

**CPC****COOPERATIVE PATENT CLASSIFICATION****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](#))

**B67D 1/00**

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

## B67D 1/0001

- {by squeezing collapsible or flexible storage containers ([B67D 1/0462](#) takes precedence)}

## B67D 1/0002

- {specially adapted to be used in microgravity conditions, e.g. in outer space}

## B67D 1/0003

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

## B67D 1/0004

- . {the beverage being stored in a container, e.g. bottle, cartridge, bag-in-box, bowl}

## B67D 1/0005

- . . {the apparatus comprising means for automatically controlling the amount to be dispensed}

## B67D 1/0006

- . . . . {based on the timed opening of a valve}

## B67D 1/0007

- . . . . {based on volumetric dosing}

## B67D 1/0008

- . . . . {based on weighing}

## B67D 1/0009

- . {the beverage being stored in an intermediate container connected to a supply}

## B67D 1/001

- . . {the apparatus comprising means for automatically controlling the amount to be dispensed}

## B67D 1/0011

- . . . . {based on the timed opening of a valve}

## B67D 1/0012

- . . . . {based on volumetric dosing}

## B67D 1/0013

- . . . . {based on weighing}

## B67D 1/0014

- . {the beverage being supplied from water mains}

## B67D 1/0015

- {the beverage being prepared by mixing at least two liquid components}

## B67D 1/0016

- . {the beverage being stored in an intermediate container before dispensing, i.e. pre-mix dispensers}

## B67D 1/0017

- . . {the apparatus comprising means for automatically controlling the amount to be dispensed}

## B67D 1/0018

- . . . . {based on the timed opening of a valve}

## B67D 1/0019

- . . . . {based on volumetric dosing}

## B67D 1/002

- . . . . {based on weighing}

## B67D 1/0021

- . {the components being mixed at the time of dispensing, i.e. post-mix dispensers}

## B67D 1/0022

- . . {the apparatus comprising means for automatically controlling the amount to be dispensed}

B67D 1/0023	. . . . {control of the amount of the mixture, i.e. after mixing}
B67D 1/0024	. . . . . {based on the timed opening of a valve}
B67D 1/0025	. . . . . {based on volumetric dosing}
B67D 1/0026	. . . . . {based on weighing}
B67D 1/0027	. . . . {control of the amount of one component, the amount of the other components(s) being dependent on that control}
B67D 1/0028	. . . . . {based on the timed opening of a valve}
B67D 1/0029	. . . . . {based on volumetric dosing}
B67D 1/003	. . . . . {by means of a dosing chamber}
B67D 1/0031	. . . . . {in the form of a metering pump}
B67D 1/0032	. . . . . {using flow-rate sensors}
B67D 1/0033	. . . . . {based on weighing}
B67D 1/0034	. . . . {for controlling the amount of each component}
B67D 1/0035	. . . . . {the controls being based on the same metering technics}
B67D 1/0036	. . . . . {based on the timed opening of valves}
B67D 1/0037	. . . . . {based on volumetric dosing}
B67D 1/0038	. . . . . {based on weighing}
B67D 1/0039	. . . . . {the controls involving at least two different metering technics}
B67D 1/004	. . {the diluent being supplied from water mains}
B67D 1/0041	. {Fully automated cocktail bars, i.e. apparatuses combining the use of packaged beverages, pre-mix and post-mix dispensers}
B67D 1/0042	. {Details of specific parts of the dispensers}
B67D 1/0043	. . {Mixing devices for liquids}
B67D 1/0044	. . . {for mixing inside the dispensing nozzle}
B67D 1/0045	. . . . {Venturi arrangements; Aspirators; Eductors}
B67D 1/0046	. . . . {Mixing chambers}
B67D 1/0047	. . . . . {with movable parts, e.g. for stirring}
B67D 1/0048	. . . . . {with baffles}
B67D 1/0049	. . . . . {with means for diverging streams}
B67D 1/005	. . . . . {with means for converging streams}
B67D 1/0051	. . . {for mixing outside the nozzle}
B67D 1/0052	. . . . {by means for directing respective streams together}
B67D 1/0053	. . . . {by stirring in the cup}
B67D 1/0054	. . . {Recirculation means}
B67D 1/0055	. . . . {with fountain effect}
B67D 1/0056	. . . . . {with illumination}
B67D 1/0057	. . {Carbonators}
B67D 1/0058	. . . {In-line carbonators}
B67D 1/0059	. . . . {in combination with a mixer tap (constructional features of the tap <a href="#">E03C 1/04</a> )}
B67D 1/006	. . . {Conventional carbonators}

