CPC  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)

1/0001 . [by squeezing collapsible or flexible storage containers (B67D 1/0462 takes precedence)]
1/0002 . [specially adapted to be used in microgravity conditions, e.g. in outer space]
1/0003 . [the beverage being a single liquid (B67D 1/02, B67D 1/04 take precedence; drinking fountains E03B 9/20)]
1/0004 . [the beverage being stored in a container, e.g. bottle, cartridge, bag-in-box, bowl]
1/0005 . . . [the apparatus comprising means for automatically controlling the amount to be dispensed]
1/0006 . . . . [based on the timed opening of a valve]
1/0007 . . . . [based on volumetric dosing]
1/0008 . . . . [based on weighing]
1/0009 . . . [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]

1/0021 . . . [the components being mixed at the time of dispensing, i.e. post-mix dispensers]
1/0022 . . . . [the apparatus comprising means for automatically controlling the amount to be dispensed]
1/0023 . . . . [control of the amount of the mixture, i.e. after mixing]
1/0024 . . . . [based on the timed opening of a valve]
1/0025 . . . . [based on volumetric dosing]
1/0026 . . . . [based on weighing]
1/0027 . . . . [control of the amount of one component, the amount of the other components(s) being dependent on that control]
1/0028 . . . . [based on the timed opening of a valve]
1/0029 . . . . [based on volumetric dosing]
1/003 . . . . . [by means of a dosing chamber]
1/0031 . . . . . [in the form of a metering pump]
1/0032 . . . . . [using flow-rate sensors]
1/0033 . . . . . [based on weighing]
1/0034 . . . . . [for controlling the amount of each component]
1/0035 . . . . . [the controls being based on the same metering technics]
1/0036 . . . . . [based on the timed opening of valves]
1/0037 . . . . . [based on volumetric dosing]
1/0038 . . . . . [based on weighing]
1/0039 . . . . . [the controls involving at least two different metering technics]
1/004 . . . [the diluent being supplied from water mains]
1/0041 . . [Fully automated cocktail bars, i.e. apparatuses combining the use of packaged beverages, pre-mix and post-mix dispensers]
1/0042 . . [Details of specific parts of the dispensers]
1/0043 . . [Mixing devices for liquids]
1/0044 . . [for mixing inside the dispensing nozzle]
1/0045 . . [Venturi arrangements; Aspirators; Eductors]
B67D

