

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 CO₂ 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 CO₂}
- 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. CO₂, N₂}
- 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 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