B67D 1/0061	. . . {with cooling means}
B67D 1/0062	. . . . {inside the carbonator}
B67D 1/0063	. . . . . {Cooling coil}
B67D 1/0064	. . . . . {Cold plate}
B67D 1/0065	. . . . . {Ice bank}
B67D 1/0066	. . . . . {outside the carbonator}
B67D 1/0067	. . . . . {Cooling coil}
B67D 1/0068	. . . . . {Cooling bath}
B67D 1/0069	. . . {Details}
B67D 1/007	. . . . {Structure of the carbonating chamber}
B67D 1/0071	. . . . {Carbonating by injecting CO <sub>2</sub> in the liquid}
B67D 1/0072	. . . . . {through a diffuser, a bubbler}
B67D 1/0073	. . . . {Carbonating by spraying the liquid}
B67D 1/0074	. . . . {Automatic carbonation control}
B67D 1/0075	. . . . . {by sensing gas pressure}
B67D 1/0076	. . . . . {by sensing temperature}
B67D 1/0077	. . . . {Carbonator being specially adapted for adding a second gas to the CO <sub>2</sub> }
B67D 1/0078	. . {Ingredient cartridges}
B67D 1/0079	. . . {having their own dispensing means}
B67D 1/008	. . . {Gas cartridges or bottles}
B67D 1/0081	. . {Dispensing valves}
B67D 1/0082	. . . {entirely mechanical}
B67D 1/0083	. . . . {with means for separately dispensing a single or a mixture of drinks}
B67D 1/0084	. . . . . {Hand-held gun type valves}
B67D 1/0085	. . . {electro-mechanical}
B67D 1/0086	. . . . {Hand-held gun type valves}
B67D 2001/0087	. . . {being mounted on the dispenser housing}
B67D 2001/0088	. . . . {operated by push buttons}
B67D 2001/0089	. . . . {operated by lever means}
B67D 2001/009	. . . . {operated by cup detection}
B67D 2001/0091	. {Component storage means}
B67D 2001/0092	. . {Containers for gas, for e.g. CO <sub>2</sub> , N <sub>2</sub> }
B67D 2001/0093	. {Valves}
B67D 2001/0094	. . {Valve mountings in dispensers}
B67D 2001/0095	. {Constructional details}
B67D 2001/0096	. . {Means for pressurizing liquid}
B67D 2001/0097	. . . {using a pump}
B67D 2001/0098	. . . {using a gas}
B67D 1/02	. Beer engines or like manually-operable pumping apparatus

- B67D 1/025 . . {with means for carbonating the beverage, or for maintaining its carbonation}
- B67D 1/04 . Apparatus utilising compressed air or other gas acting directly or indirectly on beverages in storage containers
- B67D 1/0406 . . {with means for carbonating the beverage, or for maintaining its carbonation (B67D 1/0418 takes precedence)}
- B67D 1/0412 . . {the whole dispensing unit being fixed to the container}
- B67D 1/0418 . . . {comprising a CO<sub>2</sub> cartridge for dispensing and carbonating the beverage}
- B67D 1/0425 . . . {comprising an air pump system}
- B67D 1/0431 . . . . {power-operated}
- B67D 1/0437 . . . {comprising a gas pressure space within the container for the liquid}
- B67D 1/0443 . . . {comprising a gas generator (apparatus for generating gases in general B01J 7/00)}
- B67D 1/045 . . {using elastic bags and pistons actuated by air or other gas}
- B67D 1/0456 . . {Siphons, i.e. beverage containers under gas pressure without supply of further pressurised gas during dispensing}
- B67D 1/0462 . . {Squeezing collapsible or flexible beverage containers, e.g. bag-in-box containers}
- B67D 1/0468 . . {comprising means for the recovery of the gas acting on beverages}
- B67D 2001/0475 . . {Type of gas or gas mixture used, other than pure CO<sub>2</sub>}
- B67D 2001/0481 . . . {Single inert gas, e.g. N<sub>2</sub>}
- B67D 2001/0487 . . . {Mixture of gases, e.g. N<sub>2</sub> + CO<sub>2</sub>}
- B67D 2001/0493 . . . . {Air}
- B67D 1/06 . Mountings or arrangements of dispensing apparatus in or on shop or bar counters (shop or bar counters per se A47F 9/00)
- B67D 1/07 . Cleaning beverage-dispensing apparatus {(B67D 1/0834, B67D 1/0837 take precedence)}
- B67D 2001/075 . . {Sanitising or sterilising the apparatus}
- B67D 1/08 . Details
- B67D 1/0801 . . {of beverage containers, e.g. casks, kegs}
- B67D 1/0802 . . . {Dip tubes}
- B67D 1/0804 . . . {Shape or materials}
- B67D 1/0805 . . . {Openings for filling}
- B67D 1/0807 . . . {Openings for emptying, e.g. taped openings}
- B67D 1/0808 . . . {Closing means, e.g. bungholes, barrel bungs}
- B67D 1/0809 . . . {Opening means, e.g. means for assisting the opening}
- B67D 2001/0811 . . . {provided with coded information}
- B67D 2001/0812 . . . {Bottles, cartridges or similar containers}
- B67D 2001/0814 . . . . {for upside down use}
- B67D 2001/0815 . . . . . {with integral venting tube}
- B67D 2001/0817 . . . . . {with a venting orifice}
- B67D 2001/0818 . . . . {arranged in series}

