

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

TRANSPORTING

B67 OPENING, CLOSING {OR CLEANING} BOTTLES, JARS OR SIMILAR CONTAINERS; LIQUID HANDLING (nozzles in general [B05B](#); packaging liquids [B65B](#), e.g. [B65B 3/00](#); pumps in general [F04](#); siphons [F04F 10/00](#); valves [F16K](#); handling liquefied gases [F17C](#))

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-freed 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)	1/0018	. . . . {based on the timed opening of a valve}
		1/0019	. . . . {based on volumetric dosing}
		1/002	. . . . {based on weighing}
1/0001	. {by squeezing collapsible or flexible storage containers (B67D 1/0462 takes precedence)}	1/0021	. . {the components being mixed at the time of dispensing, i.e. post-mix dispensers}
1/0002	. {specially adapted to be used in microgravity conditions, e.g. in outer space}	1/0022	. . . {the apparatus comprising means for automatically controlling the amount to be dispensed}
1/0003	. {the beverage being a single liquid (B67D 1/02 , B67D 1/04 take precedence; drinking fountains E03B 9/20)}	1/0023	. . . . {control of the amount of the mixture, i.e. after mixing}
1/0004	. . {the beverage being stored in a container, e.g. bottle, cartridge, bag-in-box, bowl}	1/0024	. . . . . {based on the timed opening of a valve}
1/0005	. . . {the apparatus comprising means for automatically controlling the amount to be dispensed}	1/0025	. . . . . {based on volumetric dosing}
1/0006	. . . . {based on the timed opening of a valve}	1/0026	. . . . . {based on weighing}
1/0007	. . . . {based on volumetric dosing}	1/0027	. . . . {control of the amount of one component, the amount of the other component(s) being dependent on that control}
1/0008	. . . . {based on weighing}	1/0028	. . . . . {based on the timed opening of a valve}
1/0009	. . {the beverage being stored in an intermediate container connected to a supply}	1/0029	. . . . . {based on volumetric dosing}
1/001	. . . {the apparatus comprising means for automatically controlling the amount to be dispensed}	1/003	. . . . . {by means of a dosing chamber}
1/0011	. . . . {based on the timed opening of a valve}	1/0031	. . . . . {in the form of a metering pump}
1/0012	. . . . {based on volumetric dosing}	1/0032	. . . . . {using flow-rate sensors}
1/0013	. . . . {based on weighing}	1/0033	. . . . . {based on weighing}
1/0014	. . {the beverage being supplied from water mains}	1/0034	. . . . {for controlling the amount of each component}
1/0015	. {the beverage being prepared by mixing at least two liquid components}	1/0035	. . . . . {the controls being based on the same metering technics}
1/0016	. . {the beverage being stored in an intermediate container before dispensing, i.e. pre-mix dispensers}	1/0036	. . . . . {based on the timed opening of valves}
1/0017	. . . {the apparatus comprising means for automatically controlling the amount to be dispensed}	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}
- 1/0046 {Mixing chambers}
- 1/0047 {with movable parts, e.g. for stirring}
- 1/0048 {with baffles}
- 1/0049 {with means for diverging streams}
- 1/005 {with means for converging streams}
- 1/0051 . . . {for mixing outside the nozzle}
- 1/0052 {by means for directing respective streams together}
- 1/0053 {by stirring in the cup}
- 1/0054 . . . {Recirculation means}
- 1/0055 {with fountain effect}
- 1/0056 {with illumination}
- 1/0057 . . {Carbonators}
- 1/0058 . . . {In-line carbonators}
- 1/0059 {in combination with a mixer tap (constructional features of the tap E03C 1/04)}
- 1/006 . . . {Conventional carbonators}
- 1/0061 . . . {with cooling means}
- 1/0062 {inside the carbonator}
- 1/0063 {Cooling coil}
- 1/0064 {Cold plate}
- 1/0065 {Ice bank}
