COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

NOTES omitted

TRANSPORTING

B67 OPENING, CLOSING {OR CLEANING} BOTTLES, JARS OR SIMILAR CONTAINERS; LIQUID HANDLING

B67D DISPENSING, DELIVERING OR TRANSFERRING LIQUIDS, NOT OTHERWISE PROVIDED FOR (cleaning pipes or tubes or systems of pipes or tubes B08B 9/02; emptying or filling of bottles, jars, cans, casks, barrels, or similar containers, not otherwise provided for B67C; water supply E03; pipe systems F17D; domestic hot-water supply systems F24D; measuring volume, volume flow, mass flow or liquid level, metering by volume G01F; coin-free or like apparatus G07F)

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 Apparatus or devices for dispensing beverages on draught (B67D 3/00 takes precedence; apparatus for making beverages A47J 31/00)

1/001 . . . [by squeezing collapsible or flexible storage containers (B67D 1/0462 takes precedence)]

1/002 . . . [specially adapted to be used in microgravity conditions, e.g. in outer space]

1/003 . . . [the beverage being a single liquid (B67D 1/02,
B67D 1/04 take precedence; drinking fountains E03B 9/20)]

1/004 . . . [the beverage being stored in a container, e.g. bottle, cartridge, bag-in-box, bowl]

1/005 . . . . [the apparatus comprising means for automatically controlling the amount to be dispensed]

1/006 . . . . [based on the timed opening of a valve]

1/007 . . . . [based on volumetric dosing]

1/008 . . . . [based on weighing]

1/009 . . . . [the beverage being stored in an intermediate container connected to a supply]

1/001 . . . . [the apparatus comprising means for automatically controlling the amount to be dispensed]

1/0011 . . . . [based on the timed opening of a valve]

1/0012 . . . . [based on volumetric dosing]

1/0013 . . . . [based on weighing]

1/0014 . . . . [the beverage being supplied from water mains]

1/0015 . . . . [the beverage being prepared by mixing at least two liquid components]

1/0016 . . . . [the beverage being stored in an intermediate container before dispensing, i.e. pre-mix dispensers]

1/0017 . . . . [the apparatus comprising means for automatically controlling the amount to be dispensed]

1/0018 . . . . [based on the timed opening of a valve]

1/0019 . . . . [based on volumetric dosing]

1/002 . . . . [based on weighing]
Cleaning beverage-dispensing apparatus

F03C 1/04

[Details]

[Component storage means]

[Containers for gas, for, e.g. CO₂, N₂]

[Valves]

[Valve mountings in dispensers]

[Constructional details]

[Means for pressurizing liquid]

[Using a pump]

[Using a gas]

Beer engines or like manually-operable pumping apparatus

[with means for carbonating the beverage, or for maintaining its carbonation]

Apparatus utilising compressed air or other gas acting directly or indirectly on beverages in storage containers

[with means for carbonating the beverage, or for maintaining its carbonation (B67D 1/0418 takes precedence)]

[the whole dispensing unit being fixed to the container]

[comprising a CO₂ cartridge for dispensing and carbonating the beverage]

[comprising an air pump system]

[power-operated]

[comprising a gas pressure space within the container for the liquid]

[comprising a gas generator (apparatus for generating gases in general B01J 7/00)]

[using elastic bags and pistons actuated by air or other gas]

[Siphons, i.e. beverage containers under gas pressure without supply of further pressurised gas during dispensing]

[Squeezing collapsible or flexible beverage containers, e.g. bag-in-box containers]

[comprising means for the recovery of the gas acting on beverages]

[Type of gas or gas mixture used, other than pure CO₂]

[Single inert gas, e.g. N₂]

[Mixture of gases, e.g. N₂ + CO₂]

[Air]

Mountings or arrangements of dispensing apparatus in or on shop or bar counters (shop or bar counters per se A47F 9/00)

Cleaning beverage-dispensing apparatus

(B67D 1/0834, B67D 1/0837 take precedence)

[Sanitising or sterilising the apparatus]

[Details]

[of beverage containers, e.g. casks, kegs]

[Dip tubes]

[Shape or materials]

[Openings for filling]

[Openings for emptying, e.g. taped openings]

[Closing means, e.g. bungholes, barrel bungs]

[Opening means, e.g. means for assisting the opening]

[provided with coded information]

[Bottles, cartridges or similar containers]