B67D 2001/082	. . . . {arranged in parallel}
B67D 2001/0821	. . . . {having different compartments for different components}
B67D 2001/0822	. . . {Pressurised rigid containers, e.g. kegs, figals}
B67D 2001/0824	. . . . {with dip tubes}
B67D 2001/0825	. . . . {details of dip tube}
B67D 2001/0827	. . . {Bags in box}
B67D 2001/0828	. . . . {in pressurised housing}
B67D 1/0829	. . {Keg connection means}
B67D 1/0831	. . . {combined with valves}
B67D 1/0832	. . . . {with two valves disposed concentrically}
B67D 1/0834	. . . . . {and having means for admitting a cleaning fluid}
B67D 1/0835	. . . . {with one valve}
B67D 1/0837	. . . . . {and having means for admitting a cleaning fluid}
B67D 1/0838	. . . . {comprising means for preventing blow-out on disassembly of the spear valve}
B67D 1/0839	. . . {Automatically operating handles for locking or unlocking a connector to or from a keg}
B67D 1/0841	. . . {Details}
B67D 1/0842	. . . . {Multiple connectors, e.g. for simultaneously connecting several containers}
B67D 1/0844	. . . . {for containers in crates}
B67D 1/0845	. . . . {Security means}
B67D 1/0847	. . . . {Tamper-evident devices}
B67D 1/0848	. . . . {Locking means}
B67D 1/0849	. . . . {provided with means to open the keg valve when gas pressure is applied to it}
B67D 1/0851	. . . . {composed of a piston and ram assembly, e.g. tappet}
B67D 1/0852	. . . . {composed of a membrane and ram assembly}
B67D 1/0854	. . . . {provided with means to open the keg valve when water pressure is applied to it}
B67D 1/0855	. . {concerning the used flowmeter ( <a href="#">flowmeter per se G01F 1/00</a> , <a href="#">G01F 3/00</a> )}
B67D 1/0857	. . {Cooling arrangements ( <a href="#">cooling systems per se F25B</a> )}
B67D 1/0858	. . . {using compression systems}
B67D 1/0859	. . . . {the evaporator being in direct heat contact with the beverage, e.g. placed inside a beverage container}
B67D 1/0861	. . . . {the evaporator acting through an intermediate heat transfer means}
B67D 1/0862	. . . . . {in the form of a cold plate or a cooling block}
B67D 1/0864	. . . . . {in the form of a cooling bath}
B67D 1/0865	. . . . . {by circulating a cooling fluid along beverage supply lines, e.g. pythons}
B67D 1/0867	. . . . . {the cooling fluid being a liquid}
B67D 1/0868	. . . . . {the cooling fluid being a gas}

B67D 1/0869	. . . {using solid state elements, e.g. Peltier cells}
B67D 1/0871	. . {Level gauges for beverage storage containers ( <a href="#">level indicators in general G01F</a> )}
B67D 1/0872	. . {Aesthetics, advertising}
B67D 1/0874	. . . {Means for illuminating the handle of taps or faucets}
B67D 1/0875	. . . {Means for illuminating the beverage to be dispensed}
B67D 1/0877	. . . {Advertising means ( <a href="#">advertising in general G09F</a> )}
B67D 1/0878	. . {Safety, warning or controlling devices ( <a href="#">B67D 1/12</a> takes precedence)}
B67D 1/0879	. . . {Doors for protecting the vessel to be filled}
B67D 1/0881	. . . {Means for counting the doses of dispensed liquid}
B67D 1/0882	. . . {Devices for controlling the dispensing conditions}
B67D 1/0884	. . . . {Means for controlling the parameters of the state of the liquid to be dispensed, e.g. temperature, pressure}
B67D 1/0885	. . . . {Means for dispensing under specific atmospheric conditions, e.g. under inert gas}
B67D 1/0887	. . . {Sanitary protection means for dispensing nozzles or taps, e.g. outlet closures}
B67D 1/0888	. . {Means comprising electronic circuitry (e.g. control panels, switching or controlling means)}
B67D 1/0889	. . {Supports}
B67D 1/0891	. . . {for the beverage container}
B67D 1/0892	. . . . {the beverage container being stored in a rack or shelf}
B67D 1/0894	. . . {for the vessel to be filled}
B67D 1/0895	. . {Heating arrangements}
B67D 1/0897	. . . {located in nozzles}
B67D 1/0898	. . . {Beer warmers ( <a href="#">B67D 1/0897</a> takes precedence)}
B67D 1/10	. . Pump mechanism ( <a href="#">in general F04</a> )
B67D 1/101	. . . {of the piston-cylinder type}
B67D 1/102	. . . . {for one liquid component only}
B67D 1/103	. . . . . {the piston being driven by a liquid or a gas}
B67D 1/104	. . . . . {by the liquid to be dispensed}
B67D 1/105	. . . . {for two or more components}
B67D 1/106	. . . . . {the piston being driven by a liquid or a gas}
B67D 1/107	. . . . . {by one of the components to be dispensed}
B67D 1/108	. . . {of the peristaltic type}
B67D 1/12	. . Flow or pressure control devices or systems {e.g. valves, gas pressure control, level control in storage containers}
B67D 1/1202	. . . {Flow control, e.g. for controlling total amount or mixture ratio of liquids to be dispensed}
B67D 1/1204	. . . . {for ratio control purposes}
B67D 1/1206	. . . . . {Flow detectors}
B67D 1/1209	. . . . . {combined with a timer}

