a>	Reclaiming serviceable parts of waste cells or batteries
<a href="#">H01M 10/54</a>	Reclaiming serviceable parts of waste accumulators

4. In this subclass, it is desirable to add the indexing codes of group [B09B 2101/00](#).

### WARNING

{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.}

<b>1/00</b>	<b>Dumping solid waste</b>	<b>1/008</b>	<b>. {Subterranean disposal, e.g. in boreholes or subsurface fractures}</b>
1/002	. {Sea dumping (disposal of radioactively contaminated material by storage under water <a href="#">G21F 9/24</a> )}		
1/004	. {Covering of dumping sites}		
1/006	. {Shafts or wells in waste dumps}		

### 3/00 Destroying solid waste or transforming solid waste into something useful or harmless

#### **WARNING**

Group [B09B 3/00](#) is incomplete pending reclassification of documents from groups [B09B 3/0066](#) and [B09B 3/0075](#).

Group [B09B 3/00](#) is also impacted by reclassification into groups [B09B 3/30](#), [B09B 3/32](#), [B09B 3/35](#), [B09B 3/38](#), [B09B 3/50](#), [B09B 3/60](#), [B09B 3/65](#) and [B09B 3/70](#).

All groups listed in this Warning should be considered in order to perform a complete search.

3/0066 . {Disposal of asbestos}  
(Frozen)

#### **WARNING**

Group [B09B 3/0066](#) is no longer used for the classification of documents as of January 1, 2022.

The content of this group is being reclassified into groups [B09B 3/00](#), [B09B 3/30](#), [B09B 3/32](#), [B09B 3/35](#), [B09B 3/38](#), [B09B 3/50](#), [B09B 3/60](#), [B09B 3/65](#), [B09B 3/70](#) and [B09B 2101/35](#).

All groups listed in this Warning should be considered in order to perform a complete search.

3/0075 . {Disposal of medical waste (casings for used  
(Frozen) articles, e.g. sharps [A61B 50/362](#); sterilisation of refuse [A61L 11/00](#); disposal of used needles or syringes [A61M 5/3205](#); disintegrating medical waste [B02C 19/0075](#))}

#### **WARNING**

Group [B09B 3/0075](#) is no longer used for the classification of documents as of January 1, 2022.

The content of this group is being reclassified into groups [B09B 3/00](#), [B09B 3/30](#), [B09B 3/32](#), [B09B 3/35](#), [B09B 3/38](#), [B09B 3/50](#), [B09B 3/60](#), [B09B 3/65](#), [B09B 3/70](#), [B09B 2101/65](#) and [B09B 2101/67](#).

All groups listed in this Warning should be considered in order to perform a complete search.

3/10 . involving an adsorption step  
3/20 . Agglomeration, binding or encapsulation of solid waste

#### **WARNING**

Group [B09B 3/20](#) is impacted by reclassification into group [B09B 3/32](#).

Groups [B09B 3/20](#) and [B09B 3/32](#) should be considered in order to perform a complete search.

3/21 . . . using organic binders or matrix

#### **WARNING**

Group [B09B 3/21](#) is impacted by reclassification into groups [B09B 3/23](#) and [B09B 3/24](#).

Groups [B09B 3/21](#), [B09B 3/23](#) and [B09B 3/24](#) should be considered in order to perform a complete search.

3/23 . . . Binders with asphalt

#### **WARNING**

Group [B09B 3/23](#) is incomplete pending reclassification of documents from group [B09B 3/21](#).

Groups [B09B 3/21](#) and [B09B 3/23](#) should be considered in order to perform a complete search.

3/24 . . . Binders with plastic

#### **WARNING**

Group [B09B 3/24](#) is incomplete pending reclassification of documents from group [B09B 3/21](#).

Groups [B09B 3/21](#) and [B09B 3/24](#) should be considered in order to perform a complete search.

3/25 . . . using mineral binders or matrix

#### **WARNING**

Group [B09B 3/25](#) is impacted by reclassification into group [B09B 3/27](#).

Groups [B09B 3/25](#) and [B09B 3/27](#) should be considered in order to perform a complete search.

3/27 . . . Binding by sodium silicate, e.g. cement or water glass

#### **WARNING**

Group [B09B 3/27](#) is incomplete pending reclassification of documents from group [B09B 3/25](#).

Groups [B09B 3/25](#) and [B09B 3/27](#) should be considered in order to perform a complete search.

3/29 . . . involving a melting or softening step  
3/30 . involving mechanical treatment (involving an extraction step [B09B 3/80](#))

#### **WARNING**

Group [B09B 3/30](#) is incomplete pending reclassification of documents from groups [B09B 3/00](#), [B09B 3/0066](#), [B09B 3/0075](#) and [B09B 5/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/32 . . Compressing or compacting

**WARNING**

Group [B09B 3/32](#) is incomplete pending reclassification of documents from groups [B09B 3/00](#), [B09B 3/0066](#), [B09B 3/0075](#), [B09B 3/20](#) and [B09B 5/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/35 . . Shredding, crushing or cutting

**WARNING**

Group [B09B 3/35](#) is incomplete pending reclassification of documents from groups [B09B 3/00](#), [B09B 3/0066](#), [B09B 3/0075](#) and [B09B 5/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/38 . . Stirring or kneading

**WARNING**

Group [B09B 3/38](#) is incomplete pending reclassification of documents from groups [B09B 3/00](#), [B09B 3/0066](#), [B09B 3/0075](#) and [B09B 5/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/40 . . involving thermal treatment, e.g. evaporation (processes using mineral binders involving a melting or softening step [B09B 3/29](#); involving radiation [B09B 3/50](#))

**WARNING**

Group [B09B 3/40](#) is impacted by reclassification into group [B09B 3/50](#).