[(for upside down use]

[with integral venting tube]

[with a venting orifice]

[arranged in series]

[arranged in parallel]

[having different compartments for different components]

[Pressurised rigid containers, e.g. kegs, figals]

[with dip tubes]

[details of dip tube]

[Bags in box]

[in pressurised housing]

[Keg connection means]

[combined with valves]

[with two valves disposed concentrically]
B67D

1/0834 . . . . (and having means for admitting a cleaning fluid)
1/0835 . . . . [with one valve]
1/0837 . . . . (and having means for admitting a cleaning fluid)
1/0838 . . . . [comprising means for preventing blow-out on disassembly of the spear valve]
1/0839 . . . . [Automatically operating handles for locking or unlocking a connector to or from a keg]
1/0841 . . . . [Details]
1/0842 . . . . [Multiple connectors, e.g. for simultaneously connecting several containers]
1/0844 . . . . [for containers in crates]
1/0845 . . . . [Security means]
1/0847 . . . . [Tamper-evident devices]
1/0848 . . . . [Locking means]
1/0849 . . . . [provided with means to open the keg valve when gas pressure is applied to it]
1/0851 . . . . [composed of a piston and ram assembly, e.g. tappet]
1/0852 . . . . [composed of a membrane and ram assembly]
1/0854 . . . . [provided with means to open the keg valve when water pressure is applied to it]
1/0855 . . . . [concerning the used flowmeter (flowmeter per se G01F 1/00, G01F 3/00)]
1/0857 . . . . [Cooling arrangements (cooling systems per se F25B)]
1/0858 . . . . [using compression systems]
1/0859 . . . . [the evaporator being in direct heat contact with the beverage, e.g. placed inside a beverage container]
1/0861 . . . . [the evaporator acting through an intermediate heat transfer means]
1/0862 . . . . [in the form of a cold plate or a cooling block]
1/0864 . . . . [in the form of a cooling bath]
1/0865 . . . . [by circulating a cooling fluid along beverage supply lines, e.g. pythons]
1/0867 . . . . {the cooling fluid being a liquid}
1/0868 . . . . {the cooling fluid being a gas}
1/0869 . . . . [using solid state elements, e.g. Peltier cells]
1/0871 . . . . {Level gauges for beverage storage containers (level indicators in general G01F)}
1/0872 . . . . [Aesthetics, advertising]
1/0874 . . . . [Means for illuminating the handle of taps or faucets]
1/0875 . . . . [Means for illuminating the beverage to be dispensed]
1/0877 . . . . [Advertising means (advertising in general G09F)]
1/0878 . . . . {Safety, warning or controlling devices (B67D 1/12 takes precedence)}
1/0879 . . . . [Doors for protecting the vessel to be filled]
1/0881 . . . . [Means for counting the doses of dispensed liquid]
1/0882 . . . . [Devices for controlling the dispensing conditions]
1/0884 . . . . [Means for controlling the parameters of the state of the liquid to be dispensed, e.g. temperature, pressure]
1/0885 . . . . [Means for dispensing under specific atmospheric conditions, e.g. under inert gas]
1/0887 . . . . [Sanitary protection means for dispensing nozzles or taps, e.g. outlet closures]
1/0888 . . . . [Means comprising electronic circuitry (e.g. control panels, switching or controlling means)]
1/0889 . . . . [Supports]
1/0891 . . . . [for the beverage container]
1/0892 . . . . [the beverage container being stored in a rack or shelf]
1/0894 . . . . [for the vessel to be filled]
1/0895 . . . . [Heating arrangements]
1/0897 . . . . [located in nozzles]
1/0898 . . . . [Beer warmers (B67D 1/0897 takes precedence)]
1/10 . . . . Pump mechanism (in general F01D)
1/101 . . . . [of the piston-cylinder type]
1/102 . . . . [for one liquid component only]
1/103 . . . . [the piston being driven by a liquid or a gas]
1/104 . . . . [by the liquid to be dispensed]
1/105 . . . . [for two or more components]
1/106 . . . . [the piston being driven by a liquid or a gas]
1/107 . . . . [by one of the components to be dispensed]
1/108 . . . . [of the peristaltic type]
1/12 . . . . Flow or pressure control devices or systems {, e.g. valves, gas pressure control, level control in storage containers}
1/1202 . . . . [Flow control, e.g. for controlling total amount or mixture ratio of liquids to be dispensed]
1/1204 . . . . [for ratio control purposes]
1/1206 . . . . [Flow detectors]
1/1209 . . . . [combined with a timer]
1/1211 . . . . [Flow rate sensor]
1/1213 . . . . [combined with a timer]
1/1215 . . . . [combined with a counter]
1/1218 . . . . [modulating the opening of a valve]
1/122 . . . . [modulating a pumping rate]
1/1222 . . . . [Pressure gauges]
1/1225 . . . . [Weighing]
1/1227 . . . . [the cup to be filled]
1/1229 . . . . [the storage container]
1/1231 . . . . [Metering pumps]
1/1234 . . . . [to determine the total amount]
1/1236 . . . . [comprising means for detecting the size of vessels to be filled]
1/1238 . . . . [comprising means for detecting the liquid level in vessels to be filled, e.g. using ultrasonic waves, optical reflection, probes]
1/124 . . . . [the flow being started or stopped by means actuated by the vessel to be filled, e.g. by switches, weighing]
1/1243 . . . . [comprising flow or pressure sensors, e.g. for controlling pumps]
1/1245 . . . . [Change-over devices, i.e. connecting a flow line from an empty container to a full one]
1/1247 . . . . [Means for detecting the presence or absence of liquid]
1/125 . . . . [Safety means, e.g. over-pressure valves]
1/1252 . . . . [Gas pressure control means, e.g. for maintaining proper carbonation (for beer engines B67D 1/025)]
Apparatus or devices for controlling flow of liquids under gravity from storage containers for dispensing purposes (separating and dispensing metered quantities of liquids G01F)
Apparatus or devices for transferring liquids from bulk storage containers or reservoirs into vehicles or into portable containers, e.g. for retail sale purposes (general disposition of plant in stations for supplying fuel to vehicles B60S 5/02; for filling or emptying locomotive water tanks, e.g. water columns, B61K 11/00; for refuelling aircraft during flight B64D 39/00; liquid-handling ground installations specially adapted for fuelling stationary aircraft B64F 1/28)