B67D 1/1211	. . . . .	{Flow rate sensor}
B67D 1/1213	. . . . .	{combined with a timer}
B67D 1/1215	. . . . .	{combined with a counter}
B67D 1/1218	. . . . .	{modulating the opening of a valve}
B67D 1/122	. . . . .	{modulating a pumping rate}
B67D 1/1222	. . . . .	{Pressure gauges}
B67D 1/1225	. . . . .	{Weighing}
B67D 1/1227	. . . . .	{the cup to be filled}
B67D 1/1229	. . . . .	{the storage container}
B67D 1/1231	. . . . .	{Metering pumps}
B67D 1/1234	. . . . .	{to determine the total amount}
B67D 1/1236	. . . . .	{comprising means for detecting the size of vessels to be filled}
B67D 1/1238	. . . . .	{comprising means for detecting the liquid level in vessels to be filled e.g. using ultrasonic waves, optical reflexion, probes}
B67D 1/124	. . . . .	{the flow being started or stopped by means actuated by the vessel to be filled, e.g. by switches, weighing}
B67D 1/1243	. . . . .	{comprising flow or pressure sensors, e.g. for controlling pumps}
B67D 1/1245	. . . . .	{Change-over devices, i.e. connecting a flow line from an empty container to a full one}
B67D 1/1247	. . . . .	{Means for detecting the presence or absence of liquid}
B67D 1/125	. . . . .	{Safety means, e.g. over-pressure valves}
B67D 1/1252	. . . . .	{Gas pressure control means, e.g. for maintaining proper carbonation (for beer engines <a href="#">B67D 1/025</a> )}
B67D 2001/1254	. . . . .	{comprising means for making a mixture of gases}
B67D 1/1256	. . . . .	{Anti-dripping devices ( <a href="#">Drip trays B67D 1/16</a> )}
B67D 2001/1259	. . . . .	{Fluid level control devices}
B67D 2001/1261	. . . . .	{the level being detected mechanically}
B67D 2001/1263	. . . . .	{the level being detected electrically}
B67D 2001/1265	. . . . .	{Pressure switches}
B67D 2001/1268	. . . . .	{Capacitors}
B67D 1/127	. . . . .	{Froth control ( <a href="#">B67D 1/1411</a> takes precedence)}
B67D 1/1272	. . . . .	{preventing froth}
B67D 1/1275	. . . . .	{promoting froth}
B67D 1/1277	. . . . .	{Flow control valves}
B67D 1/1279	. . . . .	{regulating the flow}
B67D 1/1281	. . . . .	{responsive to pressure}
B67D 1/1284	. . . . .	{Ratio control}
B67D 1/1286	. . . . .	{by mechanical construction}
B67D 1/1288	. . . . .	{Multi-chamber piston pumps (construction of pumps: <a href="#">B67D 1/10</a> )}
B67D 1/129	. . . . .	{Means for changing the ratio by acting on structural parts}
B67D 1/1293	. . . . .	{Means for changing the ratio by acting on commands}



B67D 1/1295	. . . . {Ratio defined by setting flow controllers}
B67D 1/1297	. . . . {Ratio defined by setting of timers}
B67D 1/14	. . . Reducing valves or control taps
B67D 1/1405	. . . . {Control taps}
B67D 1/1411	. . . . . {Means for controlling the build-up of foam in the container to be filled}
B67D 1/1416	. . . . . {comprising foam inducing means}
B67D 1/1422	. . . . . {comprising foam avoiding means}
B67D 1/1427	. . . . . {by rotating the container to be filled}
B67D 1/1433	. . . . . {by delivering the beverage using a helical movement}
B67D 1/1438	. . . . . {comprising a valve shutter movable in a direction parallel to the valve seat, e.g. sliding or rotating}
B67D 1/1444	. . . . . {the valve shutter being rotated}
B67D 1/145	. . . . . {comprising a valve shutter movable in a direction perpendicular to the valve seat}
B67D 1/1455	. . . . . {the valve shutter being opened in the same direction as the liquid flow}
B67D 1/1461	. . . . . {the valve shutter being integral with a compensator}
B67D 1/1466	. . . . . {the valve shutter being opened in a direction opposite to the liquid flow}
B67D 1/1472	. . . . . {the valve shutter being integral with a compensator}
B67D 1/1477	. . . . . {Devices for assisting tap handling, e.g. levers}
B67D 2001/1483	. . . . {electrically or electro-mechanically operated}
B67D 2001/1488	. . . . {pneumatically operated}
B67D 2001/1494	. . . . {Taps with means for adjusting the position of a compensator from outside}
B67D 1/16	. . Devices for collecting spilled beverages
B67D 1/165	. . . {and re-injecting them in the dispensing line}
<b>B67D 3/00</b>	<b>Apparatus or devices for controlling flow of liquids under gravity from storage containers for dispensing purposes (separating and dispensing metered quantities of liquids <a href="#">G01F</a>)</b>
B67D 3/0003	. {provided with automatic fluid control means}
B67D 3/0006	. . {responsive to coded information provided on the neck or spout of the storage container, e.g. bar-code, magnets or transponder}
B67D 3/0009	. {provided with cooling arrangements ( <a href="#">cooling per se F25</a> )}
B67D 3/0012	. {provided with mixing devices}
B67D 3/0016	. . {Mixing valves or taps}
B67D 3/0019	. {using ingredient cartridges}
B67D 3/0022	. {provided with heating arrangements}
B67D 3/0025	. {provided with dispensing valves actuated by the receptacle to be filled ( <a href="#">B67D 3/02</a> takes precedence)}
B67D 3/0029	. {provided with holders for bottles or similar containers}



