

B08B

CLEANING IN GENERAL; PREVENTION OF FOULING IN GENERAL (brushes [A46](#); devices for domestic or like cleaning [A47L](#); {cleaning golf-clubs or golf accessories [A63B 57/60](#); cleaning grips of bats on rackets [A63B 60/36](#)} ; 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](#))

Definition statement

This place covers:

This subclass covers only inventions relating to cleaning which are usually classified according to one (or more) of the aspects mentioned below if they are 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 [F23](#), furnaces [F27](#), solar panels for the production of heat [F24S 40/20](#); 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](#) devices for cleaning paint-applying hand tools after use [B44D 3/006](#); the substance cleaned, e.g. metals [B21C](#), [C23](#), water [C02](#), glass [C03B](#), leather [C14B](#), textile fibres [D01](#); the substance removed (or prevented from depositing or forming) e.g. removing paint [B44D 3/00](#), 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](#), reactive gases [C23C16/445](#); 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](#).

B08B 1/00

Cleaning by methods involving the use of tools, brushes, or analogous members ([B08B 3/12](#), [B08B 6/00](#) {, [B08B 7/02](#)}, [B08B 9/00](#) take precedence)

Definition statement

This place covers:

The mechanical cleaning of objects by means of mechanical members such as tools, brushes, or analogous members, with or without the application of fluid.

B08B 1/007

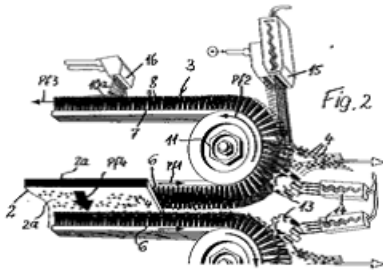
{having means to clean the cleaning members before, during or after use}

Definition statement

This place covers:

The cleaning of objects by methods involving the use of tools, brushes, or analogous members, further comprising means to clean or regenerate the cleaning members.

Example: EP-A2-1101542



B08B 1/008

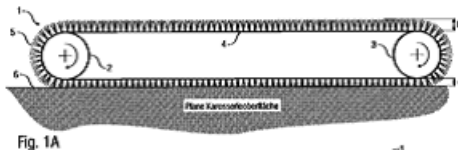
{using translating operative members}

Definition statement

This place covers:

The cleaning of objects by means of cleaning members comprising guiding means for performing a translatory movement along the object to be cleaned.

Example: WO-A1-2009/046916



B08B 1/02

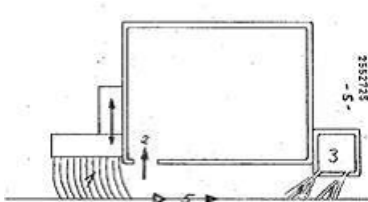
Cleaning travelling work, e.g. a web, articles on a conveyor

Definition statement

This place covers:

The cleaning of objects while these are travelling past at least one cleaning member.

Example: DE-A1-19770602



B08B 1/04

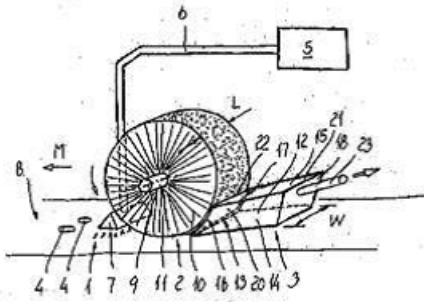
using rotary operative members ([B08B 1/02](#) takes precedence)

Definition statement

This place covers:

The cleaning of objects by means of cleaning members which are arranged to perform a rotary movement during cleaning.

Example: WO-A1-01/78910



B08B 3/00

Cleaning by methods involving the use or presence of liquid or steam
([B08B 9/00](#) takes precedence)

Definition statement

This place covers:

The mechanical cleaning of objects by means of liquid. The cleaning of objects by means of contacting with steam.

B08B 3/003

{Cleaning involving contact with foam}

Definition statement

This place covers:

The cleaning of objects by means of contacting with a foam.