I/0046 . . . . . . [Mixing chambers]
I/0047 . . . . . . [with movable parts, e.g. for stirring]
I/0048 . . . . . . [with baffles]
I/0049 . . . . . . [with means for diverging streams]
I/005 . . . . . . [with means for converging streams]
I/0051 . . . . . . [for mixing outside the nozzle]
I/0052 . . . . . . [by means for directing respective streams together]
I/0053 . . . . . . [by stirring in the cup]
I/0054 . . . . . . [Recirculation means]
I/0055 . . . . . . [with fountain effect]
I/0056 . . . . . . [with illumination]
I/0057 . . . . . . [Carbonators]
I/0058 . . . . . . [In-line carbonators]
I/0059 . . . . . . [in combination with a mixer tap (constructional features of the tap E03C 1/04)]
I/006 . . . . . . [Conventional carbonators]
I/0061 . . . . . . [with cooling means]
I/0062 . . . . . . [inside the carbonator]
I/0063 . . . . . . [Cooling coil]
I/0064 . . . . . . [Cold plate]
I/0065 . . . . . . [Ice bank]
I/0066 . . . . . . [outside the carbonator]
I/0067 . . . . . . [Cooling coil]
I/0068 . . . . . . [Cooling bath]
I/0069 . . . . . . [Details]
I/007 . . . . . . [Structure of the carbonating chamber]
I/0071 . . . . . . [Carbonating by injecting CO₂ in the liquid]
I/0072 . . . . . . [through a diffuser, a bubbler]
I/0073 . . . . . . [Carbonating by spraying the liquid]
I/0074 . . . . . . [Automatic carbonation control]
I/0075 . . . . . . [by sensing gas pressure]
I/0076 . . . . . . [by sensing temperature]
I/0077 . . . . . . [Carbonator being specially adapted for adding a second gas to the CO₂]
I/0078 . . . . . . [Ingredient cartridges]
I/0079 . . . . . . [having their own dispensing means]
I/008 . . . . . . [Gas cartridges or bottles]
I/0081 . . . . . . [Dispensing valves]
I/0082 . . . . . . [entirely mechanical]
I/0083 . . . . . . [with means for separately dispensing a single or a mixture of drinks]
I/0084 . . . . . . [Hand-held gun type valves]
I/0085 . . . . . . [electro-mechanical]
I/0086 . . . . . . [Hand-held gun type valves]
2001/0087 . . . . . . [being mounted on the dispenser housing]
2001/0088 . . . . . . [operated by push buttons]
2001/0089 . . . . . . [operated by lever means]
2001/009 . . . . . . [operated by cup detection]
2001/0091 . . . . . . [Component storage means]
2001/0092 . . . . . . [Containers for gas, for, e.g. CO₂, N₂]
2001/0093 . . . . . . [Valves]
2001/0094 . . . . . . [Valve mountings in dispensers]
2001/0095 . . . . . . [Constructional details]
2001/0096 . . . . . . [Means for pressurizing liquid]
2001/0097 . . . . . . [using a pump]
2001/0098 . . . . . . [using a gas]
I/02 . . . . . . Beer engines or like manually-operable pumping apparatus
I/025 . . . . . . [with means for carbonating the beverage, or for maintaining its carbonation]
1/04 . . . . . . Apparatus utilising compressed air or other gas acting directly or indirectly on beverages in storage containers
1/0406 . . . . . . [with means for carbonating the beverage, or for maintaining its carbonation (B67D 1/0418 takes precedence)]
1/0412 . . . . . . [the whole dispensing unit being fixed to the container]
1/0418 . . . . . . [comprising a CO₂ cartridge for dispensing and carbonating the beverage]
1/0425 . . . . . . [comprising an air pump system]
1/0431 . . . . . . [power-operated]
1/0437 . . . . . . [comprising a gas pressure space within the container for the liquid]
1/0443 . . . . . . [comprising a gas generator (apparatus for generating gases in general B01J 7/00)]
1/045 . . . . . . [using elastic bags and pistons actuated by air or other gas]
1/0456 . . . . . . [Siphons, i.e. beverage containers under gas pressure without supply of further pressurised gas during dispensing]
1/0462 . . . . . . [Squeezing collapsible or flexible beverage containers, e.g. bag-in-box containers]
1/0468 . . . . . . [comprising means for the recovery of the gas acting on beverages]
2001/0475 . . . . . . [Type of gas or gas mixture used, other than pure CO₂]
2001/0481 . . . . . . [Single inert gas, e.g. N₂]
2001/0487 . . . . . . [Mixture of gases, e.g. N₂ + CO₂]
2001/0493 . . . . . . [Air]
I/06 . . . . . . Mountings or arrangements of dispensing apparatus in or on shop or bar counters (shop or bar counters per se A47F 9/00)
I/07 . . . . . . Cleaning beverage-dispensing apparatus ((B67D 1/0834, B67D 1/0837 take precedence))
2001/075 . . . . . . [Sanitising or sterilising the apparatus]
I/08 . . . . . . Details
I/0801 . . . . . . [of beverage containers, e.g. casks, kegs]
