

**CPC****COOPERATIVE PATENT CLASSIFICATION****B67D**

**DISPENSING, DELIVERING OR TRANSFERRING LIQUIDS, NOT OTHERWISE PROVIDED FOR** (cleaning pipes or tubes or systems of pipes or tubes [B08B 9/02](#); emptying or filling of bottles, jars, cans, casks, barrels, or similar containers, not otherwise provided for [B67C](#) ; water supply [E03](#) ; pipe systems [F17D](#) ; domestic hot-water supply systems [F24D](#) ; measuring volume, volume flow, mass flow or liquid level, metering by volume [G01F](#) ; coin-freed or like apparatus [G07F](#) )

**B67D 1/00**

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

- B67D 1/0001 . { by squeezing collapsible or flexible storage containers ([B67D 1/0462](#) takes precedence) }
- B67D 1/0002 . {specially adapted to be used in microgravity conditions, e.g. in outer space }
- B67D 1/0003 . {the beverage being a single liquid ([B67D 1/02](#), [B67D 1/04](#) take precedence; drinking fountains [E03B 9/20](#)) }
- B67D 1/0004 .. {the beverage being stored in a container, e.g. bottle, cartridge, bag-in-box, bowl }
- B67D 1/0005 ... {the apparatus comprising means for automatically controlling the amount to be dispensed }
- B67D 1/0006 .... {based on the timed opening of a valve }
- B67D 1/0007 .... {based on volumetric dosing }
- B67D 1/0008 .... {based on weighing }
- B67D 1/0009 .. {the beverage being stored in an intermediate container connected to a supply }
- B67D 1/001 ... {the apparatus comprising means for automatically controlling the amount to be dispensed }
- B67D 1/0011 .... {based on the timed opening of a valve }
- B67D 1/0012 .... {based on volumetric dosing }
- B67D 1/0013 .... {based on weighing }
- B67D 1/0014 .. {the beverage being supplied from water mains }
- B67D 1/0015 . { the beverage being prepared by mixing at least two liquid components }
- B67D 1/0016 .. {the beverage being stored in an intermediate container before dispensing, i.e. pre-mix dispensers }
- B67D 1/0017 ... {the apparatus comprising means for automatically controlling the amount to be dispensed }
- B67D 1/0018 .... {based on the timed opening of a valve }
- B67D 1/0019 .... {based on volumetric dosing }
- B67D 1/002 .... {based on weighing }
- B67D 1/0021 .. {the components being mixed at the time of dispensing, i.e. post-mix dispensers }
- B67D 1/0022 ... {the apparatus comprising means for automatically controlling the amount to be dispensed }
- B67D 1/0023 .... {control of the amount of the mixture, i.e. after mixing }