B08B 3/006

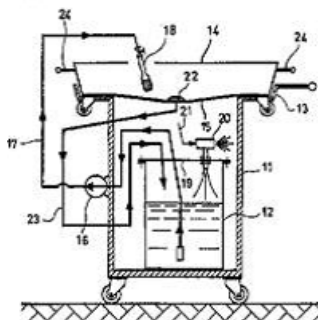
{Cabinets or cupboards specially adapted for cleaning articles by hand}

Definition statement

This place covers:

Manual cleaning of objects while these are located within a cabinet such as a parts washer.

Example: EP-A2-1524040

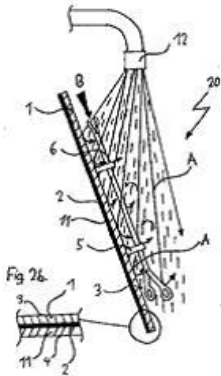


B08B 3/02**Cleaning by the force of jets or sprays****Definition statement**

This place covers:

The cleaning of objects by means of the mechanical action of a liquid or steam jet.

Example: WO-A1-03/092524

**B08B 3/022**

{Cleaning travelling work ([B08B 3/042](#) takes precedence)}

Definition statement

This place covers:

The cleaning of objects while these are travelling past at least one fluid jet.

B08B 3/024

{Cleaning by means of spray elements moving over the surface to be cleaned}

Definition statement

This place covers:

The cleaning of objects by means of fluid jets comprising guiding means for performing a controlled movement along the object to be cleaned.

B08B 3/026

{Cleaning by making use of hand-held spray guns; Fluid preparations therefor}

Definition statement

This place covers:

The cleaning of objects by means of hand-held spray guns.

B08B 3/028**{Spray guns}****Definition statement***This place covers:*

Gun lances used in the cleaning of objects by means of hand-held spray guns.

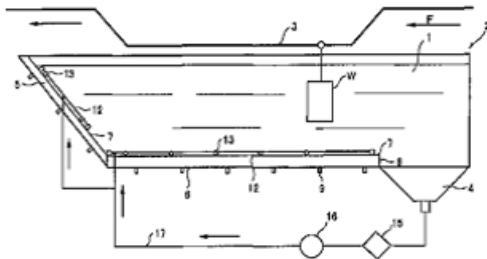
B08B 3/04**Cleaning involving contact with liquid****Definition statement***This place covers:*

The cleaning of objects by means of contacting with a liquid.

B08B 3/041**{Cleaning travelling work}****Definition statement***This place covers:*

The cleaning of objects while these are travelling and in contact with a liquid.

Example: GB-A-2469605

**B08B 3/042****{the loose articles or bulk material travelling gradually through a drum or other container, e.g. by helix or gravity}****Definition statement***This place covers:*

The cleaning of objects while these are travelling gradually through a container in contact with a liquid.

B08B 3/044

{using agitated containers in which the liquid and articles or material are placed (by means of ultrasonic vibrations [B08B 3/12](#); cleaning casks or barrels by agitating [B08B 9/0817](#); mixers with shaking, oscillating or vibrating mechanisms [B01F 11/00](#))}

Definition statement

This place covers:

The cleaning of objects while these are within an agitated container filled with a liquid.

B08B 3/045

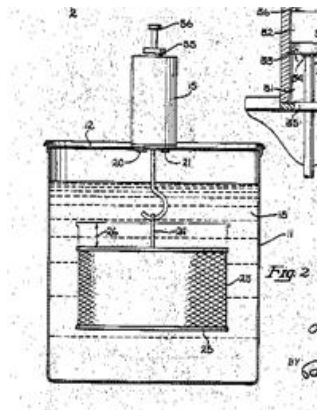
{using perforated containers, e.g. baskets, or racks immersed and agitated in a liquid bath (using perforated drums [B08B 3/06](#))}

Definition statement

This place covers:

The cleaning of objects while these are within a perforated container which is agitated within a liquid bath.

Example: US-A-3794053

**B08B 3/047**

{Containers specially adapted therefor}

Definition statement

This place covers:

Specially adapted perforated containers.