- B67D 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}
- B67D 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}
- B67D 3/0038 . {the liquid being stored in an intermediate container prior to dispensing}
- B67D 3/0041 . {with provisions for metering the liquid to be dispensed}
- B67D 3/0045 . . {by filling a predetermined volume before dispensing}
- B67D 3/0048 . {using siphoning arrangements}
- B67D 3/0051 . {dispensing by tilting}
- B67D 3/0054 . {Mounting or arrangements of dispensing apparatus in shops or bar counters}
- B67D 3/0058 . {Details}
- B67D 3/0061 . . {of liquid containers, e.g. filling, emptying, closing or opening means}
- B67D 3/0064 . . . {Dip tubes}
- B67D 3/0067 . . . {relating to shape or materials, e.g. bag-in-box packages [BIB], pouches}
- B67D 3/007 . . . {containers with adjustable volume}
- B67D 3/0074 . . {Safety or warning devices}
- B67D 3/0077 . . {Electronic circuitry}
- B67D 3/008 . . {Supports}
- B67D 3/0083 . . . {for the liquid container}
- B67D 3/0087 . . . . {the beverage container being stored in a rack or shelf}
- B67D 3/009 . . . {for the vessel to be filled}
- B67D 3/0093 . . {Level indicators}
- B67D 3/0096 . . {Aesthetics, advertising}
- B67D 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
- B67D 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](#))}
- B67D 3/041 . . {operated by pinching action on flexible tubes}
- B67D 3/042 . . {operated by deforming a membrane-like closing element}
- B67D 3/043 . . {with a closing element having a linear movement, in a direction perpendicular to the seat}
- B67D 3/044 . . . {and venting means operated automatically with the tap}
- B67D 3/045 . . {with a closing element having a linear movement, in a direction parallel to the seat}
- B67D 3/046 . . . {and venting means operated automatically with the tap}
- B67D 3/047 . . {with a closing element having a rotational movement}
- B67D 3/048 . . . {and venting means operated automatically with the tap}

<b>B67D 7/00</b>	<b>Apparatus or devices for transferring liquids from bulk storage containers or reservoirs into vehicles or into portable containers, e.g. for retail sale purposes</b> (general disposition of plant in stations for supplying fuel to vehicles <a href="#">B60S 5/02</a> ; for filling or emptying locomotive water tanks, e.g. water columns, <a href="#">B61K 11/00</a> ; for refuelling aircraft during flight <a href="#">B64D 39/00</a> ; liquid- handling ground installations specially adapted for fuelling stationary aircraft <a href="#">B64F 1/28</a> )
B67D 7/002	. {using articulated pipes}
B67D 7/005	. {Spouts}
B67D 7/007	. {using siphoning arrangements}
B67D 7/02	. for transferring liquids other than fuel or lubricants
B67D 7/0205	. . {by manually operable pumping apparatus (Hand-held apparatus with pumps for dispensing or spraying liquids or fluent materials <a href="#">B05B 11/00</a> )}
B67D 7/0211	. . . {with pump locking means}
B67D 7/0216	. . {by squeezing collapsible or flexible storage containers ( <a href="#">B67D 7/0255</a> takes precedence; for dispensing beverages on draught <a href="#">B67D 1/0001</a> )}
B67D 7/0222	. . . {the dispensed quantity of liquid being replaced by air sucked through the dispensing opening}
B67D 7/0227	. . {by an ejection plunger ( <a href="#">B67D 7/0238</a> takes precedence)}
B67D 7/0233	. . . {the plunger being gas driven}
B67D 7/0238	. . {utilising compressed air or other gas acting directly or indirectly on liquids in storage containers (for dispensing beverages on draught <a href="#">B67D 1/04</a> )}
B67D 7/0244	. . . {by using elastic expandable bags}
B67D 7/025	. . . . {specially adapted for transferring liquids of high purity}
B67D 7/0255	. . . {squeezing collapsible or flexible storage containers (for dispensing beverages on draught <a href="#">B67D 1/0462</a> )}
B67D 7/0261	. . . . {specially adapted for transferring liquids of high purity}
B67D 7/0266	. . . {by gas acting directly on the liquid}
B67D 7/0272	. . . . {specially adapted for transferring liquids of high purity}
B67D 7/0277	. . {using negative pressure}
B67D 7/0283	. . . {specially adapted for transferring liquids of high purity}
B67D 7/0288	. . {Container connection means (for dispensing beverages on draught <a href="#">B67D 1/0829</a> )}
B67D 7/0294	. . . {Combined with valves}
B67D 7/04	. for transferring fuels, lubricants or mixed fuels and lubricants
B67D 7/0401	. . {arrangements for automatically fuelling vehicles, i.e. without human intervention}
B67D 2007/0403	. . . {Fuelling robots}
B67D 2007/0405	. . . . {Opening devices}
B67D 2007/0407	. . . . . {for fuel tank flaps}
B67D 2007/0409	. . . . . {using vacuum cups}
B67D 2007/0411	. . . . . {using grippers}
B67D 2007/0413	. . . . . {using air blast}
B67D 2007/0415	. . . . . {for filler caps}