- 1/0066 {outside the carbonator}
- 1/0067 {Cooling coil}
- 1/0068 {Cooling bath}
- 1/0069 . . . {Details}
- 1/007 {Structure of the carbonating chamber}
- 1/0071 {Carbonating by injecting CO₂ in the liquid}
- 1/0072 {through a diffuser, a bubbler}
- 1/0073 {Carbonating by spraying the liquid}
- 1/0074 {Automatic carbonation control}
- 1/0075 {by sensing gas pressure}
- 1/0076 {by sensing temperature}
- 1/0077 {Carbonator being specially adapted for adding a second gas to the CO₂}
- 1/0078 . . {Ingredient cartridges}
- 1/0079 . . . {having their own dispensing means}
- 1/008 . . . {Gas cartridges or bottles}
- 1/0081 . . {Dispensing valves}
- 1/0082 . . . {entirely mechanical}
- 1/0083 {with means for separately dispensing a single or a mixture of drinks}
- 1/0084 {Hand-held gun type valves}
- 1/0085 . . . {electro-mechanical}
- 1/0086 {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}
- 1/02 . Beer engines or like manually-operable pumping apparatus
- 1/025 . . {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}
- 1/06 . Mountings or arrangements of dispensing apparatus in or on shop or bar counters (shop or bar counters per se A47F 9/00)
- 1/07 . Cleaning beverage-dispensing apparatus ((B67D 1/0834, B67D 1/0837 take precedence))
- 2001/075 . . {Sanitising or sterilising the apparatus}
- 1/08 . Details
- 1/0801 . . {of beverage containers, e.g. casks, kegs}
- 1/0802 . . . {Dip tubes}
- 1/0804 . . . {Shape or materials}
- 1/0805 . . . {Openings for filling}
- 1/0807 . . . {Openings for emptying, e.g. taped openings}
- 1/0808 . . . {Closing means, e.g. bungholes, barrel bungs}
- 1/0809 . . . {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}	1/0884	. . . . {Means for controlling the parameters of the state of the liquid to be dispensed, e.g. temperature, pressure}
1/0829	. . {Keg connection means}	1/0885	. . . . {Means for dispensing under specific atmospheric conditions, e.g. under inert gas}
1/0831	. . . {combined with valves}	1/0887	. . . {Sanitary protection means for dispensing nozzles or taps, e.g. outlet closures}
1/0832	. . . . {with two valves disposed concentrically}	1/0888	. . {Means comprising electronic circuitry (e.g. control panels, switching or controlling means)}
1/0834	. . . . . {and having means for admitting a cleaning fluid}	1/0889	. . {Supports}
1/0835	. . . . {with one valve}	1/0891	. . . {for the beverage container}
1/0837	. . . . . {and having means for admitting a cleaning fluid}	1/0892	. . . . {the beverage container being stored in a rack or shelf}
1/0838	. . . . {comprising means for preventing blow-out on disassembly of the spear valve}	1/0894	. . . {for the vessel to be filled}
1/0839	. . . {Automatically operating handles for locking or unlocking a connector to or from a keg}	1/0895	. . {Heating arrangements}
1/0841	. . . {Details}	1/0897	. . . {located in nozzles}
1/0842	. . . . {Multiple connectors, e.g. for simultaneously connecting several containers}	1/0898	. . . {Beer warmers (B67D 1/0897 takes precedence)}
1/0844	. . . . {for containers in crates}	1/10	. . Pump mechanism (in general F04)
1/0845	. . . . {Security means}	1/101	. . . {of the piston-cylinder type}
1/0847	. . . . {Tamper-evident devices}	1/102	. . . . {for one liquid component only}
1/0848	. . . . {Locking means}	1/103	. . . . . {the piston being driven by a liquid or a gas}
1/0849	. . . . {provided with means to open the keg valve when gas pressure is applied to it}	1/104	. . . . . {by the liquid to be dispensed}
1/0851	. . . . {composed of a piston and ram assembly, e.g. tappet}	1/105	. . . . {for two or more components}
1/0852	. . . . {composed of a membrane and ram assembly}	1/106	. . . . . {the piston being driven by a liquid or a gas}