7/002 . . . . (using articulated pipes)
7/005 . . . . (Spouts)
7/007 . . . . (using siphoning arrangements)
7/02 . . . . for transferring liquids other than fuel or lubricants
7/0205 . . . (by manually operable pumping apparatus (hand-held apparatus with pumps for dispensing or spraying liquids or fluent materials B05B 11/00))
7/0211 . . . . (with pump locking means)
7/0216 . . . . (by squeezing collapsible or flexible storage containers (B67D 7/0255 takes precedence; for dispensing beverages on draught B67D 1/0001))
7/0222 . . . . (the dispensed quantity of liquid being replaced by air sucked through the dispensing opening)
7/0227 . . . . (by an ejection plunger (B67D 7/0238 takes precedence))
7/0233 . . . . (the plunger being gas driven)
7/0238 . . . . (utilising compressed air or other gas acting directly or indirectly on liquids in storage containers (for dispensing beverages on draught B67D 1/04))
7/0244 . . . . (by using elastic expandable bags)
7/025 . . . . (specially adapted for transferring liquids of high purity)
7/0255 . . . . (squeezing collapsible or flexible storage containers (for dispensing beverages on draught B67D 1/0462))
7/0261 . . . . (specially adapted for transferring liquids of high purity)
7/0266 . . . . (by gas acting directly on the liquid)
7/0272 . . . . (specially adapted for transferring liquids of high purity)
7/0277 . . . . (using negative pressure)
7/0283 . . . . (specially adapted for transferring liquids of high purity)
7/0288 . . . . (Container connection means (for dispensing beverages on draught B67D 1/0829))
7/0294 . . . . (Combined with valves)
7/04 . . . . for transferring fuels, lubricants or mixed fuels and lubricants
7/0401 . . . . (arrangements for automatically fuelling vehicles, i.e. without human intervention)

