

ECLA EUROPEAN CLASSIFICATION

B67D

DISPENSING, DELIVERING OR TRANSFERRING LIQUIDS, NOT OTHERWISE PROVIDED FOR (cleaning pipes or tubes or systems of pipes or tubes [B08B9/02](#); 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) [C9502]

B67D1/00

Apparatus or devices for dispensing beverages on draught ([B67D3/00](#) takes precedence; apparatus for making beverages [A47J31/00](#))

- B67D1/00C . [N: by squeezing collapsible or flexible storage containers ([B67D1/04E](#) takes precedence)]
- B67D1/00D . [N: specially adapted to be used in microgravity conditions, e.g. in outer space]
- B67D1/00E . [N: the beverage being a single liquid ([B67D1/02](#), [B67D1/04](#) take precedence; drinking fountains [E03B9/20](#))] [N9903]
- B67D1/00E2 . . [N: the beverage being stored in a container, e.g. bottle, cartridge, bag-in-box, bowl] [N9903] [C0508]
- B67D1/00E2B . . . [N: the apparatus comprising means for automatically controlling the amount to be dispensed] [N9903]
- B67D1/00E2B2 [N: based on the timed opening of a valve] [N9903]
- B67D1/00E2B4 [N: based on volumetric dosing] [N9903]
- B67D1/00E2B6 [N: based on weighing] [N9903]
- B67D1/00E4 . . [N: the beverage being stored in an intermediate container connected to a supply] [N9903] [C0508]
- B67D1/00E4B . . . [N: the apparatus comprising means for automatically controlling the amount to be dispensed] [N9903]
- B67D1/00E4B2 [N: based on the timed opening of a valve] [N9903]
- B67D1/00E4B4 [N: based on volumetric dosing] [N9903]
- B67D1/00E4B6 [N: based on weighing] [N9903]
- B67D1/00E6 . . [N: the beverage being supplied from water mains] [N0508]
- B67D1/00F . [N: the beverage being prepared by mixing at least two liquid components] [N1204]
- B67D1/00F2 . . [N: the beverage being stored in an intermediate container before dispensing, i.e. pre-mix dispensers] [N9903]
- B67D1/00F2B . . . [N: the apparatus comprising means for automatically controlling the amount to be dispensed] [N9903]
- B67D1/00F2B2 [N: based on the timed opening of a valve] [N9903]
- B67D1/00F2B4 [N: based on volumetric dosing] [N9903]
- B67D1/00F2B6 [N: based on weighing] [N9903]
- B67D1/00F4 . . [N: the components being mixed at the time of dispensing, i.e. post-mix dispensers] [N9903]
- B67D1/00F4B . . . [N: the apparatus comprising means for automatically controlling the amount to

		be dispensed] [N9903]
B67D1/00F4B2	. . . .	[N: control of the amount of the mixture, i.e. after mixing] [N9903]
B67D1/00F4B2B	. . . . .	[N: based on the timed opening of a valve] [N9903]
B67D1/00F4B2C	. . . . .	[N: based on volumetric dosing] [N9903]
B67D1/00F4B2D	. . . . .	[N: based on weighing] [N9903]
B67D1/00F4B4	. . . . .	[N: control of the amount of one component, the amount of the other components(s) being dependent on that control] [N9903]
B67D1/00F4B4B	. . . . .	[N: based on the timed opening of a valve] [N9903]
B67D1/00F4B4C	. . . . .	[N: based on volumetric dosing] [N9903]
B67D1/00F4B4C2	. . . . .	[N: by means of a dosing chamber] [N9903]
B67D1/00F4B4C2B	. . . . .	{7 dots} [N: in the form of a metering pump] [N9903]
B67D1/00F4B4C4	. . . . .	[N: using flow-rate sensors] [N9903]
B67D1/00F4B4D	. . . . .	[N: based on weighing] [N9903]
B67D1/00F4B6	. . . . .	[N: for controlling the amount of each component] [N9903]
B67D1/00F4B6B	. . . . .	[N: the controls being based on the same metering technics] [N9903]
B67D1/00F4B6B2	. . . . .	[N: based on the timed opening of valves] [N9903]
B67D1/00F4B6B4	. . . . .	[N: based on volumetric dosing] [N9903]
B67D1/00F4B6B6	. . . . .	[N: based on weighing] [N9903]
B67D1/00F4B6C	. . . . .	[N: the controls involving at least two different metering technics] [N9903]
B67D1/00F6	. .	[N: the diluent being supplied from water mains] [N1204]
B67D1/00G	. .	[N: Fully automated cocktail bars, i.e. apparatuses combining the use of packaged beverages, pre-mix and post-mix dispensers] [N9903]
B67D1/00H	. .	[N: Details of specific parts of the dispensers] [N9903]
B67D1/00H2	. .	[N: Mixing devices for liquids] [C1205]
B67D1/00H2B	. . .	[N: for mixing inside the dispensing nozzle] [N9903]
B67D1/00H2B2	. . . .	[N: Venturi arrangements; Aspirators; Eductors] [N1204]
B67D1/00H2B4	. . . .	[N: Mixing chambers] [N1204]
B67D1/00H2B4B	. . . . .	[N: with movable parts, e.g. for stirring] [N1204]
B67D1/00H2B4D	. . . . .	[N: with baffles] [N1204]
B67D1/00H2B4F	. . . . .	[N: with means for diverging streams] [N1204]
B67D1/00H2B4H	. . . . .	[N: with means for converging streams] [N1204]
B67D1/00H2C	. . .	[N: for mixing outside the nozzle] [N9903]
B67D1/00H2C2	. . . .	[N: by means for directing respective streams together] [N1204]
B67D1/00H2C4	. . . .	[N: by stirring in the cup] [N1204]
B67D1/00H2D	. . .	[N: Recirculation means] [N1204]
B67D1/00H2D2	. . . .	[N: with fountain effect] [N1204]
B67D1/00H2D2B	. . . . .	[N: with illumination] [N1204]
B67D1/00H4	. .	[N: Carbonators] [N9903]
B67D1/00H4B	. . .	[N: In-line carbonators] [N9903]
B67D1/00H4B2	. . . .	[N: in combination with a mixer tap (constructional features of the tap E03C1/04)] [N0012] [C0101]
B67D1/00H4D	. . .	[N: Conventional carbonators] [N1204]