B67D 1/0024	.....	{based on the timed opening of a valve }
B67D 1/0025	.....	{based on volumetric dosing }
B67D 1/0026	.....	{based on weighing }
B67D 1/0027	....	{control of the amount of one component, the amount of the other components(s) being dependent on that control }
B67D 1/0028	.....	{based on the timed opening of a valve }
B67D 1/0029	.....	{based on volumetric dosing }
B67D 1/003	.....	{by means of a dosing chamber }
B67D 1/0031	.....	{in the form of a metering pump }
B67D 1/0032	.....	{using flow-rate sensors }
B67D 1/0033	.....	{based on weighing }
B67D 1/0034	....	{for controlling the amount of each component }
B67D 1/0035	.....	{the controls being based on the same metering technics }
B67D 1/0036	.....	{based on the timed opening of valves }
B67D 1/0037	.....	{based on volumetric dosing }
B67D 1/0038	.....	{based on weighing }
B67D 1/0039	.....	{the controls involving at least two different metering technics }
B67D 1/004	..	{ the diluent being supplied from water mains }
B67D 1/0041	.	{Fully automated cocktail bars, i.e. apparatuses combining the use of packaged beverages, pre-mix and post-mix dispensers }
B67D 1/0042	.	{Details of specific parts of the dispensers }
B67D 1/0043	..	{ Mixing devices for liquids }
B67D 1/0044	...	{for mixing inside the dispensing nozzle }
B67D 1/0045	....	{ Venturi arrangements; Aspirators; Eductors }
B67D 1/0046	....	{ Mixing chambers }
B67D 1/0047	.....	{ with movable parts, e.g. for stirring }
B67D 1/0048	.....	{ with baffles }
B67D 1/0049	.....	{ with means for diverging streams }
B67D 1/005	.....	{ with means for converging streams }
B67D 1/0051	...	{for mixing outside the nozzle }
B67D 1/0052	....	{ by means for directing respective streams together }
B67D 1/0053	....	{ by stirring in the cup }
B67D 1/0054	...	{ Recirculation means }
B67D 1/0055	....	{ with fountain effect }
B67D 1/0056	.....	{ with illumination }
B67D 1/0057	..	{Carbonators }
B67D 1/0058	...	{In-line carbonators }
B67D 1/0059	....	{in combination with a mixer tap (constructional features of the tap <a href="#">E03C 1/04</a> ) }
B67D 1/006	...	{ Conventional carbonators }
B67D 1/0061	...	{ with cooling means }
B67D 1/0062	....	{ inside the carbonator }

B67D 1/0063	.....	{ Cooling coil }
B67D 1/0064	.....	{ Cold plate }
B67D 1/0065	.....	{ Ice bank }
B67D 1/0066	....	{ outside the carbonator }
B67D 1/0067	.....	{ Cooling coil }
B67D 1/0068	.....	{ Cooling bath }
B67D 1/0069	...	{ Details }
B67D 1/007	....	{ Structure of the carbonating chamber }
B67D 1/0071	....	{ Carbonating by injecting CO <sub>2</sub> in the liquid }
B67D 1/0072	.....	{ through a diffuser, a bubbler }
B67D 1/0073	....	{ Carbonating by spraying the liquid }
B67D 1/0074	....	{ Automatic carbonation control }
B67D 1/0075	.....	{ by sensing gas pressure }
B67D 1/0076	.....	{ by sensing temperature }
B67D 1/0077	....	{ Carbonator being specially adapted for adding a second gas to the CO <sub>2</sub> }
B67D 1/0078	..	{Ingredient cartridges }
B67D 1/0079	...	{having their own dispensing means }
B67D 1/008	...	{Gas cartridges or bottles }
B67D 1/0081	..	{Dispensing valves }
B67D 1/0082	...	{entirely mechanical }
B67D 1/0083	....	{with means for separately dispensing a single or a mixture of drinks }
B67D 1/0084	.....	{Hand-held gun type valves }
B67D 1/0085	...	{electro-mechanical }
B67D 1/0086	....	{Hand-held gun type valves }
B67D 2001/0087	...	being mounted on the dispenser housing
B67D 2001/0088	....	operated by push buttons
B67D 2001/0089	....	operated by lever means
B67D 2001/009	....	operated by cup detection
B67D 2001/0091	.	Component storage means
B67D 2001/0092	..	Containers for gas, for e.g. CO <sub>2</sub> , N <sub>2</sub>
B67D 2001/0093	.	Valves
B67D 2001/0094	..	Valve mountings in dispensers
B67D 2001/0095	.	Constructional details
B67D 2001/0096	..	Means for pressurizing liquid
B67D 2001/0097	...	using a pump
B67D 2001/0098	...	using a gas
B67D 1/02	.	Beer engines or like manually-operable pumping apparatus
B67D 1/025	..	{with means for carbonating the beverage, or for maintaining its carbonation }
B67D 1/04	.	Apparatus utilising compressed air or other gas acting directly or indirectly on beverages in storage containers