I/0802 . . . . . . [Dip tubes]
I/0804 . . . . . . [Shape or materials]
I/0805 . . . . . . [Openings for filling]
I/0807 . . . . . . [Openings for emptying, e.g. taped openings]
I/0808 . . . . . . [Closing means, e.g. bungholes, barrel bungs]
I/0809 . . . . . . [Opening means, e.g. means for assisting the opening]
2001/0811 . . . . . . [provided with coded information]
2001/0812 . . . . . . [Bottles, cartridges or similar containers]
2001/0814 . . . . . . [for upside down use]
2001/0815 . . . . . . [with integral venting tube]
2001/0817 . . . . . . [with a venting orifice]
2001/0818 . . . . . . [arranged in series]
2001/082 . . . . . . [arranged in parallel]
2001/0821 . . . . . . [having different compartments for different components]
2001/0822 . . . . . . [Pressurised rigid containers, e.g. kegs, figals]
2001/0824 . . . . . . [with dip tubes]
2001/0825 . . . . . . [details of dip tube]
2001/0827 . . . . . . [Bags in box]
2001/0828 . . . . . . [in pressurised housing]
I/0829 . . . . . . [Keg connection means]
I/0831 . . . . . . [combined with valves]
I/0832 . . . . . . [with two valves disposed concentrically]
(B67D 1/12  
{ Safety, warning or controlling devices  
{ Aesthetics, advertising }  
( level indicators in general G01F  
{ Level gauges for beverage storage containers }  
{ Cooling arrangements (cooling systems per se F25B) }  
{ Means for controlling the parameters of the state of the liquid to be dispensed, e.g. temperature, pressure }  
{ Means for dispensing under specific atmospheric conditions, e.g. under inert gas }  
{ Means for detecting the presence or absence of liquid }  
{ Gas pressure control means, e.g. for maintaining proper carbonation (for beer engines B67D 1/025) }  
{ Means for controlling the parameters of the state of the liquid to be dispensed, e.g. temperature, pressure }  
{ Means for counting the doses of dispensed liquid }  
{ Devices for controlling the dispensing conditions }  
{ Means for illuminating the handle of taps or faucets }  
{ Means for illuminating the beverage to be dispensed }  
Advertising means (advertising in general G09F)  
{ Safety, warning or controlling devices (B67D 1/12 takes precedence) }  
{ Doors for protecting the vessel to be filled }  
{ Means for counting the doses of dispensed liquid }  
{ Devices for controlling the dispensing conditions }  
{ Means for controlling the parameters of the state of the liquid to be dispensed, e.g. temperature, pressure }  
{ Means for dispensing under specific atmospheric conditions, e.g. under inert gas }  
{ Sanitary protection means for dispensing nozzles or taps, e.g. outlet closures }  
{ Means comprising electronic circuitry (e.g. control panels, switching or controlling means) }  
{ Supports }  
{ for the beverage container }  
{ the beverage container being stored in a rack or shelf }  
{ for the vessel to be filled }  
{ Heating arrangements }  
{ located in nozzles }  
{ Beer warmers (B67D 1/087 takes precedence) }  
{ Pump mechanism (in general F04) }  
{ of the piston-cylinder type }  
{ for one liquid component only }  
{ the piston being driven by a liquid or a gas }  
{ by the liquid to be dispensed }  
{ for two or more components }  
{ the piston being driven by a liquid or a gas }  
{ by one of the components to be dispensed }  
{ of the peristaltic type }  
{ Pump mechanism for controlling total amount or mixture ratio of liquids to be dispensed }  
{ for ratio control purposes }  
{ Flow rate sensor }  
{ combined with a timer }  
{ combined with a counter }  
modulating a pump rate  
{ Pressure gauges }  
{ Weighing }  
{ the cup to be filled }  
{ the storage container }  
{ Metering pumps }  
{ to determine the total amount }  
{ comprising means for detecting the size of vessels to be filled }  
{ comprising means for detecting the liquid level in vessels to be filled, e.g. using ultrasonic waves, optical reflection, probes }  
{ the flow being started or stopped by means actuated by the vessel to be filled, e.g. by switches, weighing }  
{ comprising flow or pressure sensors, e.g. for controlling pumps }  
{ Change-over devices, i.e. connecting a flow line from an empty container to a full one }  
{ Means for detecting the presence or absence of liquid }  
{ Safety means, e.g. over-pressure valves }  
Gas pressure control means, e.g. for maintaining proper carbonation (for beer engines B67D 1/025) 