- B67D1/00H4F . . . [N: with cooling means] [N1204]
- B67D1/00H4F2 [N: inside the carbonator] [N1204]
- B67D1/00H4F2B [N: Cooling coil] [N1204]
- B67D1/00H4F2D [N: Cold plate] [N1204]
- B67D1/00H4F2F [N: Ice bank] [N1204]
- B67D1/00H4F4 [N: outside the carbonator] [N1204]
- B67D1/00H4F4B [N: Cooling coil] [N1204]
- B67D1/00H4F4D [N: Cooling bath] [N1204]
- B67D1/00H4H [N: Details] [N1204]
- B67D1/00H4H2 [N: Structure of the carbonating chamber] [N1204]
- B67D1/00H4H4 [N: Carbonating by injecting CO2 in the liquid] [N1204]
- B67D1/00H4H4B [N: through a diffuser, a bubbler] [N1204]
- B67D1/00H4H6 [N: Carbonating by spraying the liquid] [N1204]
- B67D1/00H4H8 [N: Automatic carbonation control] [N1204]
- B67D1/00H4H8B [N: by sensing gas pressure] [N1204]
- B67D1/00H4H8D [N: by sensing temperature] [N1204]
- B67D1/00H4H10 [N: Carbonator being specially adapted for adding a second gas to the CO2] [N1204]

- B67D1/00H6 . . . [N: Ingredient cartridges] [N9903]
- B67D1/00H6B [N: having their own dispensing means] [N9903]
- B67D1/00H6C [N: Gas cartridges or bottles] [N9903]
- B67D1/00H8 . . . [N: Dispensing valves] [N9903]
- B67D1/00H8B [N: entirely mechanical] [N9903]
- B67D1/00H8B2 [N: with means for separately dispensing a single or a mixture of drinks] [N9903]
- B67D1/00H8B2B [N: Hand-held gun type valves] [N9903]
- B67D1/00H8C [N: electro-mechanical] [N9903]
- B67D1/00H8C2 [N: Hand-held gun type valves] [N9903]

- B67D1/02 . . . Beer engines or like manually-operable pumping apparatus
- B67D1/02B . . . [N: with means for carbonating the beverage, or for maintaining its carbonation]

- B67D1/04 . . . Apparatus utilising compressed air or other gas acting directly or indirectly on beverages in storage containers
- B67D1/04A . . . [N: with means for carbonating the beverage, or for maintaining its carbonation (B67D1/04B2 takes precedence)]
- B67D1/04B . . . [N: the whole dispensing unit being fixed to the container] [N1204]
- B67D1/04B2 [N: comprising a CO2 cartridge for dispensing and carbonating the beverage]
- B67D1/04B4 [N: comprising an air pump system]
- B67D1/04B4B [N: power-operated]
- B67D1/04B6 [N: comprising a gas pressure space within the container for the liquid] [N0809]
- B67D1/04B8 [N: comprising a gas generator (apparatus for generating gases in general B01J7/00)] [N0908]
- B67D1/04C . . . [N: using elastic bags and pistons actuated by air or other gas] [C0710]