2007/0403 . . . . (for filler caps)
2007/0415 . . . . (for manual pumping apparatus)
2007/0417 . . . . (Manipulator arms)
2007/0419 . . . . (Fuelling nozzles)
2007/0421 . . . . (with locking devices)
2007/0423 . . . . (Fuelling hoses)
2007/0425 . . . . (comprising a single hose for several fuels)
2007/0426 . . . . (comprising several hoses for several fuels)
2007/0428 . . . . (having devices to avoid a mix up of different fuels)
2007/043 . . . . (Moveable)
2007/0432 . . . . (according to a planar coordinate system)
2007/0434 . . . . (with the ability to compensate movements of the car during filling)
2007/0436 . . . . (according to a spatial coordinate system)
2007/0438 . . . . (with the ability to compensate movements of the car during filling)
2007/044 . . . . (Customer interfaces)
2007/0442 . . . . (interface for orders and payments)
2007/0444 . . . . (Sensors)
2007/0446 . . . . (measuring physical properties of the fluid to be dispensed)
2007/0448 . . . . (Density)
2007/0449 . . . . (Viscosity)
2007/0451 . . . . (Temperature)
2007/0453 . . . . (recognising the fuel to be dispensed)
2007/0455 . . . . (recognising the position)
2007/0457 . . . . (of the car)
2007/0459 . . . . (by interrogating a transponder)
2007/0461 . . . . (by calculating from a reference position, e.g. the car's silhouette, reference marks)
2007/0463 . . . . (optically)
2007/0465 . . . . (by GPS)
2007/0467 . . . . (of the fuel tank flap and/or fuel tank opening)
2007/0469 . . . . (by interrogating a transponder)
2007/0471 . . . . (by calculating from a reference position, e.g. the car's silhouette, reference marks)
2007/0473 . . . . (optically)
2007/0474 . . . . (of the filling nozzle relative to the fuel tank opening, e.g. engagement between nozzle and tank opening)
2007/0476 . . . . (Vapour recovery systems)
2007/0478 . . . . (constructional features or components (vapour recovery nozzles B67D 7/54))
2007/048 . . . . (Vapour flow control means, e.g. valves, pumps)
2007/0482 . . . . (using pumps driven at different flow rates)
2007/0484 . . . . (Liquid jet pumps, e.g. venturis)
2007/0486 . . . . (Pumps driven in response to electric signals indicative of pressure, temperature or liquid flow)
2007/0488 . . . . (Means for preventing the formation of condensation on, or for removing condensation from, vapour recovery lines)
2007/049 . . . . (Vapour recovery methods, e.g. condensing the vapour)
2007/0492 . . . . (Vapour storing means, e.g. dedicated ullage spaces, separate tanks)
Arrangements of devices for controlling, indicating, metering or registering quantity or price of liquid transferred (arrangement of flow- or pressure-control valves B67D 7/36; computing, calculating, counting G06; coin-free apparatus for dispensing fluids G07F 13/00; prepayment devices for metering liquids G07F 15/00)

Testing or calibrating apparatus therefore (testing or calibrating apparatus for measuring volume flow in general G01F 25/00)

operated by keys, push-buttons or cash registers

operated by keys

operated by push-buttons

operated by movement of delivery hose or nozzle or by devices associated therewith

responsive to input of recorded programmed information, e.g. on punched cards

(by wireless communication means, e.g. RF, transponders or the like)

[Arrangements of liquid meters]

[Arrangements of indicators or registers (indicating or recording in fluid meters G01F 15/06)]

[using electrical or electro-mechanical means (B67D 7/224 takes precedence)]

(involving digital counting)

(involving price indicators)

(combined with variators)

(using electrical or electro-mechanical means)

(using digital counting)

with means for producing or issuing a receipt or record of sale

(using electrical or electro-mechanical means)

(involving digital counting)

with resetting or zeroing means

(using electrical or electro-mechanical means)

(involving digital counting)

with automatic means for reducing or intermittently interrupting flow before completion of delivery, e.g. to produce dribble feed

with means for predetermined quantity of liquid to be transferred (B67D 7/10, B67D 7/14 take precedence)

[using mechanical means (B67D 7/306 takes precedence)]

[using electrical or electro-mechanical means (B67D 7/307 takes precedence)]

(involving digital counting)

[in function of money to be spent therefor]

[using mechanical means]

[using electrical or electro-mechanical means]

[involving digital counting]

Arrangements of safety or warning devices; Means for preventing unauthorised delivery of liquid

(relation to spillage or leakage, e.g. spill containments, leak detection (leak detectors for underground fuel dispensing systems G01M 3/2892))

(relation to emergency shut-off means)

(relation to venting of a container during loading or unloading)

(relation to electrostatic charges)

[relating to the transfer method]

[using a pressurised liquid acting directly or indirectly on the bulk of the liquid to be transferred]