- B67D 1/0406 .. {with means for carbonating the beverage, or for maintaining its carbonation ([B67D 1/0418](#) takes precedence) }
- B67D 1/0412 .. { the whole dispensing unit being fixed to the container }
- B67D 1/0418 ... {comprising a CO2 cartridge for dispensing and carbonating the beverage }
- B67D 1/0425 ... {comprising an air pump system }
- B67D 1/0431 .... {power-operated }
- B67D 1/0437 ... { comprising a gas pressure space within the container for the liquid }
- B67D 1/0443 ... { comprising a gas generator ([apparatus for generating gases in general B01J 7/00](#)) }
- B67D 1/045 .. { using elastic bags and pistons actuated by air or other gas }
- B67D 1/0456 .. {Siphons, i.e. beverage containers under gas pressure without supply of further pressurised gas during dispensing }
- B67D 1/0462 .. {Squeezing collapsible or flexible beverage containers, e.g. bag-in-box containers }
- B67D 1/0468 .. {comprising means for the recovery of the gas acting on beverages }
- B67D 2001/0475 .. Type of gas or gas mixture used, other than pure CO2
- B67D 2001/0481 ... Single inert gas, e.g. N2
- B67D 2001/0487 ... Mixture of gases, e.g. N2 + CO2
- B67D 2001/0493 .... Air
- B67D 1/06 . Mountings or arrangements of dispensing apparatus in or on shop or bar counters ([shop or bar counters per se A47F 9/00](#))
- B67D 1/07 . Cleaning beverage-dispensing apparatus { ([B67D 1/0834](#), [B67D 1/0837](#) take precedence) }
- B67D 2001/075 .. { Sanitising or sterilising the apparatus }
- B67D 1/08 . Details
- B67D 1/0801 .. {of beverage containers, e.g. casks, kegs }
- B67D 1/0802 ... {Dip tubes (for pressurized containers [L67D 1/00L20C10](#), [L67D 1/00L20C20](#)) }
- B67D 1/0804 ... { Shape or materials }
- B67D 1/0805 ... { Openings for filling }
- B67D 1/0807 ... { Openings for emptying, e.g. taped openings }
- B67D 1/0808 ... { Closing means, e.g. bungholes, barrel bungs }
- B67D 1/0809 ... { Opening means, e.g. means for assisting the opening }
- B67D 2001/0811 ... provided with coded information
- B67D 2001/0812 ... Bottles, cartridges or similar containers
- B67D 2001/0814 .... for upside down use
- B67D 2001/0815 ..... with integral venting tube
- B67D 2001/0817 ..... with a venting orifice
- B67D 2001/0818 .... arranged in series
- B67D 2001/082 .... arranged in parallel
- B67D 2001/0821 .... having different compartments for different components
- B67D 2001/0822 ... Pressurised rigid containers, e.g. kegs, figals
- B67D 2001/0824 .... with dip tubes
- B67D 2001/0825 .... details of dip tube

