

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 E03C 1/04)}

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 ₂ 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 ₂ }
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 ₂ , N ₂ }
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 CO₂ 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 CO₂}
- B67D 2001/0481 . . . {Single inert gas, e.g. N₂}
- B67D 2001/0487 . . . {Mixture of gases, e.g. N₂ + CO₂}
- 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 (for pressurized containers L67D 1/00L20C10, L67D 1/00L20C20)}
- 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 (flowmeter per se G01F 1/00 , G01F 3/00)}
B67D 1/0857	..	{Cooling arrangements (cooling systems per se F25B)}
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 (level indicators in general G01F)}
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 (advertising in general G09F)}
B67D 1/0878	..	{Safety, warning or controlling devices (B67D 1/12 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 (B67D 1/0897 takes precedence)}
B67D 1/10	..	Pump mechanism (in general F04)
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 B67D 1/025)}
B67D 2001/1254	....	{comprising means for making a mixture of gases }
B67D 1/1256	...	{Anti-dripping devices (Drip trays B67D 1/16)}
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 (B67D 1/1411 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: B67D 1/10)}

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}

B67D 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](#))

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 (cooling per se F25)}
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 ([B67D 3/02 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}

- B67D 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](#))

- 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 [B05B 11/00](#))}
- B67D 7/0211 . . . { with pump locking means}
- B67D 7/0216 . . { by squeezing collapsible or flexible storage containers ([B67D 7/0255](#) takes precedence; for dispensing beverages on draught [B67D 1/0001](#))}
- B67D 7/0222 . . . { the dispensed quantity of liquid being replaced by air sucked through the dispensing opening}
- B67D 7/0227 . . { by an ejection plunger ([B67D 7/0238](#) 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 [B67D 1/04](#))}
- 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 [B67D 1/0462](#))}
- 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 [B67D 1/0829](#))}
- 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 B67D 7/54)}
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 B67D 7/36 ; computing, calculating, counting G06 ; coin-freed apparatus for dispensing fluids G07F 13/00 ; prepayment devices for metering liquids G07F 15/00)
B67D 7/085	...	{ Testing or calibrating apparatus therefore (testing or calibrating apparatus for measuring volume flow in general G01F 25/00)}
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 G01F 15/06)
B67D 7/221	....	{ using electrical or electro-mechanical means (B67D 7/224 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 (B67D 7/10 , B67D 7/14 take precedence)
B67D 7/301	....	{ using mechanical means (B67D 7/306 takes precedence)}
B67D 7/302	....	{ using electrical or electro-mechanical means (B67D 7/307 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 (leak detectors for underground fuel dispensing systems G01M 3/2892)}
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 B67D 7/0238 , B67D 7/72)}

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 [G07F 13/06](#))
- 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

- B67D 9/00** **Apparatus or devices for transferring liquids when loading or unloading ships** (ship-based equipment [B63B 27/00](#))
- B67D 9/02 . using articulated pipes

B67D 99/00**Subject matter not provided for in other groups of this subclass****B67D 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**

- 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