B08B 3/06

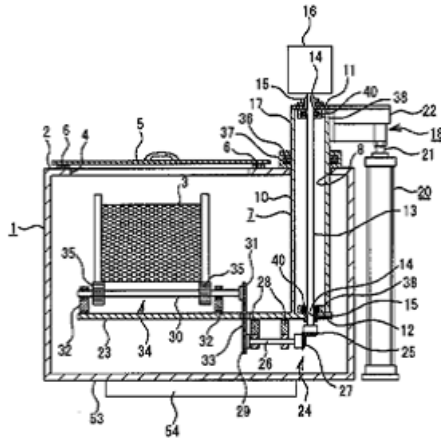
using perforated drums in which the article or material is placed {([B08B 3/042](#) takes precedence)}

Definition statement

This place covers:

The cleaning of objects while these are within a perforated drum and contacted with a liquid.

Example: US-A1-2010/126537



B08B 3/08

the liquid having chemical or dissolving effect (substances used, see the relevant classes)

Definition statement

This place covers:

The cleaning of objects by means of contacting with a liquid having chemical or dissolving effect in addition to the mechanical action of the liquid.

B08B 3/10

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

Definition statement

This place covers:

The cleaning of objects while these are contacted with a liquid and whereby the liquid or the object is subjected to an additional treatment.

B08B 3/102

{with means for agitating the liquid (by agitating the container [B08B 3/042](#), [B08B 3/044](#), [B08B 3/045](#), [B08B 3/06](#))}

Definition statement

This place covers:

Subjecting the liquid to agitation.

B08B 3/104

{using propellers}

Definition statement

This place covers:

Subjecting the liquid to agitation by means of propellers.

B08B 3/12

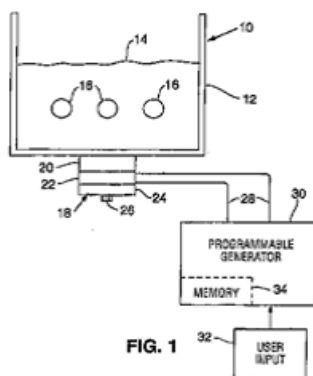
by sonic or ultrasonic vibrations (washing or rinsing machines for crockery or tableware using sonic or ultrasonic waves [A47L 15/13](#); of natural teeth, of prostheses using ultrasonic techniques similar to those used for natural teeth [A61C 17/20](#); application of ultrasonic vibrations to chemical,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

Definition statement

This place covers:

Subjecting the object or the liquid to sonic or ultrasonic vibrations.

Example: WO-A2-2005/124885

**B08B 3/123**

{Cleaning travelling work, e.g. webs, articles on a conveyor (conveyors [B65G](#); handling webs [B65H](#))}

Definition statement

This place covers:

Subjecting the object or the liquid to sonic or ultrasonic vibrations while the objects are travelling.

B08B 3/14

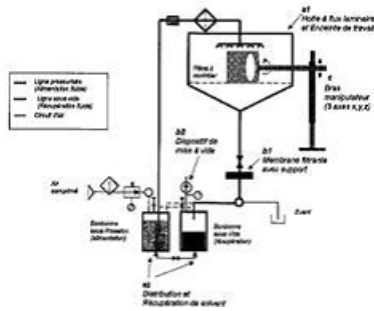
Removing waste, e.g. labels, from cleaning liquid; {Regenerating cleaning liquids} (treatment of water in general [C02F](#))

Definition statement

This place covers:

The additional treatment of the liquid consists in removing contaminants from the liquid.

Example: FR-A1-2820995



B08B 5/00

Cleaning by methods involving the use of air flow or gas flow ([B08B 6/00](#) takes precedence)

Definition statement

This place covers:

The cleaning of objects by means of a gas.

B08B 5/02

Cleaning by the force of jets, e.g. blowing-out cavities {(airguns or nozzles per se [B05B 1/005](#))}

Definition statement

This place covers:

The cleaning of objects by means of the mechanical action of a gas jet.

B08B 5/04

Cleaning by suction, with or without auxiliary action ({[B08B 9/035](#) takes precedence; } suction cleaners [A47L](#))

Definition statement

This place covers:

The cleaning of objects by means of the mechanical action of suction.