- B67D1/04D . . [N: Siphons, i.e. beverage containers under gas pressure without supply of further pressurised gas during dispensing]
- B67D1/04E . . [N: Squeezing collapsible or flexible beverage containers, e.g. bag-in-box containers]
- B67D1/04F . . [N: comprising means for the recovery of the gas acting on beverages]
- B67D1/06 . Mountings or arrangements of dispensing apparatus in or on shop or bar counters (shop or bar counters per se [A47F9/00](#))
- B67D1/07 . Cleaning beverage-dispensing apparatus [N: ([B67D1/08B2A1](#), [B67D1/08B2B1](#) take precedence)]
- B67D1/08 . Details
- B67D1/08A . . [N: of beverage containers, e.g. casks, kegs] [N0505]
- B67D1/08A2 . . . [N: Dip tubes (for pressurized containers [L67D1/00L20C10](#), [L67D1/00L20C20](#))] [N0505]
- B67D1/08A4 . . . [N: Shape or materials] [N1204]
- B67D1/08A6 . . . [N: Openings for filling] [N1204]
- B67D1/08A8 . . . [N: Openings for emptying, e.g. taped openings] [N1204]
- B67D1/08A10 . . . [N: Closing means, e.g. bungholes, barrel bungs] [N1204]
- B67D1/08A12 . . . [N: Opening means, e.g. means for assisting the opening] [N1204]
- B67D1/08B . . [N: Keg connection means] [C0505]
- B67D1/08B2 . . . [N: combined with valves] [C0505]
- B67D1/08B2A [N: with two valves disposed concentrically] [C0505]
- B67D1/08B2A1 [N: and having means for admitting a cleaning fluid] [C0505]
- B67D1/08B2B [N: with one valve] [C0505]
- B67D1/08B2B1 [N: and having means for admitting a cleaning fluid] [C0505]
- B67D1/08B2C [N: comprising means for preventing blow-out on disassembly of the spear valve] [N9708] [C0505]
- B67D1/08B4 . . . [N: Automatically operating handles for locking or unlocking a connector to or from a keg]
- B67D1/08B6 . . . [N: Details] [N1204]
- B67D1/08B6B [N: Multiple connectors, e.g. for simultaneously connecting several containers] [N1204]
- B67D1/08B6D [N: for containers in crates] [N1204]
- B67D1/08B6F [N: Security means] [N1204]
- B67D1/08B6H [N: Tamper-evident devices] [N1204]
- B67D1/08B6J [N: Locking means] [N1204]
- B67D1/08B6L [N: provided with means to open the keg valve when gas pressure is applied to it] [N1204]
- B67D1/08B6N [N: composed of a piston and ram assembly, e.g. tappet] [N1204]
- B67D1/08B6P [N: composed of a membrane and ram assembly] [N1204]
- B67D1/08B6R [N: provided with means to open the keg valve when water pressure is applied to it] [N1204]
- B67D1/08C . . [N: concerning the used flowmeter (flowmeter per se [G01F1/00](#), [G01F3/00](#))]
- B67D1/08D . . [N: Cooling arrangements (cooling systems per se [F25B](#))]

B67D1/08D2	. . .	[N: using compression systems] [N9905]
B67D1/08D2B	. . . .	[N: the evaporator being in direct heat contact with the beverage, e.g. placed inside a beverage container] [N9905]
B67D1/08D2C	. . . .	[N: the evaporator acting through an intermediate heat transfer means] [N9905]
B67D1/08D2C2	. . . . .	[N: in the form of a cold plate or a cooling block] [N0508]
B67D1/08D2C4	. . . . .	[N: in the form of a cooling bath] [N9905]
B67D1/08D2C6	. . . . .	[N: by circulating a cooling fluid along beverage supply lines, e.g. pythons] [N9905] [C0406]
B67D1/08D2C6B	. . . . .	[N: the cooling fluid being a liquid] [N0404]
B67D1/08D2C6D	. . . . .	[N: the cooling fluid being a gas] [N0404]
B67D1/08D4	. . .	[N: using solid state elements, e.g. Peltier cells] [N9905]
B67D1/08E	. .	[N: Level gauges for beverage storage containers (level indicators in general G01F)]
B67D1/08F	. .	[N: Aesthetics, advertising] [N1204]
B67D1/08F2	. . .	[N: Means for illuminating the handle of taps or faucets] [N1204]
B67D1/08F4	. . .	[N: Means for illuminating the beverage to be dispensed] [N1204]
B67D1/08F6	. . .	[N: Advertising means (advertising in general G09F)] [N1204]
B67D1/08H	. .	[N: Safety, warning or controlling devices (B67D1/12 takes precedence)] [N0404] [C0505]
B67D1/08H2	. . .	[N: Doors for protecting the vessel to be filled] [N0505]
B67D1/08H4	. . .	[N: Means for counting the doses of dispensed liquid] [N0505]
B67D1/08H6	. . .	[N: Devices for controlling the dispensing conditions] [N0505]
B67D1/08H6B	. . . .	[N: Means for controlling the parameters of the state of the liquid to be dispensed, e.g. temperature, pressure] [N0505]
B67D1/08H6D	. . . .	[N: Means for dispensing under specific atmospheric conditions, e.g. under inert gas] [N0505]
B67D1/08H8	. . .	[N: Sanitary protection means for dispensing nozzles or taps, e.g. outlet closures] [N0707]
B67D1/08J	. .	[N: Means comprising electronic circuitry (e.g. control panels, switching or controlling means)] [N0404]
B67D1/08K	. .	[N: Supports] [N0505]
B67D1/08K2	. . .	[N: for the beverage container] [N0505]
B67D1/08K2B	. . . .	[N: the beverage container being stored in a rack or shelf] [N1204]
B67D1/08K4	. . .	[N: for the vessel to be filled] [N0505]
B67D1/08L	. .	[N: Heating arrangements] [N0505]
B67D1/08L2	. . .	[N: located in nozzles] [N0505]
B67D1/08L4	. . .	[N: Beer warmers (B67D1/08L2 takes precedence)] [N0505]
B67D1/10	. .	Pump mechanism (in general F04)
B67D1/10B	. . .	[N: of the piston-cylinder type] [N9505]
B67D1/10B2	. . . .	[N: for one liquid component only] [N9505]
B67D1/10B2B	. . . . .	[N: the piston being driven by a liquid or a gas] [N9505]
B67D1/10B2B2	. . . . .	[N: by the liquid to be dispensed] [N9505]
B67D1/10B4	. . . .	[N: for two or more components] [N9505]
B67D1/10B4B	. . . . .	[N: the piston being driven by a liquid or a gas] [N9505]