B67D 2007/0417	. . . .	{Manipulator arms}
B67D 2007/0419	. . . .	{Fuelling nozzles}
B67D 2007/0421	. . . . .	{with locking devices}
B67D 2007/0423	. . . .	{Fuelling hoses}
B67D 2007/0425	. . . . .	{comprising a single hose for several fuels}
B67D 2007/0426	. . . . .	{comprising several hoses for several fuels}
B67D 2007/0428	. . . . .	{having devices to avoid a mix up of different fuels}
B67D 2007/043	. . . .	{Moveable}
B67D 2007/0432	. . . . .	{according to a planar coordinate system}
B67D 2007/0434	. . . . .	{with the ability to compensate movements of the car during filling}
B67D 2007/0436	. . . . .	{according to a spatial coordinate system}
B67D 2007/0438	. . . . .	{with the ability to compensate movements of the car during filling}
B67D 2007/044	. . .	{Customer interfaces}
B67D 2007/0442	. . . .	{interface for orders and payments}
B67D 2007/0444	. . .	{Sensors}
B67D 2007/0446	. . . .	{measuring physical properties of the fluid to be dispensed}
B67D 2007/0448	. . . . .	{Density}
B67D 2007/0449	. . . . .	{Viscosity}
B67D 2007/0451	. . . . .	{Temperature}
B67D 2007/0453	. . . .	{recognising the fuel to be dispensed}
B67D 2007/0455	. . . .	{recognising the position}
B67D 2007/0457	. . . . .	{of the car}
B67D 2007/0459	. . . . .	{by interrogating a transponder}
B67D 2007/0461	. . . . .	{by calculating from a reference position, e.g the car's silhouette, reference marks}
B67D 2007/0463	. . . . .	{optically}
B67D 2007/0465	. . . . .	{by GPS}
B67D 2007/0467	. . . . .	{of the fuel tank flap and/or fuel tank opening}
B67D 2007/0469	. . . . .	{by interrogating a transponder}
B67D 2007/0471	. . . . .	{by calculating from a reference position, e.g the car's silhouette, reference marks}
B67D 2007/0473	. . . . .	{optically}
B67D 2007/0474	. . . . .	{of the filling nozzle relative to the fuel tank opening, e.g. engagement between nozzle and tank opening}
B67D 7/0476	. .	{Vapour recovery systems}
B67D 7/0478	. . .	{constructional features or components (vapour recovery nozzles <a href="#">B67D 7/54</a> )}
B67D 7/048	. . . .	{Vapour flow control means, e.g. valves, pumps}
B67D 7/0482	. . . . .	{using pumps driven at different flow rates}
B67D 7/0484	. . . . .	{Liquid jet pumps, e.g. venturis}

B67D 7/0486	. . . . . {Pumps driven in response to electric signals indicative of pressure, temperature or liquid flow}
B67D 7/0488	. . . . {Means for preventing the formation of condensation on, or for removing condensation from, vapour recovery lines}
B67D 7/049	. . . . {Vapour recovery methods, e.g. condensing the vapour}
B67D 7/0492	. . . . {Vapour storing means, e.g. dedicated ullage spaces, separate tanks}
B67D 2007/0494	. . . . {Means for condensing the vapours and reintroducing them into the storage tanks}
B67D 7/0496	. . . {Performance test devices therefor}
B67D 7/0498	. . {Arrangements specially adapted for transferring biofuels, e.g. ethanol-gasoline mixture}
B67D 7/06	. Details or accessories
B67D 7/061	. . {Means for transferring liquids from a chosen level of a storage container}
B67D 7/062	. . . {from the free surface level of the liquid}
B67D 7/064	. . {Drive-off preventing means, e.g. in case of non-payment}
B67D 7/065	. . . {acting on the vehicle}
B67D 7/067	. . . {using communication means}
B67D 7/068	. . . {using imaging means, e.g. cameras}
B67D 7/08	. . Arrangements of devices for controlling, indicating, metering or registering quantity or price of liquid transferred (arrangement of flow- or pressure-control valves <a href="#">B67D 7/36</a> ; computing, calculating, counting <a href="#">G06</a> ; coin-freed apparatus for dispensing fluids <a href="#">G07F 13/00</a> ; prepayment devices for metering liquids <a href="#">G07F 15/00</a> )
B67D 7/085	. . . {Testing or calibrating apparatus therefore (testing or calibrating apparatus for measuring volume flow in general <a href="#">G01F 25/00</a> )}
B67D 7/10	. . . operated by keys, push-buttons or cash registers
B67D 7/103	. . . . {operated by keys}
B67D 7/106	. . . . {operated by push-buttons}
B67D 7/12	. . . operated by movement of delivery hose or nozzle or by devices associated therewith
B67D 7/14	. . . responsive to input of recorded programmed information, e.g. on punched cards
B67D 7/145	. . . . {by wireless communication means, e.g. RF, transponders or the like}
B67D 7/16	. . . Arrangements of liquid meters
B67D 7/163	. . . . {of fixed measuring chamber type}
B67D 7/166	. . . . . {comprising at least two chambers}
B67D 7/18	. . . . of piston type
B67D 7/20	. . . . of rotary type
B67D 7/22	. . . Arrangements of indicators or registers (indicating or recording in fluid meters <a href="#">G01F 15/06</a> )
B67D 7/221	. . . . {using electrical or electro-mechanical means ( <a href="#">B67D 7/224</a> takes precedence)}
B67D 7/222	. . . . . {involving digital counting}
B67D 7/224	. . . . . {involving price indicators}

