SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B08 CLEANING

B08B **CLEANING IN GENERAL; PREVENTION OF FOULING IN GENERAL** (brushes A46; devices for domestic or like cleaning A47L; separation of particles from liquids or gases B01D; separation of solids B03, B07; spraying or applying liquids or other fluent materials to surfaces in general B05; cleaning devices for conveyors B65G 45/10; concurrent cleaning, filling and closing of bottles B67C 7/00; inhibiting corrosion or incrustation in general C23; cleaning streets, permanent ways, beaches or land E01H; parts, details or accessories of swimming or splash baths or pools, specially adapted for cleaning E04H 4/16; preventing or removing electrostatic charges H05F)

Note(s)

This subclass covers only cleaning, which is usually classified according to one (or more) of the aspects mentioned below, if it is not fully classifiable in a subclass providing for any of the following aspects:

- the articles cleaned, e.g. bed-pans, urinal or other sanitary devices for bed-ridden persons A61G 9/02, filters, semi-permeable membranes B01D, castings and moulds B22D 29/00, vehicles B60S, coke ovens C10B 43/00, building forms E04G, boilers F22, combustion apparatus F23J, furnaces F27;
- the general nature of the cleaning, e.g. preparing for sugar manufacture A23N, domestic cleaning A47L, treatment of textiles D06, laundry D06F, air-conditioning F24F;
- the particular operation performed, e.g. filtering B01D, separating of solids B03, B07, sand-blasting B24C;
- the particular apparatus or device, e.g. brushes A46B, mops A47L, centrifuges B04, hand tools B25;
- the substance cleaned, e.g. metals B21C, C23, water C02, glass C03C, leather C14B, textile fibres D01;
- the substance removed (or prevented from depositing or forming), e.g. implements or apparatus for removing dry paint from surfaces B44D 3/16, chemical paint-removers C09D 9/00, preventing rust C23F;
- the substance used, e.g. macromolecular compounds or compositions C08, anti-icing materials C09K, detergents C11D;
- the operation in connection with which cleaning is done, e.g. metal rolling B21B, metal boring B23B, soldering B23K, textile fabrication D01G, D01H, D03J, D04B;
- the surroundings of a surface to be cleaned or kept clean, e.g. water in a boiler C02F, air in a room F24F.

Subclass index

CLEANING CHARACTERISED BY THE MEANS USED.....1/00, 3/00, 5/00, 6/00, 7/00
CLEANING HOLLOW, FLEXIBLE OR DELICATE ARTICLES.....9/00, 11/00
ACCESSORIES OR DETAILS OF MACHINES.....13/00
PREVENTING FOULING OR ESCAPE OF DIRT OR FUMES.....15/00, 17/00

1/00 **Cleaning by methods involving the use of tools, brushes, or analogous members** (B08B 3/12, B08B 6/00, B08B 9/00 take precedence) **[2]**

1/02 • Cleaning travelling work, e.g. a web or articles on a conveyor

1/04 • using rotary operative members (B08B 1/02 takes precedence)

3/00 **Cleaning by methods involving the use or presence of liquid or steam** (B08B 9/00 takes precedence)

3/02 • Cleaning by the force of jets or sprays

3/04 • Cleaning involving contact with liquid

3/06 • • using perforated drums in which the article or material is placed

3/08 • • the liquid having chemical or dissolving effect (substances used, see the relevant classes)

3/10 • • with additional treatment of the liquid or of the object being cleaned, e.g. by heat, by electricity, by vibration

3/12 • • • by sonic or ultrasonic vibrations (washing or rinsing machines for crockery or tableware using sonic or ultrasonic waves A47L 15/13; of natural teeth, of prostheses using ultrasonic techniques similar to those used for natural teeth A61C 17/20; application of ultrasonic vibrations to chemical, physical, or physico-chemical processes in general B01J 19/10) **[2, 5]**

3/14 • • • Removing waste, e.g. labels, from cleaning liquid (treatment of water in general C02F) **[5]**

5/00 **Cleaning by methods involving the use of air flow or gas flow** (B08B 6/00, B08B 9/00 take precedence) **[2, 7]**

5/02 • Cleaning by the force of jets, e.g. blowing-out cavities

5/04 • Cleaning by suction, with or without auxiliary action (suction cleaners A47L)