B67D 2001/0827	...	Bags in box
B67D 2001/0828	....	in pressurised housing
B67D 1/0829	..	{Keg connection means }
B67D 1/0831	...	{combined with valves }
B67D 1/0832	....	{with two valves disposed concentrically }
B67D 1/0834	.....	{and having means for admitting a cleaning fluid }
B67D 1/0835	....	{with one valve }
B67D 1/0837	.....	{and having means for admitting a cleaning fluid }
B67D 1/0838	....	{comprising means for preventing blow-out on disassembly of the spear valve }
B67D 1/0839	...	{Automatically operating handles for locking or unlocking a connector to or from a keg }
B67D 1/0841	...	{ Details }
B67D 1/0842	....	{ Multiple connectors, e.g. for simultaneously connecting several containers }
B67D 1/0844	....	{ for containers in crates }
B67D 1/0845	....	{ Security means }
B67D 1/0847	....	{ Tamper-evident devices }
B67D 1/0848	....	{ Locking means }
B67D 1/0849	....	{ provided with means to open the keg valve when gas pressure is applied to it }
B67D 1/0851	....	{ composed of a piston and ram assembly, e.g. tappet }
B67D 1/0852	....	{ composed of a membrane and ram assembly }
B67D 1/0854	....	{ provided with means to open the keg valve when water pressure is applied to it }
B67D 1/0855	..	{concerning the used flowmeter ( <a href="#">flowmeter per se G01F 1/00</a> , <a href="#">G01F 3/00</a> ) }
B67D 1/0857	..	{Cooling arrangements ( <a href="#">cooling systems per se F25B</a> ) }
B67D 1/0858	...	{using compression systems }
B67D 1/0859	....	{the evaporator being in direct heat contact with the beverage, e.g. placed inside a beverage container }
B67D 1/0861	....	{the evaporator acting through an intermediate heat transfer means }
B67D 1/0862	.....	{in the form of a cold plate or a cooling block }
B67D 1/0864	.....	{in the form of a cooling bath }
B67D 1/0865	.....	{by circulating a cooling fluid along beverage supply lines, e.g. pythons }
B67D 1/0867	.....	{the cooling fluid being a liquid }
B67D 1/0868	.....	{the cooling fluid being a gas }
B67D 1/0869	...	{using solid state elements, e.g. Peltier cells }
B67D 1/0871	..	{Level gauges for beverage storage containers ( <a href="#">level indicators in general G01F</a> ) }
B67D 1/0872	..	{ Aesthetics, advertising }
B67D 1/0874	...	{ Means for illuminating the handle of taps or faucets }
B67D 1/0875	...	{ Means for illuminating the beverage to be dispensed }
B67D 1/0877	...	{ Advertising means ( <a href="#">advertising in general G09F</a> ) }
B67D 1/0878	..	{Safety, warning or controlling devices ( <a href="#">B67D 1/12 takes precedence</a> ) }
B67D 1/0879	...	{Doors for protecting the vessel to be filled }
B67D 1/0881	...	{Means for counting the doses of dispensed liquid }

B67D 1/0882	...	{Devices for controlling the dispensing conditions }
B67D 1/0884	....	{Means for controlling the parameters of the state of the liquid to be dispensed, e.g. temperature, pressure }
B67D 1/0885	....	{Means for dispensing under specific atmospheric conditions, e.g. under inert gas }
B67D 1/0887	...	{ Sanitary protection means for dispensing nozzles or taps, e.g. outlet closures }
B67D 1/0888	..	{Means comprising electronic circuitry (e.g. control panels, switching or controlling means) }
B67D 1/0889	..	{Supports }
B67D 1/0891	...	{for the beverage container }
B67D 1/0892	....	{ the beverage container being stored in a rack or shelf }
B67D 1/0894	...	{for the vessel to be filled }
B67D 1/0895	..	{Heating arrangements }
B67D 1/0897	...	{located in nozzles }
B67D 1/0898	...	{Beer warmers ( <a href="#">B67D 1/0897</a> takes precedence) }
B67D 1/10	..	Pump mechanism ( <a href="#">in general F04</a> )
B67D 1/101	...	{of the piston-cylinder type }
B67D 1/102	....	{for one liquid component only }
B67D 1/103	.....	{the piston being driven by a liquid or a gas }
B67D 1/104	.....	{by the liquid to be dispensed }
B67D 1/105	....	{for two or more components }
B67D 1/106	.....	{the piston being driven by a liquid or a gas }
B67D 1/107	.....	{by one of the components to be dispensed }
B67D 1/108	...	{of the peristaltic type }
B67D 1/12	..	Flow or pressure control devices or systems {e.g. valves, gas pressure control, level control in storage containers }
B67D 1/1202	...	{ Flow control, e.g. for controlling total amount or mixture ratio of liquids to be dispensed }
B67D 1/1204	....	{ for ratio control purposes }
B67D 1/1206	.....	{ Flow detectors }
B67D 1/1209	.....	{ combined with a timer }
B67D 1/1211	.....	{ Flow rate sensor }
B67D 1/1213	.....	{ combined with a timer }
B67D 1/1215	.....	{ combined with a counter }
B67D 1/1218	.....	{ modulating the opening of a valve }
B67D 1/122	.....	{ modulating a pumping rate }
B67D 1/1222	.....	{ Pressure gauges }
B67D 1/1225	.....	{ Weighing }
B67D 1/1227	.....	{ the cup to be filled }
B67D 1/1229	.....	{ the storage container }
B67D 1/1231	.....	{ Metering pumps }
B67D 1/1234	....	{ to determine the total amount }
B67D 1/1236	.....	{ comprising means for detecting the size of vessels to be filled }
B67D 1/1238	.....	{ comprising means for detecting the liquid level in vessels to be filled e.g.