Flow or pressure control devices or systems {, e.g. valves, gas pressure control, level control in storage containers}  
{ for controlling total amount or mixture ratio of liquids to be dispensed }  
{ Flow detectors }  
{ combined with a timer }  
{ Flow rate sensor }  
{ combined with a timer }  
{ combined with a counter }  
smooth flow rate control  
{ modulating the opening of a valve }  
{ the piston being driven by a liquid or a gas }  
{ combined with a timer }  
{ the storage container }  
{ Metering pumps }  
{ to determine the total amount }  
{ comprising means for detecting the size of vessels to be filled }  
{ comprising means for detecting the liquid level in vessels to be filled, e.g. using ultrasonic waves, optical reflection, probes }  
{ the flow being started or stopped by means actuated by the vessel to be filled, e.g. by switches, weighing }  
{ comprising flow or pressure sensors, e.g. for controlling pumps }  
{ Change-over devices, i.e. connecting a flow line from an empty container to a full one }  
{ Means for detecting the presence or absence of liquid }  
{ Safety means, e.g. over-pressure valves }  
Gas pressure control means, e.g. for maintaining proper carbonation (for beer engines B67D 1/025) 

Flow or pressure control devices or systems {, e.g. valves, gas pressure control, level control in storage containers}  
{ for controlling total amount or mixture ratio of liquids to be dispensed }  
{ Flow detectors }  
{ combined with a timer }  
{ Flow rate sensor }  
{ combined with a timer }  
{ combined with a counter }  
smooth flow rate control  
{ modulating the opening of a valve }  
{ the piston being driven by a liquid or a gas }  
{ combined with a timer }  
{ the storage container }  
{ Metering pumps }  
{ to determine the total amount }  
{ comprising means for detecting the size of vessels to be filled }  
{ comprising means for detecting the liquid level in vessels to be filled, e.g. using ultrasonic waves, optical reflection, probes }  
{ the flow being started or stopped by means actuated by the vessel to be filled, e.g. by switches, weighing }  
{ comprising flow or pressure sensors, e.g. for controlling pumps }  
{ Change-over devices, i.e. connecting a flow line from an empty container to a full one }  
{ Means for detecting the presence or absence of liquid }  
{ Safety means, e.g. over-pressure valves }  
Gas pressure control means, e.g. for maintaining proper carbonation (for beer engines B67D 1/025) 

Flow or pressure control devices or systems {, e.g. valves, gas pressure control, level control in storage containers}  
{ for controlling total amount or mixture ratio of liquids to be dispensed }  
{ Flow detectors }  
{ combined with a timer }  
{ Flow rate sensor }  
{ combined with a timer }  
{ combined with a counter }  
smooth flow rate control  
{ modulating the opening of a valve }  
{ the piston being driven by a liquid or a gas }  
{ combined with a timer }  
{ the storage container }  
{ Metering pumps }  
{ to determine the total amount }  
{ comprising means for detecting the size of vessels to be filled }  
{ comprising means for detecting the liquid level in vessels to be filled, e.g. using ultrasonic waves, optical reflection, probes }  
{ the flow being started or stopped by means actuated by the vessel to be filled, e.g. by switches, weighing }  
{ comprising flow or pressure sensors, e.g. for controlling pumps }  
{ Change-over devices, i.e. connecting a flow line from an empty container to a full one }  
{ Means for detecting the presence or absence of liquid }  
{ Safety means, e.g. over-pressure valves }  
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)

3/00. . . . [provided with automatic fluid control means]
7/00 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 B608 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 . . . . (Fuelling robots)
2007/0405 . . . . . . (Opening devices)
2007/0407 . . . . . . (for fuel tank flaps)
2007/0409 . . . . . . (using vacuum cups)
2007/0411 . . . . . . (using grippers)
2007/0413 . . . . . . (using air blast)

2007/0415 . . . . . . (for filler caps)
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)

7/0476 . . . . . . (Vapour recovery systems)
7/0478 . . . . . . (constructional features or components (vapour recovery nozzles B67D 7/54))

7/048 . . . . . . (Vapour flow control means, e.g. valves, pumps)
7/0482 . . . . . . (using pumps driven at different flow rates)
7/0484 . . . . . . (Liquid jet pumps, e.g. venturis)
7/0486 . . . . . . (Pumps driven in response to electric signals indicative of pressure, temperature or liquid flow)
7/0488 . . . . . . (Means for preventing the formation of condensation on, or for removing condensation from, vapour recovery lines)
7/049 . . . . . . (Vapour recovery methods, e.g. condensing the vapour)
7/0492 . . . . . . (Vapour storing means, e.g. dedicated ullage spaces, separate tanks)
B67D