1/0854	. . . . {provided with means to open the keg valve when water pressure is applied to it}	1/107	. . . . . . {by one of the components to be dispensed}
1/0855	. . {concerning the used flowmeter (flowmeter per se G01F 1/00, G01F 3/00)}	1/108	. . . {of the peristaltic type}
1/0857	. . {Cooling arrangements (cooling systems per se F25B)}	1/12	. . Flow or pressure control devices or systems {, e.g. valves, gas pressure control, level control in storage containers}
1/0858	. . . {using compression systems}	1/1202	. . . {Flow control, e.g. for controlling total amount or mixture ratio of liquids to be dispensed}
1/0859	. . . . {the evaporator being in direct heat contact with the beverage, e.g. placed inside a beverage container}	1/1204	. . . . {for ratio control purposes}
1/0861	. . . . {the evaporator acting through an intermediate heat transfer means}	1/1206	. . . . . {Flow detectors}
1/0862	. . . . . {in the form of a cold plate or a cooling block}	1/1209	. . . . . . {combined with a timer}
1/0864	. . . . . {in the form of a cooling bath}	1/1211	. . . . . . {Flow rate sensor}
1/0865	. . . . . {by circulating a cooling fluid along beverage supply lines, e.g. pythons}	1/1213	. . . . . . . {combined with a timer}
1/0867	. . . . . . {the cooling fluid being a liquid}	1/1215	. . . . . . . {combined with a counter}
1/0868	. . . . . . {the cooling fluid being a gas}	1/1218	. . . . . . . {modulating the opening of a valve}
1/0869	. . . {using solid state elements, e.g. Peltier cells}	1/122	. . . . . . . {modulating a pumping rate}
1/0871	. . {Level gauges for beverage storage containers (level indicators in general G01F)}	1/1222	. . . . . . . {Pressure gauges}
1/0872	. . {Aesthetics, advertising}	1/1225	. . . . . . . {Weighing}
1/0874	. . . {Means for illuminating the handle of taps or faucets}	1/1227	. . . . . . . {the cup to be filled}
1/0875	. . . {Means for illuminating the beverage to be dispensed}	1/1229	. . . . . . . {the storage container}
1/0877	. . . {Advertising means (advertising in general G09F)}	1/1231	. . . . . . . {Metering pumps}
1/0878	. . {Safety, warning or controlling devices (B67D 1/12 takes precedence)}	1/1234	. . . . . . . {to determine the total amount}
1/0879	. . . {Doors for protecting the vessel to be filled}	1/1236	. . . . . . . {comprising means for detecting the size of vessels to be filled}
1/0881	. . . {Means for counting the doses of dispensed liquid}	1/1238	. . . . . . . {comprising means for detecting the liquid level in vessels to be filled, e.g. using ultrasonic waves, optical reflexion, probes}
1/0882	. . . {Devices for controlling the dispensing conditions}	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](#))}
- 2001/1254 {comprising means for making a mixture of gases}
- 1/1256 . . . {Anti-dripping devices (drip trays [B67D 1/16](#))}
- 2001/1259 . . . {Fluid level control devices}
- 2001/1261 {the level being detected mechanically}
- 2001/1263 {the level being detected electrically}
- 2001/1265 {Pressure switches}
- 2001/1268 {Capacitors}
- 1/127 . . . {Froth control ([B67D 1/1411](#) takes precedence)}
- 1/1272 {preventing froth}
- 1/1275 {promoting froth}
- 1/1277 . . . {Flow control valves}
- 1/1279 {regulating the flow}
- 1/1281 {responsive to pressure}
- 1/1284 . . . {Ratio control}
- 1/1286 {by mechanical construction}
- 1/1288 {Multi-chamber piston pumps (construction of pumps: [B67D 1/10](#))}
- 1/129 {Means for changing the ratio by acting on structural parts}
- 1/1293 {Means for changing the ratio by acting on commands}
- 1/1295 {Ratio defined by setting flow controllers}
- 1/1297 {Ratio defined by setting of timers}
- 1/14 . . . Reducing valves or control taps
- 1/1405 {Control taps}
- 1/1411 {Means for controlling the build-up of foam in the container to be filled}