B08B 6/00

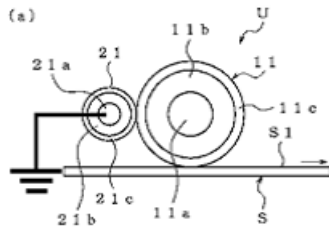
Cleaning by electrostatic means (domestic cleaning implements functioning electrostatically [A47L 13/40](#); cleaning of grooved record carriers [G11B 3/58](#))

Definition statement

This place covers:

The cleaning of objects by means of electrostatic action on the contaminants.

Example: WO-A1-2010/109755



B08B 7/0007

{by explosions}

Definition statement

This place covers:

The cleaning of objects by means of subjecting the objects to an explosion.

Example: US-A1-2004216698

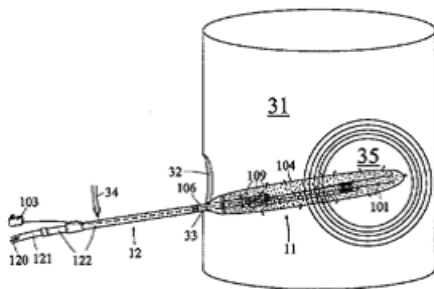


FIG. 3

B08B 7/0014

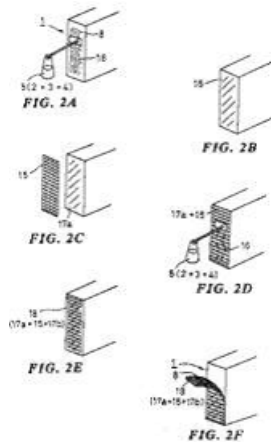
{by incorporation in a layer which is removed with the contaminants}

Definition statement

This place covers:

The cleaning of objects by means of applying a layer to a contaminated surface, into which layer contaminants become incorporated, and removing the layer with the contaminants.

Example US-A-6123777



B08B 7/0021

{by liquid gases or supercritical fluids}

Definition statement

This place covers:

The cleaning of objects by means of subjecting the objects to the washing action of a liquid gas or a supercritical fluid.

B08B 7/0028

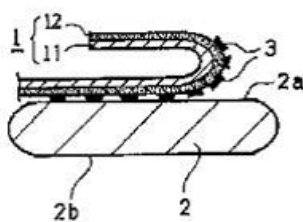
{by adhesive surfaces}

Definition statement

This place covers:

The cleaning of objects by means of applying a tacky layer to a contaminated surface, onto which layer contaminants become attached, and removing the layer with the contaminants.

Example: JP-A-8274059



B08B 7/0035

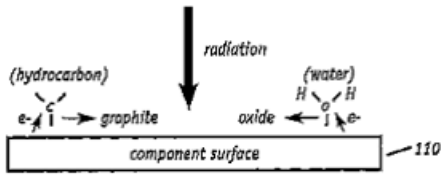
{by radiant energy, e.g. UV, laser, light beam or the like}

Definition statement

This place covers:

The cleaning of objects by means of subjecting the objects to the action of radiant energy.

Example: WO-A1-02/052347



B08B 7/0042

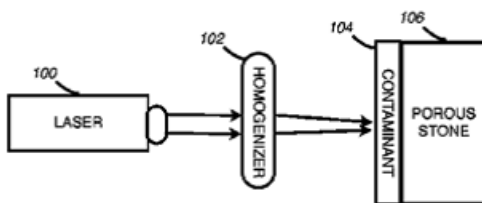
{by laser}

Definition statement

This place covers:

The cleaning of objects by means of subjecting the objects to laser radiation.

Example: US-A1-2011/007308



B08B 7/0064

{by temperature changes}

Definition statement

This place covers:

The cleaning of objects by means of subjecting the objects to temperature changes.

The idea of the parent group [B08B 9/032](#) is to cover subject-matter involving mechanical action with a cleaning fluid which is not classifiable in any of the subgroups.