[using a pressurised gas acting directly or indirectly on the bulk of the liquid to be transferred (use of compressed air or gas for transferring liquids B67D 7/0238, B67D 7/72)]

[using pumps]

[Details]

[Function indicator devices]

Means for preventing unauthorised delivery of liquid

(by discriminating the kind of liquid by analysis or by physical properties, e.g. vapour-pressure)

(by checking a correct coupling or coded information)

(by reading a code)

(by interrogating an information transmitter, e.g. a transponder (B67D 7/145 takes precedence))

Arrangements of flow- or pressure-control valves (associated with nozzles B67D 7/42)

(combined with over-fill preventing means (indicating or measuring liquid level G01F 23/00; level control G05D 9/00))

(using floats)

(the float acting pneumatically on a shut-off valve)

Arrangements of hoses, e.g. operative connection with pump motor (hoses in general F16L 11/00)

Suspending, reeling or storing devices

(the hose carrier comprising a sliding unit)

(the hose carrier comprising a pivoting unit)

Filling nozzles
B67D 2021/00

Indexing scheme relating to aspects and details of apparatus or devices for transferring liquids when loading or unloading ships (ship-based equipment B63B 27/00)

9/00 Apparatus or devices for transferring liquids when loading or unloading ships (ship-based equipment B63B 27/00)

9/02 . . . using articulated pipes

99/00 Subject matter not provided for in other groups of this subclass

2210/00 Indexing scheme relating to aspects and details of apparatus or devices for dispensing beverages on draught or for controlling flow of liquids under gravity from storage containers for dispensing purposes

2210/0002 . . . Purifying means
2210/0005 . . . Filters
2210/0007 . . . for gas
2210/0001 . . . for liquid
2210/0013 . . . Sterilising means
2210/0015 . . . UV radiation
2210/0018 . . . Membranes
2210/0022 . . . Distillators
2210/0023 . . . Oxygenators
2210/0026 . . . Heaters
2210/0028 . . . Constructional details
2210/0031 . . . Housing
2210/0034 . . . Modules
2210/0036 . . . . . . for use with or in refrigerators
2210/0039 . . . . . . Panels
2210/0041 . . . . . . Doors
2210/0044 . . . . . . Insulation
2210/0047 . . . . . . Piping
2210/0049 . . . . . . Pipes
2210/0052 . . . . . . with flow tranquillisers
2210/0055 . . . . . . with turbulent flow generators, e.g. vortices
2210/0057 . . . . . . . adapted for being easily cleaned
2210/006 . . . . . . . . . . . . . . . . . . Manifolds
2210/0062 . . . . . . . . . . . . . . . . . . Pipe joints
2210/0065 . . . . . . . . . . . . . . . . . . related to the use of drinking cups or glasses
2210/0068 . . . . . . . . . . . . . . . . . . Means for filling simultaneously a plurality of cups
2210/007 . . . . . . . . . . . . . . . . . . For use with partially pre-filled cups
2210/0073 . . . . . . . . . . . . . . . . . . Cup cleaning devices
2210/0076 . . . . . . . . . . . . . . . . . . Cup conveyors
2210/0078 . . . . . . . . . . . . . . . . . . Cup dispensers
2210/0081 . . . . . . . . . . . . . . . . . . related to bartenders
2210/0083 . . . . . . . . . . . . . . . . . . Access code recognition means
2210/0086 . . . . . . . . . . . . . . . . . . Selector circuits
2210/0089 . . . . . . . . . . . . . . . . . . Remote control means, e.g. by electromagnetic signals

CPC - 2020.08
Bar management means
Ergonomics
Handling of storage containers
Temperature control
Heating only
Cooling only
by spraying fluids on the inner or outer surfaces of the receptacles to be filled
The sprayed fluid being a liquid
The sprayed fluid being a gas
The sprayed fluid being a cryogen
Heating and cooling
related to concentrate handling
Preparing a mix of concentrates
Treating or conditioning the concentrate, e.g. by heating, freezing
relating to outdoor use; movable; portable
wearable by a person, e.g. as a backpack or helmet
wheeled
vehicle carried
Trolleys
Other parts
Magnets, e.g. used in valves or for stirring
Component storage means
Fixed containers to be filled in situ
Automatically
Level detected by a float
Level detected electrically by contact with sensors
Adapted for dispensing high viscosity products
Agitators
Heated tubes