- 1/1416 {comprising foam inducing means}
- 1/1422 {comprising foam avoiding means}
- 1/1427 {by rotating the container to be filled}
- 1/1433 {by delivering the beverage using a helical movement}
- 1/1438 {comprising a valve shutter movable in a direction parallel to the valve seat, e.g. sliding or rotating}
- 1/1444 {the valve shutter being rotated}
- 1/145 {comprising a valve shutter movable in a direction perpendicular to the valve seat}
- 1/1455 {the valve shutter being opened in the same direction as the liquid flow}
- 1/1461 {the valve shutter being integral with a compensator}
- 1/1466 {the valve shutter being opened in a direction opposite to the liquid flow}
- 1/1472 {the valve shutter being integral with a compensator}
- 1/1477 {Devices for assisting tap handling, e.g. levers}
- 2001/1483 {electrically or electro-mechanically operated}
- 2001/1488 {pneumatically operated}
- 2001/1494 {Taps with means for adjusting the position of a compensator from outside}
- 1/16 . . Devices for collecting spilled beverages
- 1/165 {and re-injecting them in the dispensing line}
- 3/00** **Apparatus or devices for controlling flow of liquids under gravity from storage containers for dispensing purposes (separating and dispensing metered quantities of liquids [G01F](#))**
- 3/0003 . . {provided with automatic fluid control means}
- 3/0006 . . {responsive to coded information provided on the neck or spout of the storage container, e.g. bar-code, magnets or transponder}
- 3/0009 . . {provided with cooling arrangements ([cooling per se F25](#))}
- 3/0012 . . {provided with mixing devices}
- 3/0016 . . . {Mixing valves or taps}
- 3/0019 . . {using ingredient cartridges}
- 3/0022 . . {provided with heating arrangements}
- 3/0025 . . {provided with dispensing valves actuated by the receptacle to be filled ([B67D 3/02](#) takes precedence)}
- 3/0029 . . {provided with holders for bottles or similar containers}
- 3/0032 . . . {the bottle or container being held upside down and provided with a closure, e.g. a cap, adapted to cooperate with a feed tube}
- 3/0035 . . . {the bottle or container being held upside down and not provided with a closure, e.g. a bottle screwed onto a base of a dispenser}
- 3/0038 . . {the liquid being stored in an intermediate container prior to dispensing}
- 3/0041 . . {with provisions for metering the liquid to be dispensed}
- 3/0045 . . . {by filling a predetermined volume before dispensing}
- 3/0048 . . {using siphoning arrangements}
- 3/0051 . . {dispensing by tilting}
- 3/0054 . . {Mounting or arrangements of dispensing apparatus in shops or bar counters}
- 3/0058 . . {Details}
- 3/0061 . . . {of liquid containers, e.g. filling, emptying, closing or opening means}
- 3/0064 . . . {Dip tubes}
- 3/0067 . . . {relating to shape or materials, e.g. bag-in-box packages [BIB], pouches}
- 3/007 . . . {containers with adjustable volume}
- 3/0074 . . . {Safety or warning devices}
- 3/0077 . . . {Electronic circuitry}
- 3/008 . . . {Supports}
- 3/0083 . . . {for the liquid container}
- 3/0087 {the beverage container being stored in a rack or shelf}
- 3/009 . . . {for the vessel to be filled}
- 3/0093 . . . {Level indicators}
- 3/0096 . . . {Aesthetics, advertising}
- 3/02 . . Liquid-dispensing valves having operating members arranged to be pressed upwards, e.g. by the rims of receptacles held below the delivery orifice
- 3/04 . . Liquid-dispensing taps or cocks adapted to seal and open tapping holes of casks, e.g. for beer {(closures with filling and discharging devices for containers [B65D 47/00](#))}
- 3/041 . . . {operated by pinching action on flexible tubes}
- 3/042 . . . {operated by deforming a membrane-like closing element}