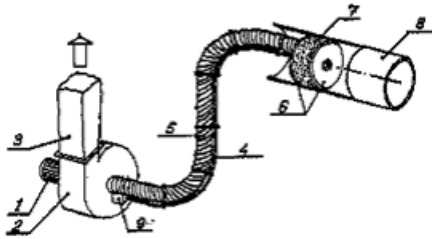
B08B 9/035

by suction

Definition statement

This place covers:

Example: WO85/02565



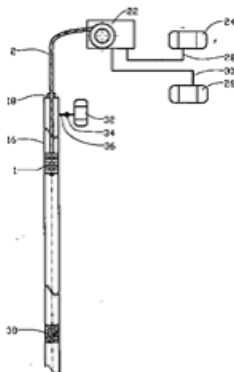
B08B 9/043

moved by externally powered mechanical linkage, e.g. pushed or drawn through the pipes

Definition statement

This place covers:

Example: WO-A1-03/095792



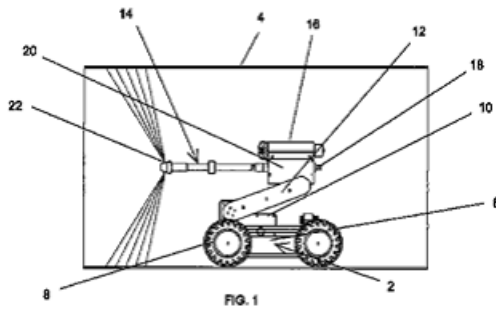
B08B 9/049

having self-contained propelling means for moving the cleaning devices along the pipes {, i.e. self-propelled}

Definition statement

This place covers:

Example: US-A1-2008/001005

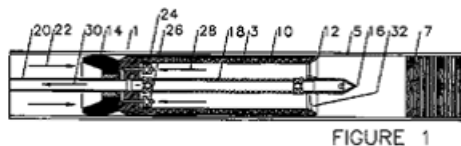
**B08B 9/053**

moved along the pipes by a fluid, e.g. by fluid pressure or by suction

Definition statement

This place covers:

Example: US-A1-2010/012151

**B08B 9/08**

Cleaning containers, e.g. tanks

Definition statement

This place covers:

The cleaning of inner and/or outer surfaces of containers by methods or apparatus specially adapted thereto.

B08B 9/0804

{Cleaning containers having tubular shape, e.g. casks, barrels, drums
([B08B 9/20](#) take precedence)}

Definition statement

This place covers:

The cleaning of containers, whereby the tubular shape of the container is essential to the definition of the cleaning method or apparatus.

B08B 9/0808

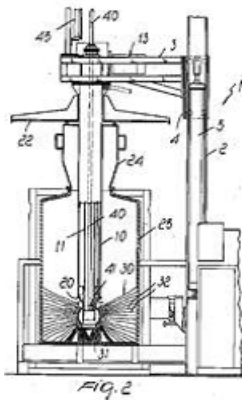
{by methods involving the use of tools, e.g. by brushes, scrapers}

Definition statement

This place covers:

The cleaning of containers by means of mechanical members, whereby the shape of the container is essential to the definition of the mechanical member used.

Example: EP-A1-1236521

**B08B 9/0813**

{by the force of jets or sprays}

Definition statement

This place covers:

The cleaning of containers by means of a fluid jet, whereby the shape of the container is essential to the definition of the fluid jet applied.

B08B 9/087

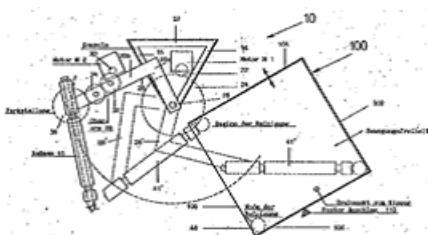
by methods involving the use of tools, e.g. brushes, scrapers (**B08B 9/0808** , **B08B 9/20** take precedence)

Definition statement

This place covers:

The cleaning of containers by means of mechanical members, whereby the shape of the container is not essential to the definition of the mechanical member used.