B67D1/10B4B2	. . . . .	[N: by one of the components to be dispensed] [N9505]
B67D1/10D	. . .	[N: of the peristaltic type] [N0004]
B67D1/12	. .	Flow or pressure control devices or systems [N: e.g. valves, gas pressure control, level control in storage containers]
B67D1/12B	. . .	[N: Flow control, e.g. for controlling total amount or mixture ratio of liquids to be dispensed] [C1205]
B67D1/12B4	. . . . .	[N: for ratio control purposes] [N1204]
B67D1/12B4B	. . . . .	[N: Flow detectors] [N1204]
B67D1/12B4B2	. . . . .	[N: combined with a timer] [N1204]
B67D1/12B4D	. . . . .	[N: Flow rate sensor] [N1204]
B67D1/12B4D2	. . . . .	[N: combined with a timer] [N1204]
B67D1/12B4D4	. . . . .	[N: combined with a counter] [N1204]
B67D1/12B4D6	. . . . .	[N: modulating the opening of a valve] [N1204]
B67D1/12B4D8	. . . . .	[N: modulating a pumping rate] [N1204]
B67D1/12B4F	. . . . .	[N: Pressure gauges] [N1204]
B67D1/12B4H	. . . . .	[N: Weighing] [N1204]
B67D1/12B4H2	. . . . .	[N: the cup to be filled] [N1204]
B67D1/12B4H4	. . . . .	[N: the storage container] [N1204]
B67D1/12B4J	. . . . .	[N: Metering pumps] [N1204]
B67D1/12B6	. . . . .	[N: to determine the total amount] [N1204]
B67D1/12B6B	. . . . .	[N: comprising means for detecting the size of vessels to be filled] [N1204]
B67D1/12B6D	. . . . .	[N: comprising means for detecting the liquid level in vessels to be filled e.g. using ultrasonic waves, optical reflexion, probes] [N1204]
B67D1/12B6F	. . . . .	[N: the flow being started or stopped by means actuated by the vessel to be filled, e.g. by switches, weighing] [N1204]
B67D1/12B6H	. . . . .	[N: comprising flow or pressure sensors, e.g. for controlling pumps] [N1204]
B67D1/12D	. . .	[N: Change-over devices, i.e. connecting a flow line from an empty container to a full one]
B67D1/12E	. . .	[N: Means for detecting the presence or absence of liquid]
B67D1/12F	. . .	[N: Safety means, e.g. over-pressure valves]
B67D1/12G	. . .	[N: Gas pressure control means, e.g. for maintaining proper carbonation (for beer engines B67D1/02B)] [N9608]
B67D1/12H	. . .	[N: Anti-dripping devices (Drip trays B67D1/16)] [N0505]
B67D1/12L	. . .	[N: Froth control (B67D1/14B2 takes precedence)] [N0505]
B67D1/12L2	. . . . .	[N: preventing froth] [N0505]
B67D1/12L4	. . . . .	[N: promoting froth] [N0505]
B67D1/12M	. . .	[N: Flow control valves] [N1204]
B67D1/12M2	. . . . .	[N: regulating the flow] [N1204]
B67D1/12M2B	. . . . .	[N: responsive to pressure] [N1204]
B67D1/12N	. . .	[N: Ratio control] [N1204]
B67D1/12N2	. . . . .	[N: by mechanical construction] [N1204]
B67D1/12N2B	. . . . .	[N: Multi-chamber piston pumps (construction of pumps: B67D1/10)] [N1204]