- 3/043 . . {with a closing element having a linear movement, in a direction perpendicular to the seat}
- 3/044 . . . {and venting means operated automatically with the tap}
- 3/045 . . {with a closing element having a linear movement, in a direction parallel to the seat}
- 3/046 . . . {and venting means operated automatically with the tap}
- 3/047 . . {with a closing element having a rotational movement}
- 3/048 . . . {and venting means operated automatically with the tap}
- 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 [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 . . . {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}	7/263	. . . . . {using electrical or electro-mechanical means}
7/049	. . . . {Vapour recovery methods, e.g. condensing the vapour}	7/266	. . . . . {involving digital counting}
7/0492	. . . . {Vapour storing means, e.g. dedicated ullage spaces, separate tanks}	7/28	. . . with automatic means for reducing or intermittently interrupting flow before completion of delivery, e.g. to produce dribble feed
2007/0494	. . . . {Means for condensing the vapours and reintroducing them into the storage tanks}	7/30	. . . with means for predetermining quantity of liquid to be transferred (B67D 7/10 , B67D 7/14 take precedence)
7/0496	. . . . {Performance test devices therefor}	7/301	. . . . . {using mechanical means (B67D 7/306 takes precedence)}
7/0498	. . {Arrangements specially adapted for transferring biofuels, e.g. ethanol-gasoline mixture}	7/302	. . . . . {using electrical or electro-mechanical means (B67D 7/307 takes precedence)}
7/06	. Details or accessories	7/303	. . . . . {involving digital counting}
7/061	. . {Means for transferring liquids from a chosen level of a storage container}	7/305	. . . . . {in function of money to be spent therefor}
7/062	. . . {from the free surface level of the liquid}	7/306	. . . . . {using mechanical means}
7/064	. . {Drive-off preventing means, e.g. in case of non-payment}	7/307	. . . . . {using electrical or electro-mechanical means}
7/065	. . . {acting on the vehicle}	7/308	. . . . . {involving digital counting}
7/067	. . . {using communication means}	7/32	. . Arrangements of safety or warning devices; Means for preventing unauthorised delivery of liquid
7/068	. . . {using imaging means, e.g. cameras}	7/3209	. . . {relating to spillage or leakage, e.g. spill containments, leak detection (leak detectors for underground fuel dispensing systems G01M 3/2892)}
7/08	. . 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)	7/3218	. . . {relating to emergency shut-off means}
7/085	. . . {Testing or calibrating apparatus therefore (testing or calibrating apparatus for measuring volume flow in general G01F 25/00)}	7/3227	. . . {relating to venting of a container during loading or unloading}
7/10	. . . operated by keys, push-buttons or cash registers	7/3236	. . . {relating to electrostatic charges}
7/103	. . . . {operated by keys}	7/3245	. . . {relating to the transfer method}
7/106	. . . . {operated by push-buttons}	7/3254	. . . . . {using a pressurised liquid acting directly or indirectly on the bulk of the liquid to be transferred}
7/12	. . . operated by movement of delivery hose or nozzle or by devices associated therewith	7/3263	. . . . . {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)}
7/14	. . . responsive to input of recorded programmed information, e.g. on punched cards	7/3272	. . . . . {using pumps}
7/145	. . . . {by wireless communication means, e.g. RF, transponders or the like}	7/3281	. . . {Details}
7/16	. . . Arrangements of liquid meters	2007/329	. . . . . {Function indicator devices}
7/163	. . . . {of fixed measuring chamber type}	7/34	. . . Means for preventing unauthorised delivery of liquid