Groups [B09B 3/40](#) and [B09B 3/50](#) should be considered in order to perform a complete search.

- 3/45 . . Steam treatment, e.g. supercritical water gasification or oxidation

- 3/50 . . involving radiation, e.g. electro-magnetic waves

**WARNING**

Group [B09B 3/50](#) is incomplete pending reclassification of documents from groups [B09B 3/00](#), [B09B 3/0066](#), [B09B 3/0075](#), [B09B 3/40](#) and [B09B 5/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/60 . . Biochemical treatment, e.g. by using enzymes

**WARNING**

Groups [B09B 3/60](#) and [B09B 3/65](#) are incomplete pending reclassification of documents from groups [B09B 3/00](#), [B09B 3/0066](#), [B09B 3/0075](#) and [B09B 5/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/65 . . Anaerobic treatment

- 3/70 . . Chemical treatment, e.g. pH adjustment or oxidation (involving an extraction step [B09B 3/80](#); processes for making harmful chemical substances harmless by effecting a chemical change in the substances [A62D 3/00](#))

**WARNING**

Group [B09B 3/70](#) is incomplete pending reclassification of documents from groups [B09B 3/00](#), [B09B 3/0066](#), [B09B 3/0075](#), [B09B 3/80](#) and [B09B 5/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/80 . . involving an extraction step

**WARNING**

Group [B09B 3/80](#) is impacted by reclassification into group [B09B 3/70](#).

Groups [B09B 3/80](#) and [B09B 3/70](#) should be considered in order to perform a complete search.

- 5/00 Operations not covered by a single other subclass or by a single other group in this subclass

**WARNING**

Group [B09B 5/00](#) is impacted by reclassification into groups [B09B 3/30](#), [B09B 3/32](#), [B09B 3/35](#), [B09B 3/38](#), [B09B 3/50](#), [B09B 3/60](#), [B09B 3/65](#) and [B09B 3/70](#).

All groups listed in this Warning should be considered in order to perform a complete search.

**Indexing scheme associated with groups [B09B 1/00](#) – [B09B 5/00](#), relating to the type of disposed solid waste****2101/00 Type of solid waste**

- 2101/007 . {Fuel tanks, especially draining thereof}  
 2101/014 . {Shock absorbers, especially draining thereof}  
 2101/018 . {Animal meals}  
 2101/02 . Gases or liquids enclosed in discarded articles, e.g. aerosol cans or cooling systems of refrigerators

**WARNING**

Group [B09B 2101/02](#) is impacted by reclassification into group [B09B 2101/78](#).

Groups [B09B 2101/02](#) and [B09B 2101/78](#) should be considered in order to perform a complete search.

- 2101/05 . Vehicles; Vehicle parts  
 2101/10 . Cans  
 2101/15 . Electronic waste

- 2101/16 . . Batteries
- 2101/17 . . Printed circuit boards [PCBs]
- 2101/18 . . Mobile phones; Tablets
- 2101/20 . Filters, e.g. oil filters
- 2101/25 . Non-industrial waste, e.g. household waste
- 2101/30 . Incineration ashes
- 2101/35 . Asbestos

**WARNING**

Group [B09B 2101/35](#) is incomplete pending reclassification of documents from group [B09B 3/0066](#).

Groups [B09B 3/0066](#) and [B09B 2101/35](#) should be considered in order to perform a complete search.

- 2101/40 . Asphalt
- 2101/45 . Concrete
- 2101/50 . Glass
- 2101/55 . Slag
- 2101/60 . Ceramics, e.g. pottery
- 2101/65 . Medical waste

**WARNING**

Groups [B09B 2101/65](#) and [B09B 2101/67](#) are incomplete pending reclassification of documents from group [B09B 3/0075](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2101/67 . . Diapers or nappies
- 2101/68 . . Transdermal patches
- 2101/70 . Kitchen refuse; Food waste
- 2101/75 . Plastic waste
- 2101/77 . . containing chlorine
- 2101/78 . . containing foamed plastics, e.g. polystyrol

**WARNING**

Group [B09B 2101/78](#) is incomplete pending reclassification of documents from group [B09B 2101/02](#).

Groups [B09B 2101/02](#) and [B09B 2101/78](#) should be considered in order to perform a complete search.

- 2101/80 . Rubber waste, e.g. scrap tyres
- 2101/85 . Paper; Wood; Fabrics, e.g. cloths
- 2101/90 . Soil, e.g. excavated soil from construction sites
- 2101/95 . Waste catalysts; Waste ion exchange materials; Waste adsorbents