B67D1/12N2D	. . . . .	[N: Means for changing the ratio by acting on structural parts] [N1204]
B67D1/12N2F	. . . . .	[N: Means for changing the ratio by acting on commands] [N1204]
B67D1/12N4	. . . . .	[N: Ratio defined by setting flow controllers] [N1204]
B67D1/12N6	. . . . .	[N: Ratio defined by setting of timers] [N1204]
B67D1/14	. . . . .	Reducing valves or control taps
B67D1/14B	. . . . .	[N: Control taps]
B67D1/14B2	. . . . .	[N: Means for controlling the build-up of foam in the container to be filled] [C0404]
B67D1/14B2B	. . . . .	[N: comprising foam inducing means] [N0404]
B67D1/14B2D	. . . . .	[N: comprising foam avoiding means] [N0404]
B67D1/14B2D2	. . . . .	{7 dots} [N: by rotating the container to be filled] [N0501]
B67D1/14B2D4	. . . . .	{7 dots} [N: by delivering the beverage using a helical movement] [N0501]
B67D1/14B4	. . . . .	[N: comprising a valve shutter movable in a direction parallel to the valve seat, e.g. sliding or rotating] [N0110]
B67D1/14B4B	. . . . .	[N: the valve shutter being rotated] [N0110]
B67D1/14B6	. . . . .	[N: comprising a valve shutter movable in a direction perpendicular to the valve seat] [N0110]
B67D1/14B6A	. . . . .	[N: the valve shutter being opened in the same direction as the liquid flow] [N0110]
B67D1/14B6A2	. . . . .	{7 dots} [N: the valve shutter being integral with a compensator] [N0110]
B67D1/14B6B	. . . . .	[N: the valve shutter being opened in a direction opposite to the liquid flow] [N0110]
B67D1/14B6B2	. . . . .	{7 dots} [N: the valve shutter being integral with a compensator] [N0110]
B67D1/14B8	. . . . .	[N: Devices for assisting tap handling, e.g. levers] [N0505]
B67D1/16	. . . . .	Devices for collecting spilled beverages
B67D1/16B	. . . . .	[N: and re-injecting them in the dispensing line] [N9804]

B67D3/00 **Apparatus or devices for controlling flow of liquids under gravity from storage containers for dispensing purposes** (separating and dispensing metered quantities of liquids [G01F](#))

B67D3/00B	. . . . .	[N: provided with automatic fluid control means]
B67D3/00B2	. . . . .	[N: responsive to coded information provided on the neck or spout of the storage container, e.g. bar-code, magnets or transponder] [N9608]
B67D3/00C	. . . . .	[N: provided with cooling arrangements (cooling perse F25)]
B67D3/00D	. . . . .	[N: provided with mixing devices]
B67D3/00D2	. . . . .	[N: Mixing valves or taps]
B67D3/00E	. . . . .	[N: using ingredient cartridges]
B67D3/00F	. . . . .	[N: provided with heating arrangements]
B67D3/00G	. . . . .	[N: provided with dispensing valves actuated by the receptacle to be filled (B67D3/02)]

takes precedence)]

- B67D3/00H . [N: provided with holders for bottles or similar containers]
- B67D3/00H2 . . [N: the bottle or container being held upside down and provided with a closure, e.g. a cap, adapted to cooperate with a feed tube] [N9712]
- B67D3/00H4 . . [N: 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] [N0605]
- B67D3/00K . [N: the liquid being stored in an intermediate container prior to dispensing] [N0501]
- B67D3/00L . [N: with provisions for metering the liquid to be dispensed] [N0607]
- B67D3/00L2 . . [N: by filling a predetermined volume before dispensing] [N0607]
- B67D3/00M . [N: using siphoning arrangements] [N0607]
- B67D3/00N . [N: dispensing by tilting] [N0607]
- B67D3/00P . [N: Mounting or arrangements of dispensing apparatus in shops or bar counters] [N0607]
- B67D3/00R . [N: Details] [N0607]
- B67D3/00R2 . . [N: of liquid containers, e.g. filling, emptying, closing or opening means] [N0607]
- B67D3/00R2A . . . [N: Dip tubes] [N0607]
- B67D3/00R2B . . . [N: relating to shape or materials, e.g. bag-in-box packages (BIB), pouches] [N1204]
- B67D3/00R2C . . . [N: containers with adjustable volume] [N0607]
- B67D3/00R4 . . [N: Safety or warning devices] [N0607]
- B67D3/00R6 . . [N: Electronic circuitry] [N0607]
- B67D3/00R8 . . [N: Supports] [N0607]
- B67D3/00R8A . . . [N: for the liquid container] [N0607]
- B67D3/00R8A2 [N: the beverage container being stored in a rack or shelf] [N1204]
- B67D3/00R8B . . . [N: for the vessel to be filled] [N0607]
- B67D3/00R10 . . [N: Level indicators] [N1204]
- B67D3/00R12 . . [N: Aesthetics, advertising] [N1204]
- B67D3/02 . Liquid-dispensing valves having operating members arranged to be pressed upwards, e.g. by the rims of receptacles held below the delivery orifice
- B67D3/04 . Liquid-dispensing taps or cocks adapted to seal and open tapping holes of casks, e.g. for beer [N: (closures with filling and discharging devices for containers [B65D47/00](#))]
- B67D3/04B . . [N: operated by pinching action on flexible tubes]
- B67D3/04C . . [N: operated by deforming a membrane-like closing element]
- B67D3/04D . . [N: with a closing element having a linear movement, in a direction perpendicular to the seat]
- B67D3/04D1 . . . [N: and venting means operated automatically with the tap]
- B67D3/04E . . [N: with a closing element having a linear movement, in a direction parallel to the seat]