7/166	. . . . . {comprising at least two chambers}	7/342	. . . . . {by discriminating the kind of liquid by analysis or by physical properties, e.g. vapour-pressure}
7/18	. . . . of piston type	7/344	. . . . . {by checking a correct coupling or coded information}
7/20	. . . . of rotary type	7/346	. . . . . {by reading a code}
7/22	. . . Arrangements of indicators or registers (indicating or recording in fluid meters G01F 15/06)	7/348	. . . . . {by interrogating an information transmitter, e.g. a transponder (B67D 7/145 takes precedence)}
7/221	. . . . . {using electrical or electro-mechanical means (B67D 7/224 takes precedence)}	7/36	. . Arrangements of flow- or pressure-control valves (associated with nozzles B67D 7/42)
7/222	. . . . . {involving digital counting}	7/362	. . . {combined with over-fill preventing means (indicating or measuring liquid level G01F 23/00 ; level control G05D 9/00)}
7/224	. . . . . {involving price indicators}	7/365	. . . . . {using floats}
7/225	. . . . . {combined with variators}	7/367	. . . . . {the float acting pneumatically on a shut-off valve}
7/227	. . . . . {using electrical or electro-mechanical means}	7/38	. . Arrangements of hoses, e.g. operative connection with pump motor (hoses in general F16L 11/00)
7/228	. . . . . {using digital counting}		
7/24	. . . with means for producing or issuing a receipt or record of sale		
7/243	. . . . . {using electrical or electro-mechanical means}		
7/246	. . . . . {involving digital counting}		
7/26	. . . with resetting or zeroing means		

- 7/40 . . . Suspending, reeling or storing devices
(supports for storing lengths of hoses, in
general [B65H 75/34](#))
- 7/403 {the hose carrier comprising a sliding unit}
- 7/406 {the hose carrier comprising a pivoting unit}
- 7/42 . . Filling nozzles
- 7/421 . . . {comprising protective covers, e.g. anti-splash
attachments}
- 7/423 . . . {specially adapted for blending several fluids
(mixing devices [B67D 7/74](#))}
- 7/425 . . . {including components powered by electricity
or light}
- 7/426 . . . {including means for displaying information,
e.g. for advertising ([B67D 7/425](#) takes
precedence)}
- 7/428 . . . {for delivering at least two different liquids
into separate containers}
- 7/44 . . . automatically closing
- 7/445 {after a predetermined time}
- 7/46 when liquid in container to be filled reaches
a predetermined level
- 7/465 {Electrical probes sensing the level of the
liquid}
- 7/48 by making use of air suction through an
opening closed by the rising liquid
- 7/50 and provided with an additional hand lever
- 7/52 and provided with additional flow-
controlling valve means
- 7/54 . . . with means for preventing escape of liquid
or vapour or for recovering escaped liquid or
vapour ([B67D 7/44](#) takes precedence)
- 2007/545 {Additional means for preventing dispensing
of liquid by incorrect sealing engagement
with the tank opening of the vapour
recovering means, e.g. bellows, shrouds}
- 7/56 . . Arrangements of flow-indicators, e.g. transparent
compartments, windows, rotary vanes ([indicating
or recording presence, absence or direction of
movement G01P 13/00](#))
- 7/565 . . . {for indicating end of flow, e.g. by optical or
audible signals}
- 7/58 . . Arrangements of pumps
- 7/60 . . . manually operable
- 7/62 . . . power operated
- 7/64 of piston type
- 7/645 {Barrel pumps}
- 7/66 of rotary type
- 7/68 . . . submerged in storage tank or reservoir
- 7/70 . . . of two or more pumps in series or parallel
- 7/72 . . Devices for applying air or other gas pressure for
forcing liquid to delivery point
- 7/725 . . . {using negative pressure}
- 7/74 . . Devices for mixing two or more different
liquids to be transferred ([coin-freed apparatus
G07F 13/06](#))
- 7/741 . . . {mechanically operated}