B67D 7/225	. . . . . {combined with variators}
B67D 7/227	. . . . . {using electrical or electro-mechanical means}
B67D 7/228	. . . . . {using digital counting}
B67D 7/24	. . . . with means for producing or issuing a receipt or record of sale
B67D 7/243	. . . . . {using electrical or electro-mechanical means}
B67D 7/246	. . . . . {involving digital counting}
B67D 7/26	. . . . with resetting or zeroing means
B67D 7/263	. . . . . {using electrical or electro-mechanical means}
B67D 7/266	. . . . . {involving digital counting}
B67D 7/28	. . . with automatic means for reducing or intermittently interrupting flow before completion of delivery, e.g. to produce dribble feed
B67D 7/30	. . . with means for predetermining quantity of liquid to be transferred ( <a href="#">B67D 7/10</a> , <a href="#">B67D 7/14</a> take precedence)
B67D 7/301	. . . . {using mechanical means ( <a href="#">B67D 7/306</a> takes precedence)}
B67D 7/302	. . . . {using electrical or electro-mechanical means ( <a href="#">B67D 7/307</a> takes precedence)}
B67D 7/303	. . . . . {involving digital counting}
B67D 7/305	. . . . {in function of money to be spent therefor}
B67D 7/306	. . . . . {using mechanical means}
B67D 7/307	. . . . . {using electrical or electro-mechanical means}
B67D 7/308	. . . . . {involving digital counting}
B67D 7/32	. . Arrangements of safety or warning devices; Means for preventing unauthorised delivery of liquid
B67D 7/3209	. . . {relating to spillage or leakage, e.g. spill containments, leak detection ( <a href="#">leak detectors for underground fuel dispensing systems G01M 3/2892</a> )}
B67D 7/3218	. . . {relating to emergency shut-off means}
B67D 7/3227	. . . {relating to venting of a container during loading or unloading}
B67D 7/3236	. . . {relating to electrostatic charges}
B67D 7/3245	. . . {relating to the transfer method}
B67D 7/3254	. . . . {using a pressurised liquid acting directly or indirectly on the bulk of the liquid to be transferred}
B67D 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 <a href="#">B67D 7/0238</a> , <a href="#">B67D 7/72</a> )}
B67D 7/3272	. . . . {using pumps}
B67D 7/3281	. . . {Details}
B67D 2007/329	. . . . {Function indicator devices}
B67D 7/34	. . . Means for preventing unauthorised delivery of liquid
B67D 7/342	. . . . {by discriminating the kind of liquid by analysis or by physical properties, e.g. vapour-pressure}
B67D 7/344	. . . . {by checking a correct coupling or coded information}
B67D 7/346	. . . . . {by reading a code}

- B67D 7/348 . . . . . {by interrogating an information transmitter, e.g. a transponder (B67D 7/145 takes precedence)}
- B67D 7/36 . . Arrangements of flow- or pressure-control valves (associated with nozzles B67D 7/42)
- B67D 7/362 . . . {combined with over-fill preventing means (indicating or measuring liquid level G01F 23/00; level control G05D 9/00)}
- B67D 7/365 . . . . {using floats}
- B67D 7/367 . . . . . {the float acting pneumatically on a shut-off valve}
- B67D 7/38 . . Arrangements of hoses, e.g. operative connection with pump motor (hoses in general F16L 11/00)
- B67D 7/40 . . . Suspending, reeling or storing devices (supports for storing lengths of hoses, in general B65H 75/34)
- B67D 7/403 . . . . {the hose carrier comprising a sliding unit}
- B67D 7/406 . . . . {the hose carrier comprising a pivoting unit}
- B67D 7/42 . . Filling nozzles
- B67D 7/421 . . . {comprising protective covers, e.g. anti-splash attachments}
- B67D 7/423 . . . {specially adapted for blending several fluids (mixing devices B67D 7/74)}
- B67D 7/425 . . . {including components powered by electricity or light}
- B67D 7/426 . . . {including means for displaying information, e.g. for advertising (B67D 7/425 takes precedence)}
- B67D 7/428 . . . {for delivering at least two different liquids into separate containers}
- B67D 7/44 . . . automatically closing
- B67D 7/445 . . . . {after a predetermined time}
- B67D 7/46 . . . . when liquid in container to be filled reaches a predetermined level
- B67D 7/465 . . . . . {Electrical probes sensing the level of the liquid}
- B67D 7/48 . . . . . by making use of air suction through an opening closed by the rising liquid
- B67D 7/50 . . . . and provided with an additional hand lever
- B67D 7/52 . . . . and provided with additional flow-controlling valve means
- B67D 7/54 . . . with means for preventing escape of liquid or vapour or for recovering escaped liquid or vapour (B67D 7/44 takes precedence)
- B67D 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}
- B67D 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)
- B67D 7/565 . . . {for indicating end of flow, e.g. by optical or audible signals}
- B67D 7/58 . . Arrangements of pumps
- B67D 7/60 . . . manually operable
- B67D 7/62 . . . power operated
- B67D 7/64 . . . . of piston type
- B67D 7/645 . . . . . {Barrel pumps}