Example: DE-C1-3311117



B08B 9/093

by the force of jets or sprays ({[B08B 9/0813](#)}, [B08B 9/20](#) take precedence)

Definition statement

This place covers:

The cleaning of containers by means of a fluid jet, whereby the shape of the container is not essential to the definition of the fluid jet applied.

B08B 9/0933

{Removing sludge or the like from tank bottoms}

Definition statement

This place covers:

The removal of sludge, sediment or the like from container bottoms, using a fluid jet to fluidize the sludge, sediment or the like.

B08B 9/20

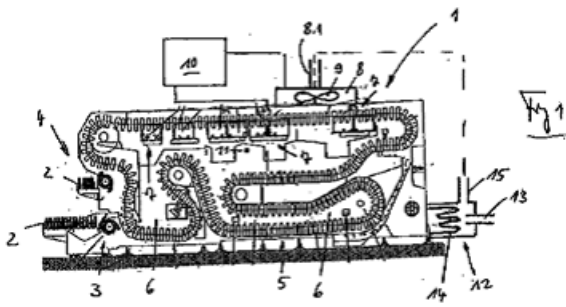
by using apparatus into or on to which containers, e.g. bottles, jars, cans are brought {(washing or rinsing crockery or tableware [A47L 15/00](#))}

Definition statement

This place covers:

Methods and apparatus for the cleaning of series of bottles.

Example: WO-A1-2009/124688

**B08B 9/205**

{Conveying containers to or from the cleaning machines}

Definition statement

This place covers:

The cleaning method or apparatus being characterized by the method or apparatus for conveying the bottles to or from the cleaning machine.

B08B 9/44**the means being for loading or unloading the apparatus****Definition statement***This place covers:*

The cleaning method or apparatus being characterized by the method or apparatus for loading or unloading the bottles.

B08B 9/46**Inspecting cleaned containers for cleanliness****Definition statement***This place covers:*

The cleaning method or apparatus being characterized by the method or apparatus for inspecting cleaned bottles.

B08B 15/002

{using a central suction system, e.g. for collecting exhaust gases in workshops (removing dust from textile machines [D01H 11/00](#); ventilation of mines, galleries or tunnels, e.g. traffic tunnels, [E21F 1/00](#))}

Definition statement*This place covers:*

Collecting or removing dirt or fumes from the area where these are produced using a central suction system to which a plurality of collecting or removing devices are connected.

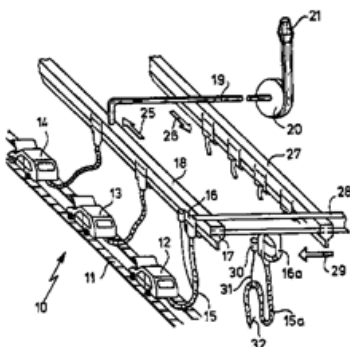
B08B 15/005

{comprising a stationary main duct with one or more branch units, the branch units being freely movable along a sealed longitudinal slit in the main duct}

Definition statement*This place covers:*

Branch units configured to move along a sealed longitudinal slit in a main duct, the branch units travelling with a source of dirt or fumes.

Example: EP-A1-0174481



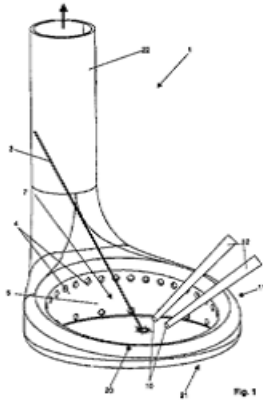
B08B 15/007

{Fume suction nozzles arranged on a closed or semi-closed surface, e.g. on a circular, ring-shaped or rectangular surface adjacent the area where fumes are produced (**B08B 15/04** takes precedence)}

Definition statement

This place covers:

Example: DE-A1-102004031881

**B08B 17/06**

by giving articles subject to fouling a special shape or arrangement

Definition statement

This place covers:

Preventing fouling or deposition of fouling or of dust by means of giving articles subject to fouling a shape or arrangement such that fouling or deposition of fouling or of dust will be minimized or eliminated, e.g. by application of the lotus effect.

Example: DE-A1-102005013560