- B67D3/04E1 . . . [N: and venting means operated automatically with the tap]
- B67D3/04F . . . [N: with a closing element having a rotational movement]
- B67D3/04F1 . . . [N: and venting means operated automatically with the tap]

- B67D7/00** **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 [B60S5/02](#); for filling or emptying locomotive water tanks, e.g. water columns, [B61K11/00](#); for refuelling aircraft during flight [B64D39/00](#); liquid- handling ground installations specially adapted for fuelling stationary aircraft [B64F1/28](#)) [N1007]

- B67D7/00B . [N: using articulated pipes] [N1007]
- B67D7/00C . [N: Spouts] [N1007]
- B67D7/00D . [N: using siphoning arrangements] [N1007]
- B67D7/02 . for transferring liquids other than fuel or lubricants [N1007]
- B67D7/02B . . [N: by manually operable pumping apparatus (Hand-held apparatus with pumps for dispensing or spraying liquids or fluent materials [B05B11/00](#))] [N1007]
- B67D7/02B2 . . . [N: with pump locking means] [N1007]
- B67D7/02C . . [N: by squeezing collapsible or flexible storage containers ([B67D7/02E4](#) takes precedence; for dispensing beverages on draught [B67D1/00C](#))] [N1007]
- B67D7/02C2 . . . [N: the dispensed quantity of liquid being replaced by air sucked through the dispensing opening] [N1007]
- B67D7/02D . . [N: by an ejection plunger ([B67D7/02E](#) takes precedence)] [N1007]
- B67D7/02D2 . . . [N: the plunger being gas driven] [N1204]
- B67D7/02E . . [N: utilising compressed air or other gas acting directly or indirectly on liquids in storage containers (for dispensing beverages on draught [B67D1/04](#))] [N1007]
- B67D7/02E2 . . . [N: by using elastic expandable bags] [N1007]
- B67D7/02E2B [N: specially adapted for transferring liquids of high purity] [N1007]
- B67D7/02E4 . . . [N: squeezing collapsible or flexible storage containers (for dispensing beverages on draught [B67D1/04E](#))] [N1007]
- B67D7/02E4B [N: specially adapted for transferring liquids of high purity] [N1007]
- B67D7/02E6 . . . [N: by gas acting directly on the liquid] [N1007]
- B67D7/02E6B [N: specially adapted for transferring liquids of high purity] [N1007]
- B67D7/02F . . [N: using negative pressure] [N1007]
- B67D7/02F2 . . . [N: specially adapted for transferring liquids of high purity] [N1007]
- B67D7/02G . . [N: Container connection means (for dispensing beverages on draught [B67D1/08B](#))] [N1007]
- B67D7/02G2 . . . [N: Combined with valves] [N1007]

- B67D7/04 . for transferring fuels, lubricants or mixed fuels and lubricants [N1007]
- B67D7/04A . . [N: arrangements for automatically fuelling vehicles, i.e. without human intervention] [N1007]
- B67D7/04C . . [N: Vapour recovery systems] [N1007]
- B67D7/04C1 . . . [N: constructional features or components (vapour recovery nozzles [B67D7/54](#))] [N1007]

- B67D7/04C1B [N: Vapour flow control means, e.g. valves, pumps] [N1007]
- B67D7/04C1B2 [N: using pumps driven at different flow rates] [N1007]
- B67D7/04C1B2B [N: Liquid jet pumps, e.g. venturis] [N1007]
- B67D7/04C1B2C [N: Pumps driven in response to electric signals indicative of pressure, temperature or liquid flow] [N1007]
- B67D7/04C1C [N: Means for preventing the formation of condensation on, or for removing condensation from, vapour recovery lines] [N1007]
- B67D7/04C1E [N: Vapour recovery methods, e.g. condensing the vapour] [N1204]
- B67D7/04C1G [N: Vapour storing means, e.g. dedicated ullage spaces, separate tanks] [N1204]
- B67D7/04C2 [N: Performance test devices therefor] [N1007]
- B67D7/04E . . . [N: Arrangements specially adapted for transferring biofuels, e.g. ethanol-gasoline mixture] [N1204]