B67D 7/66	. . . . of rotary type
B67D 7/68	. . . submerged in storage tank or reservoir
B67D 7/70	. . . of two or more pumps in series or parallel
B67D 7/72	. . Devices for applying air or other gas pressure for forcing liquid to delivery point
B67D 7/725	. . . {using negative pressure}
B67D 7/74	. . Devices for mixing two or more different liquids to be transferred (coin-freed apparatus <a href="#">G07F 13/06</a> )
B67D 7/741	. . . {mechanically operated}
B67D 7/742	. . . . {involving mechanical counters, e.g. of clock-work type}
B67D 7/743	. . . {electrically or electro-mechanically operated}
B67D 7/744	. . . . {involving digital counting}
B67D 2007/745	. . . {for obtaining fuel of a given octane level}
B67D 2007/746	. . . . {by mixing different fuel grades or fuel and oil}
B67D 2007/747	. . . . . {involving means responsive to the octane level, e.g. octane sensor, knock engine}
B67D 2007/748	. . . . {by mixing fuel with additives, e.g. anti-knocking agents}
B67D 2007/749	. . . . . {involving means responsive to the octane level, e.g. octane sensor, knock engine}
B67D 7/76	. . Arrangements of devices for purifying liquids to be transferred, e.g. of filters, of air or water separators
B67D 7/763	. . . {of air separators}
B67D 7/766	. . . {of water separators}
B67D 7/78	. . Arrangements of storage tanks, reservoirs or pipe-lines
B67D 7/80	. . Arrangements of heating or cooling devices for liquids to be transferred
B67D 7/82	. . . Heating only
B67D 7/84	. . Casings, cabinets or frameworks; Trolleys or like movable supports
B67D 7/845	. . . {Trolleys or like movable supports}
B67D 7/86	. . Illuminating arrangements
<b>B67D 9/00</b>	<b>Apparatus or devices for transferring liquids when loading or unloading ships (<a href="#">ship-based equipment B63B 27/00</a>)</b>
B67D 9/02	. using articulated pipes
<b>B67D 99/00</b>	<b>Subject matter not provided for in other groups of this subclass</b>
<b>B67D 2210/00</b>	<b>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</b>
B67D 2210/00002	. Purifying means
B67D 2210/00005	. . Filters
B67D 2210/00007	. . . for gas
B67D 2210/0001	. . . for liquid



B67D 2210/00013	. .	Sterilising means
B67D 2210/00015	. . .	UV radiation
B67D 2210/00018	. . .	Membranes
B67D 2210/0002	. . .	Distillators
B67D 2210/00023	. . .	Oxygenators
B67D 2210/00026	. . .	Heaters
B67D 2210/00028	.	Constructional details
B67D 2210/00031	. .	Housing
B67D 2210/00034	. . .	Modules
B67D 2210/00036	. . . .	for use with or in refrigerators
B67D 2210/00039	. . .	Panels
B67D 2210/00041	. . .	Doors
B67D 2210/00044	. . .	Insulation
B67D 2210/00047	. .	Piping
B67D 2210/00049	. . .	Pipes
B67D 2210/00052	. . . .	with flow tranquilisers
B67D 2210/00055	. . . .	with turbulent flow generators, e.g. vortices
B67D 2210/00057	. . . .	adapted for being easily cleaned
B67D 2210/0006	. . .	Manifolds
B67D 2210/00062	. . .	Pipe joints
B67D 2210/00065	. .	related to the use of drinking cups or glasses
B67D 2210/00068	. . .	Means for filling simultaneously a plurality of cups
B67D 2210/0007	. . .	For use with partially pre-filled cups
B67D 2210/00073	. . .	Cup cleaning devices
B67D 2210/00076	. . .	Cup conveyors
B67D 2210/00078	. . .	Cup dispensers
B67D 2210/00081	. .	related to bartenders
B67D 2210/00083	. . .	Access code recognition means
B67D 2210/00086	. . .	Selector circuits
B67D 2210/00089	. . .	Remote control means, e.g. by electromagnetic signals
B67D 2210/00091	. . .	Bar management means
B67D 2210/00094	. .	Ergonomics
B67D 2210/00097	. . .	Handling of storage containers
B67D 2210/00099	. .	Temperature control
B67D 2210/00102	. . .	Heating only
B67D 2210/00104	. . .	Cooling only
B67D 2210/00107	. . . .	by spraying fluids on the inner or outer surfaces of the receptacles to be filled
B67D 2210/0011	. . . . .	The sprayed fluid being a liquid
B67D 2210/00112	. . . . .	The sprayed fluid being a gas

- B67D 2210/00115 . . . . . The sprayed fluid being a cryogen
- B67D 2210/00118 . . . Heating and cooling
- B67D 2210/0012 . . related to concentrate handling
- B67D 2210/00123 . . . Preparing a mix of concentrates
- B67D 2210/00125 . . . Treating or conditioning the concentrate, e.g. by heating, freezing
- B67D 2210/00128 . . relating to outdoor use; movable; portable
- B67D 2210/00131 . . . wearable by a person, e.g. as a backpack or helmet
- B67D 2210/00133 . . . wheeled
- B67D 2210/00136 . . . . vehicle carried
- B67D 2210/00139 . . . . Trolleys
- B67D 2210/00141 . . Other parts
- B67D 2210/00144 . . . Magnets, e.g. used in valves or for stirring
- B67D 2210/00146 . Component storage means
- B67D 2210/00149 . . Fixed containers to be filled in situ
- B67D 2210/00152 . . . Automatically
- B67D 2210/00154 . . . . Level detected by a float
- B67D 2210/00157 . . . . Level detected electrically by contact with sensors
- B67D 2210/0016 . . Adapted for dispensing high viscosity products
- B67D 2210/00163 . . Agitators
- B67D 2210/00166 . . Heated tubes