6/00 **Cleaning by electrostatic means** (domestic cleaning implements functioning electrostatically A47L 13/40; cleaning of grooved record carriers G11B 3/58) **[2]**

7/00 Cleaning by methods not provided for in a single other subclass or a single group in this subclass

7/02 • by distortion, beating, or vibration of the surface to be cleaned

7/04 • by a combination of operations

9/00 Cleaning hollow articles by methods or apparatus specially adapted thereto (B08B 3/12, B08B 6/00 take precedence) **[2]**

9/02 • Cleaning pipes or tubes or systems of pipes or tubes (apparatus for cleaning metal pipes by chemical methods C23G 3/04) **[5]**

9/023 • • Cleaning the external surfaces **[7]**

9/027 • • Cleaning the internal surfaces; Removal of blockages **[7]**

9/032 • • • by the mechanical action of a moving fluid, e.g. by flushing (B08B 9/04 takes precedence) **[7]**

9/035 • • • • by suction **[7]**

9/04 • • • using cleaning devices introduced into and moved along the pipes **[1, 7]**

9/043 • • • • moved by externally powered mechanical linkage, e.g. pushed or drawn through the pipes **[7]**

9/045 • • • • • the cleaning devices being rotated while moved (B08B 9/047 takes precedence) **[7]**

9/047 • • • • • the cleaning devices having motors for powering cleaning tools **[7]**

9/049 • • • • having self-contained propelling means for moving the cleaning devices along the pipes **[7]**

9/051 • • • • • the cleaning devices having motors for powering cleaning tools **[7]**

9/053 • • • • moved along the pipes by a fluid, e.g. by fluid pressure or by suction **[7]**

9/055 • • • • • the cleaning devices conforming to, or being conformable to, substantially the cross-section of the pipes, e.g. pigs or moles **[7]**

9/057 • • • • • the cleaning devices being entrained discrete elements, e.g. balls, grinding elements, brushes **[7]**

9/08 • Cleaning of containers, e.g. tanks

9/087 • • by methods involving the use of tools, e.g. brushes, scrapers (B08B 9/20 takes precedence) **[5]**

9/093 • • by the force of jets or sprays (B08B 9/20 takes precedence) **[5]**

9/20 • • by using apparatus into or on to which containers, e.g. bottles, jars, cans, are brought **[5]**

9/22 • • • the apparatus cleaning by soaking alone **[5]**

9/24 • • • • and having conveyors **[5]**

9/26 • • • • • Rotating conveyors **[5]**

9/28 • • • the apparatus cleaning by splash, spray or jet application, with or without soaking **[5]**

9/30 • • • • and having conveyors **[5]**

9/32 • • • • • Rotating conveyors **[5]**

9/34 • • • • Arrangement of conduits or nozzles **[5]**

9/36 • • • the apparatus cleaning by using brushes **[5]**

9/38 • • • the apparatus cleaning by using scrapers, chains, grains of shot, sand or other abrasive means (abrasive blasting in general B24C) **[5]**

9/40 • • • the apparatus cleaning by burning out **[5]**

9/42 • • • the apparatus being characterised by means for conveying or carrying containers therethrough **[5]**

9/44 • • • • the means being for loading or unloading the apparatus **[5]**

9/46 • • Inspecting cleaned containers for cleanliness **[5]**

11/00 Cleaning flexible or delicate articles by methods or apparatus specially adapted thereto (B08B 3/12, B08B 6/00 take precedence) **[2]**

11/02 • Devices for holding articles during cleaning

11/04 • specially adapted for plate glass, e.g. prior to manufacture of windshields (cleaning the gap between permanently secured panes E06B 3/677)

13/00 Accessories or details of general applicability for machines or apparatus for cleaning

15/00 Preventing escape of dirt or fumes from the area where they are produced; Collecting or removing dirt or fumes from that area (parts, details or accessories of cooking-vessels for withdrawing or condensing cooking vapours from such vessels A47J 36/38; refuse disposal B65F; devices for conducting smoke or fumes, e.g. flues, F23J 11/00; removing cooking fumes from domestic stoves or ranges F24C 15/20; air-conditioning, ventilation F24F) **[5]**

15/02 • using chambers or hoods covering the area

15/04 • from a small area, e.g. a tool

17/00 Methods preventing fouling

17/02 • Preventing deposition of fouling or of dust

17/04 • • by using removable coverings

17/06 • • by giving articles subject to fouling a special shape for arrangement