- B67D7/06 . . . Details or accessories [N1007]
- B67D7/06B . . . [N: Means for transferring liquids from a chosen level of a storage container] [N1007]
- B67D7/06B2 [N: from the free surface level of the liquid] [N1007]
- B67D7/06C . . . [N: Drive-off preventing means, e.g. in case of non-payment] [N1007]
- B67D7/06C2 [N: acting on the vehicle] [N1007]
- B67D7/06C4 [N: using communication means] [N1007]
- B67D7/06C6 [N: using imaging means, e.g. cameras] [N1007]
- B67D7/08 . . . Arrangements of devices for controlling, indicating, metering or registering quantity or price of liquid transferred ([arrangement of flow- or pressure-control valves B67D7/36](#); [computing, calculating, counting G06](#); [coin-freed apparatus for dispensing fluids G07F13/00](#); [prepayment devices for metering liquids G07F15/00](#)) [N1007]
- B67D7/08B [N: Testing or calibrating apparatus therefore ([testing or calibrating apparatus for measuring volume flow in general G01F25/00](#))] [N1007]
- B67D7/10 operated by keys, push-buttons or cash registers [N1007]
- B67D7/10B [N: operated by keys] [N1007]
- B67D7/10C [N: operated by push-buttons] [N1007]
- B67D7/12 operated by movement of delivery hose or nozzle or by devices associated therewith [N1007]
- B67D7/14 responsive to input of recorded programmed information, e.g. on punched cards [N1007]
- B67D7/14B [N: by wireless communication means, e.g. RF, transponders or the like] [N1007]
- B67D7/16 Arrangements of liquid meters [N1007]
- B67D7/16B [N: of fixed measuring chamber type] [N1007]
- B67D7/16B2 [N: comprising at least two chambers] [N1007]
- B67D7/18 of piston type [N1007]
- B67D7/20 of rotary type [N1007]
- B67D7/22 Arrangements of indicators or registers ([indicating or recording in fluid meters G01F15/06](#)) [N1007]
- B67D7/22B [N: using electrical or electro-mechanical means ([B67D7/22C takes precedence](#))] [N1007]

B67D7/22B2	. . . . .	[N: involving digital counting] [N1007]
B67D7/22C	. . . . .	[N: involving price indicators] [N1007]
B67D7/22C2	. . . . .	[N: combined with variators] [N1007]
B67D7/22C4	. . . . .	[N: using electrical or electro-mechanical means] [N1007]
B67D7/22C4B	. . . . .	[N: using digital counting] [N1007]
B67D7/24	. . . . .	with means for producing or issuing a receipt or record of sale [N1007]
B67D7/24B	. . . . .	[N: using electrical or electro-mechanical means] [N1007]
B67D7/24B2	. . . . .	[N: involving digital counting] [N1007]
B67D7/26	. . . . .	with resetting or zeroing means [N1007]
B67D7/26B	. . . . .	[N: using electrical or electro-mechanical means] [N1007]
B67D7/26B2	. . . . .	[N: involving digital counting] [N1007]
B67D7/28	. . . . .	with automatic means for reducing or intermittently interrupting flow before completion of delivery, e.g. to produce dribble feed [N1007]
B67D7/30	. . . . .	with means for predetermining quantity of liquid to be transferred (B67D7/10 , B67D7/14 take precedence) [N1007]
B67D7/30B	. . . . .	[N: using mechanical means (B67D7/30D2 takes precedence)] [N1007]
B67D7/30C	. . . . .	[N: using electrical or electro-mechanical means (B67D7/30D4 takes precedence)] [N1007]
B67D7/30C2	. . . . .	[N: involving digital counting] [N1007]
B67D7/30D	. . . . .	[N: in function of money to be spent therefor] [N1007]
B67D7/30D2	. . . . .	[N: using mechanical means] [N1007]
B67D7/30D4	. . . . .	[N: using electrical or electro-mechanical means] [N1007]
B67D7/30D4B	. . . . .	[N: involving digital counting] [N1007]
B67D7/32	. . . . .	Arrangements of safety or warning devices; Means for preventing unauthorised delivery of liquid [N1007]
B67D7/32B	. . . . .	[N: relating to spillage or leakage, e.g. spill containments, leak detection (leak detectors for underground fuel dispensing systems G01M3/28G)] [N1007]
B67D7/32C	. . . . .	[N: relating to emergency shut-off means] [N1007]
B67D7/32D	. . . . .	[N: relating to venting of a container during loading or unloading] [N1007]
B67D7/32E	. . . . .	[N: relating to electrostatic charges] [N1007]
B67D7/32K	. . . . .	[N: relating to the transfer method] [N1007]
B67D7/32K2	. . . . .	[N: using a pressurised liquid acting directly or indirectly on the bulk of the liquid to be transferred] [N1007]
B67D7/32K4	. . . . .	[N: 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 B67D7/02E , B67D7/72)] [N1007]
B67D7/32K6	. . . . .	[N: using pumps] [N1007]
B67D7/32S	. . . . .	[N: Details] [N1204]
B67D7/34	. . . . .	Means for preventing unauthorised delivery of liquid [N1007]
B67D7/34B	. . . . .	[N: by discriminating the kind of liquid by analysis or by physical properties, e.g. vapour-pressure] [N1007]
B67D7/34C	. . . . .	[N: by checking a correct coupling or coded information] [N1007]
B67D7/34C2	. . . . .	[N: by reading a code] [N1007]
B67D7/34C4	. . . . .	[N: by interrogating an information transmitter, e.g. a transponder (B67D7/14B takes precedence)] [N1007]