		using ultrasonic waves, optical reflexion, probes }
B67D 1/124	.....	{ the flow being started or stopped by means actuated by the vessel to be filled, e.g. by switches, weighing }
B67D 1/1243	.....	{ comprising flow or pressure sensors, e.g. for controlling pumps }
B67D 1/1245	...	{Change-over devices, i.e. connecting a flow line from an empty container to a full one }
B67D 1/1247	...	{Means for detecting the presence or absence of liquid }
B67D 1/125	...	{Safety means, e.g. over-pressure valves }
B67D 1/1252	...	{Gas pressure control means, e.g. for maintaining proper carbonation (for beer engines <a href="#">B67D 1/025</a> ) }
B67D 2001/1254	.....	comprising means for making a mixture of gases
B67D 1/1256	...	{Anti-dripping devices ( <a href="#">Drip trays B67D 1/16</a> ) }
B67D 2001/1259	...	Fluid level control devices
B67D 2001/1261	.....	the level being detected mechanically
B67D 2001/1263	.....	the level being detected electrically
B67D 2001/1265	.....	Pressure switches
B67D 2001/1268	.....	Capacitors
B67D 1/127	...	{Froth control ( <a href="#">B67D 1/1411</a> takes precedence) }
B67D 1/1272	.....	{preventing froth }
B67D 1/1275	.....	{promoting froth }
B67D 1/1277	...	{ Flow control valves }
B67D 1/1279	.....	{ regulating the flow }
B67D 1/1281	.....	{ responsive to pressure }
B67D 1/1284	...	{ Ratio control }
B67D 1/1286	.....	{ by mechanical construction }
B67D 1/1288	.....	{ Multi-chamber piston pumps ( <a href="#">construction of pumps: B67D 1/10</a> ) }
B67D 1/129	.....	{ Means for changing the ratio by acting on structural parts }
B67D 1/1293	.....	{ Means for changing the ratio by acting on commands }
B67D 1/1295	.....	{ Ratio defined by setting flow controllers }
B67D 1/1297	.....	{ Ratio defined by setting of timers }
B67D 1/14	...	Reducing valves or control taps
B67D 1/1405	.....	{Control taps }
B67D 1/1411	.....	{Means for controlling the build-up of foam in the container to be filled }
B67D 1/1416	.....	{ comprising foam inducing means }
B67D 1/1422	.....	{comprising foam avoiding means }
B67D 1/1427	.....	{by rotating the container to be filled }
B67D 1/1433	.....	{by delivering the beverage using a helical movement }
B67D 1/1438	.....	{comprising a valve shutter movable in a direction parallel to the valve seat, e.g. sliding or rotating }
B67D 1/1444	.....	{the valve shutter being rotated }
B67D 1/145	.....	{comprising a valve shutter movable in a direction perpendicular to the valve seat }
B67D 1/1455	.....	{the valve shutter being opened in the same direction as the liquid flow }



