

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:

A23J 1/16	Obtaining proteins from waste water of starch manufacturing plants of like wastes
A23K 10/26 , A23K 10/37	Animal feeding-stuffs from waste products of animal origin or of plant origin
A23K 10/38	Animal feeding-stuffs from distillers' or brewers' waste
A23K 10/28	Animal feeding-stuffs from waste dairy products
A23K 10/20	Animal feeding-stuffs from kitchen waste
A43B 1/12	Footwear made of rubber waste
A61L 11/00	Disinfection or sterilisation methods specially adapted for refuse
A62D 3/00	Chemical means for combatting harmful chemical agents; processes for making harmful chemical agents harmless
B01D 53/34	Chemical purification of smoke or fumes, e.g. flue gas
{B02C 18/0084}	Disintegrating by knives or other cutting or tearing members, which chop material into fragments, specially adapted for disintegrating garbage, waste or sewage
B03B 7/00	Combinations of wet processes or apparatus with other processes or apparatus, e.g. for dressing ores or garbage
B03B 9/06	General arrangement of separating plant, e.g. flow sheets, specially adapted for refuse
B05B 12/16 , B05B 14/00	Control of spray area of spraying plant, e.g. masking, side shields; Means for collection or re-use of excess material
B08B 15/00	Prevent escape of dirt or fumes from the area where they are produced; Collecting or removing dirt or fumes from that area
B22F 8/00	Manufacture of articles from scrap or waste metal particles
B23D 25/14	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
B24B 55/12	Devices for recovering materials from grinding or polishing
B27B 33/20	Edge trimming saw blades or tools combined with means to disintegrate waste
B29B 17/00	Recovery of plastics or other constituents of waste material containing plastics
B30B 9/32	Presses for consolidating scrap metal or for compacting used cars
B62D 67/00	Systematic disassembly of vehicles for recovery of salvageable components, e.g. for recycling
B63B 17/06	Refuse discharge from vessels, e.g. for ash
{B63J 4/006}	Arrangements of installation for treating waste water or sewage on vessels
B63J 4/00	Arrangements of installations for treating waste water or sewage on vessels
B65F 1/00	Refuse receptacles
B65F 3/00	Vehicles particularly adapted for collecting refuse
B65F 5/00	Gathering or removal of refuse otherwise than by receptacles or vehicles
B65F 7/00	Cleaning or disinfecting devices combined with refuse receptacles or refuse vehicles
C03C 1/00	Ingredients generally applicable to manufacture of glasses, glazes or vitreous enamels
C04B 7/24	Hydraulic cements from oil shales, residues or waste other than slag
C04B 11/26	Calcium sulfate cements from phosphogypsum or from waste, e.g. purification products of smoke
C04B 18/04	Waste materials or refuse used as fillers for mortars, concrete, artificial stone or the like
{C04B 22/0006}	Waste inorganic materials used as active ingredients for mortars, concrete, artificial stone or the like
{C04B 24/001}	Waste organic materials used as active ingredients for mortars, concrete, artificial stone or the like
C04B 33/132	Waste materials or refuse used as compounding for clay-ware
C05F 9/00	Fertilisers made from household or town refuse

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(continued)

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

1/00	Dumping solid waste	1/008	. {Subterranean disposal, e.g. in boreholes or subsurface fractures}
1/002	. {Sea dumping (disposal of radioactively contaminated material by storage under water G21F 9/24)}		
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