- B67D7/36 . . Arrangements of flow- or pressure-control valves ([associated with nozzles B67D7/42](#)) [N1007]
- B67D7/36B . . . [N: combined with over-fill preventing means ([indicating or measuring liquid level G01F23/00](#); [level control G05D9/00](#))] [N1007]
- B67D7/36B2 [N: using floats] [N1007]
- B67D7/36B2B [N: the float acting pneumatically on a shut-off valve] [N1007]
- B67D7/38 . . Arrangements of hoses, e.g. operative connection with pump motor ([hoses in general F16L11/00](#)) [N1007]
- B67D7/40 . . . Suspending, reeling or storing devices ([supports for storing lengths of hoses, in general B65H75/34](#)) [N1007]
- B67D7/40B [N: the hose carrier comprising a sliding unit] [N1007]
- B67D7/40D [N: the hose carrier comprising a pivoting unit] [N1007]
- B67D7/42 . . Filling nozzles [N1007]
- B67D7/42B . . . [N: comprising protective covers, e.g. anti-splash attachments] [N1007]
- B67D7/42C . . . [N: specially adapted for blending several fluids ([mixing devices B67D7/74](#))] [N1007]
- B67D7/42E . . . [N: including components powered by electricity or light] [N1007]
- B67D7/42F . . . [N: including means for displaying information, e.g. for advertising ([B67D7/42E takes precedence](#))] [N1007]
- B67D7/42H . . . [N: for delivering at least two different liquids into separate containers] [N1007]
- B67D7/44 . . . automatically closing [N1007]
- B67D7/44B [N: after a predetermined time] [N1007]
- B67D7/46 when liquid in container to be filled reaches a predetermined level [N1007]
- B67D7/46B [N: Electrical probes sensing the level of the liquid] [N1007]
- B67D7/48 by making use of air suction through an opening closed by the rising liquid [N1007]
- B67D7/50 and provided with an additional hand lever [N1007]
- B67D7/52 and provided with additional flow-controlling valve means [N1007]
- B67D7/54 with means for preventing escape of liquid or vapour or for recovering escaped liquid or vapour ([B67D7/44 takes precedence](#)) [N1007]
- B67D7/56 . . Arrangements of flow-indicators, e.g. transparent compartments, windows, rotary vanes ([indicating or recording presence, absence or direction of movement G01P13/00](#)) [N1007]
- B67D7/56B . . . [N: for indicating end of flow, e.g. by optical or audible signals] [N1007]
- B67D7/58 . . Arrangements of pumps [N1007]
- B67D7/60 . . . manually operable [N1007]
- B67D7/62 . . . power operated [N1007]
- B67D7/64 of piston type [N1007]
- B67D7/64B [N: Barrel pumps] [N1204]
- B67D7/66 of rotary type [N1007]
- B67D7/68 submerged in storage tank or reservoir [N1007]
- B67D7/70 of two or more pumps in series or parallel [N1007]
- B67D7/72 . . Devices for applying air or other gas pressure for forcing liquid to delivery point [N1007]
- B67D7/72B . . . [N: using negative pressure] [N1007]

- B67D7/74 . . Devices for mixing two or more different liquids to be transferred ([coin-freeed apparatus G07F13/06](#)) [N1007]
- B67D7/74B . . . [N: mechanically operated] [N1007]
- B67D7/74B2 [N: involving mechanical counters, e.g. of clock-work type] [N1007]
- B67D7/74C [N: electrically or electro-mechanically operated] [N1007]
- B67D7/74C2 [N: involving digital counting] [N1007]
- B67D7/76 . . Arrangements of devices for purifying liquids to be transferred, e.g. of filters, of air or water separators [N1007]
- B67D7/76B . . . [N: of air separators] [N1007]
- B67D7/76C . . . [N: of water separators] [N1007]
- B67D7/78 . . Arrangements of storage tanks, reservoirs or pipe-lines [N1007]
- B67D7/80 . . Arrangements of heating or cooling devices for liquids to be transferred [N1007]
- B67D7/82 . . . Heating only [N1007]
- B67D7/84 . . Casings, cabinets or frameworks; Trolleys or like movable supports [N1007]
- B67D7/84B . . . [N: Trolleys or like movable supports] [N1007]
- B67D7/86 . . Illuminating arrangements [N1007]

- B67D9/00** **Apparatus or devices for transferring liquids when loading or unloading ships** ([ship-based equipment B63B27/00](#)) [N1007]

- B67D9/02 . . using articulated pipes [N1007]

- B67D99/00** **Subject matter not provided for in other groups of this subclass** [N1007]