

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}
- 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 perse 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-freeed 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