- 7/742 {involving mechanical counters, e.g. of
clock-work type}
- 7/743 . . . {electrically or electro-mechanically operated}
- 7/744 {involving digital counting}
- 2007/745 . . . {for obtaining fuel of a given octane level}
- 2007/746 {by mixing different fuel grades or fuel and
oil}
- 2007/747 {involving means responsive to the octane
level, e.g. octane sensor, knock engine}
- 2007/748 {by mixing fuel with additives, e.g. anti-
knocking agents}
- 2007/749 {involving means responsive to the octane
level, e.g. octane sensor, knock engine}
- 7/76 . . Arrangements of devices for purifying liquids
to be transferred, e.g. of filters, of air or water
separators
- 7/763 . . . {of air separators}
- 7/766 . . . {of water separators}
- 7/78 . . Arrangements of storage tanks, reservoirs or pipe-
lines
- 7/80 . . Arrangements of heating or cooling devices for
liquids to be transferred
- 7/82 . . . Heating only
- 7/84 . . Casings, cabinets or frameworks; Trolleys or like
movable supports
- 7/845 . . . {Trolleys or like movable supports}
- 7/86 . . Illuminating arrangements
- 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**
- 2210/00002 . . Purifying means
- 2210/00005 . . Filters
- 2210/00007 . . . for gas
- 2210/0001 . . . for liquid
- 2210/00013 . . Sterilising means
- 2210/00015 . . . UV radiation
- 2210/00018 . . . Membranes
- 2210/0002 . . . Distillators
- 2210/00023 . . . Oxygenators
- 2210/00026 . . . Heaters
- 2210/00028 . . Constructional details
- 2210/00031 . . Housing
- 2210/00034 . . . Modules
- 2210/00036 for use with or in refrigerators
- 2210/00039 . . . Panels
- 2210/00041 . . . Doors
- 2210/00044 . . . Insulation
- 2210/00047 . . Piping
- 2210/00049 . . . Pipes
- 2210/00052 with flow tranquilisers
- 2210/00055 with turbulent flow generators, e.g. vortices
- 2210/00057 adapted for being easily cleaned
- 2210/0006 . . . Manifolds
- 2210/00062 . . . Pipe joints
- 2210/00065 . . related to the use of drinking cups or glasses
- 2210/00068 . . . Means for filling simultaneously a plurality of
cups
- 2210/0007 . . . For use with partially pre-filled cups
- 2210/00073 . . . Cup cleaning devices
- 2210/00076 . . . Cup conveyors

B67D

- 2210/00078 . . . Cup dispensers
- 2210/00081 . . related to bartenders
- 2210/00083 . . . Access code recognition means
- 2210/00086 . . . Selector circuits
- 2210/00089 . . . Remote control means, e.g. by electromagnetic signals
- 2210/00091 . . . Bar management means
- 2210/00094 . . Ergonomics
- 2210/00097 . . . Handling of storage containers
- 2210/00099 . . Temperature control
- 2210/00102 . . . Heating only
- 2210/00104 . . . Cooling only
- 2210/00107 by spraying fluids on the inner or outer surfaces of the receptacles to be filled
- 2210/00111 The sprayed fluid being a liquid
- 2210/00112 The sprayed fluid being a gas
- 2210/00115 The sprayed fluid being a cryogen
- 2210/00118 . . . Heating and cooling
- 2210/0012 . . related to concentrate handling
- 2210/00123 . . . Preparing a mix of concentrates
- 2210/00125 . . . Treating or conditioning the concentrate, e.g. by heating, freezing
- 2210/00128 . . relating to outdoor use; movable; portable
- 2210/00131 . . . wearable by a person, e.g. as a backpack or helmet
- 2210/00133 . . . wheeled
- 2210/00136 vehicle carried
- 2210/00139 Trolleys
- 2210/00141 . . Other parts
- 2210/00144 . . . Magnets, e.g. used in valves or for stirring
- 2210/00146 . Component storage means
- 2210/00149 . . Fixed containers to be filled in situ
- 2210/00152 . . . Automatically
- 2210/00154 Level detected by a float
- 2210/00157 Level detected electrically by contact with sensors
- 2210/0016 . . Adapted for dispensing high viscosity products
- 2210/00163 . . Agitators
- 2210/00166 . . Heated tubes