Details or accessories

For dispensing fluids G07F 13/00 calculating, counting G06

or pressure-control valves B67D 7/36

price of liquid transferred (arrangement of flow-indicating, metering or registering quantity or

Arrangements of devices for controlling, measuring, metering or registering quantity or

payment)

on the vehicle)

{using imaging means, e.g. cameras}

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-freed 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 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

{of fixed measuring chamber type}

{comprising at least two chambers}

of piston type

of rotary type

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

{relating to spillage or leakage, e.g. spill containment, leak detection (leak detectors for underground fuel dispensing systems G01M 3/2892)}

{relating to emergency shut-off means}

{relating to venting of a container during loading or unloading}

{relating to electrostatic charges}

{relating to the transfer method}

{involving digital counting}

{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 7/723)}

{using pumps}

{Details}

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 (supports for storing lengths of hoses, in general B65H 75/34)

{the hose carrier comprising a sliding unit}

{the hose carrier comprising a pivoting unit}

Filling nozzles

Means for preventing unauthorised delivery of liquid

{relating to the transfer method}

{relating to the transfer method}

{relating to the transfer method}

{relating to the transfer method}

{relating to the transfer method}

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 (supports for storing lengths of hoses, in general B65H 75/34)

{the hose carrier comprising a sliding unit}

{the hose carrier comprising a pivoting unit}

Filling nozzles

{relating to spillage or leakage, e.g. spill containment, leak detection (leak detectors for underground fuel dispensing systems G01M 3/2892)}

{relating to emergency shut-off means}

{relating to venting of a container during loading or unloading}

{relating to electrostatic charges}

{relating to the transfer method}

{involving digital counting}

{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 7/723)}

{using pumps}

{Details}

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 (supports for storing lengths of hoses, in general B65H 75/34)

{the hose carrier comprising a sliding unit}

{the hose carrier comprising a pivoting unit}

Filling nozzles
liquids to be transferred (coin-free apparatus
Devices for mixing two or more different
forcing liquid to delivery point
Devices for applying air or other gas pressure for
movement G01P 13/00
or recording presence, absence or direction of
(flow, e.g. by optical or
audible signals)
Arrangements of pumps
manually operable
power operated
of piston type
[Barrel pumps]
of rotary type
submerged in storage tank or reservoir
two or more pumps in series or parallel
Devices for applying air or other gas pressure for
forcing liquid to delivery point
[using negative pressure]
Devices for mixing two or more different
liquids to be transferred (coin-free apparatus
G01F 13/06)
[mechanically operated]
[involving mechanical counters, e.g. of
clock-work type]
[electrically or electro-mechanically operated]
[involving digital counting]
[for obtaining fuel of a given octane level]
[by mixing different fuel grades or fuel and oil]
[involving means responsive to the octane
level, e.g. octane sensor, knock engine]
[involving fuel with additives, e.g. anti-
knocking agents]
[involving means responsive to the octane
level, e.g. octane sensor, knock engine]
Arrangements of devices for purifying liquids
to be transferred, e.g. of filters, of air or water
separators
[of air separators]
[of water separators]
Arrangements of storage tanks, reservoirs or pipe-
lines
Arrangements of heating or cooling devices for
liquids to be transferred
Heating only
Casings, cabinets or frameworks; Trolleys or like
movable supports
{Trolleys or like movable supports}
Illuminating arrangements
Apparatus or devices for transferring liquids when
loading or unloading ships (ship-based equipment
B63B 27/00)
using articulated pipes
Subject matter not provided for in other groups of
this subclass
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
Purifying means
Filters
for gas
for liquid
Sterilising means
UV radiation
Membranes
Distillators
Oxygenators
Heaters
Constructional details
Housing
Modules
for use with or in refrigerators
Panels
Doors
Insulation
Piping
Pipes
with flow tranquillisers
with turbulent flow generators, e.g. vortices
adapted for being easily cleaned
Manifolds
Pipe joints
related to the use of drinking cups or glasses
Means for filling simultaneously a plurality of
cups
For use with partially pre-filled cups
Cup cleaning devices
Cup conveyors
Cup dispensers
related to bartenders
Access code recognition means
Selector circuits
Remote control means, e.g. by electromagnetic
signals
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