B67D 1/1461	.....	{the valve shutter being integral with a compensator }
B67D 1/1466	.....	{the valve shutter being opened in a direction opposite to the liquid flow }
B67D 1/1472	.....	{the valve shutter being integral with a compensator }
B67D 1/1477	.....	{Devices for assisting tap handling, e.g. levers }
B67D 2001/1483	....	electrically or electro-mechanically operated
B67D 2001/1488	....	pneumatically operated
B67D 2001/1494	....	Taps with means for adjusting the position of a compensator from outside
B67D 1/16	..	Devices for collecting spilled beverages
B67D 1/165	...	{and re-injecting them in the dispensing line }
<b>B67D 3/00</b>		<b>Apparatus or devices for controlling flow of liquids under gravity from storage containers for dispensing purposes</b> (separating and dispensing metered quantities of liquids <a href="#">G01F</a> )
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 <a href="#">F25</a> ) }
B67D 3/0012	.	{provided with mixing devices }
B67D 3/0016	..	{Mixing valves or taps }
B67D 3/0019	.	{using ingredient cartridges }
B67D 3/0022	.	{provided with heating arrangements }
B67D 3/0025	.	{provided with dispensing valves actuated by the receptacle to be filled ( <a href="#">B67D 3/02</a> takes precedence) }
B67D 3/0029	.	{provided with holders for bottles or similar containers }
B67D 3/0032	..	{the bottle or container being held upside down and provided with a closure, e.g. a cap, adapted to cooperate with a feed tube }
B67D 3/0035	..	{ the bottle or container being held upside down and not provided with a closure, e.g. a bottle screwed onto a base of a dispenser }
B67D 3/0038	.	{the liquid being stored in an intermediate container prior to dispensing }
B67D 3/0041	.	{ with provisions for metering the liquid to be dispensed }
B67D 3/0045	..	{ by filling a predetermined volume before dispensing }
B67D 3/0048	.	{ using siphoning arrangements }
B67D 3/0051	.	{ dispensing by tilting }
B67D 3/0054	.	{ Mounting or arrangements of dispensing apparatus in shops or bar counters }
B67D 3/0058	.	{ Details }



- B67D 3/0061 . . { of liquid containers, e.g. filling, emptying, closing or opening means }
- B67D 3/0064 . . . { Dip tubes }
- B67D 3/0067 . . . { relating to shape or materials, e.g. bag-in-box packages (BIB), pouches }
- B67D 3/007 . . . { containers with adjustable volume }
- B67D 3/0074 . . { Safety or warning devices }
- B67D 3/0077 . . { Electronic circuitry }
- B67D 3/008 . . { Supports }
- B67D 3/0083 . . . { for the liquid container }
- B67D 3/0087 . . . . { the beverage container being stored in a rack or shelf }
- B67D 3/009 . . . { for the vessel to be filled }
- B67D 3/0093 . . { Level indicators }
- B67D 3/0096 . . { Aesthetics, advertising }
  
- B67D 3/02 . . Liquid-dispensing valves having operating members arranged to be pressed upwards, e.g. by the rims of receptacles held below the delivery orifice
  
- B67D 3/04 . . Liquid-dispensing taps or cocks adapted to seal and open tapping holes of casks, e.g. for beer { (closures with filling and discharging devices for containers [B65D 47/00](#)) }
- B67D 3/041 . . {operated by pinching action on flexible tubes }
- B67D 3/042 . . {operated by deforming a membrane-like closing element }
- B67D 3/043 . . {with a closing element having a linear movement, in a direction perpendicular to the seat }
- B67D 3/044 . . . {and venting means operated automatically with the tap }
- B67D 3/045 . . {with a closing element having a linear movement, in a direction parallel to the seat }
- B67D 3/046 . . . {and venting means operated automatically with the tap }
- B67D 3/047 . . {with a closing element having a rotational movement }
- B67D 3/048 . . . {and venting means operated automatically with the tap }
  
- 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 <a href="#">B67D 1/0001</a> }
<a href="#">B67D 7/0222</a>	...	{ the dispensed quantity of liquid being replaced by air sucked through the dispensing opening }
<a href="#">B67D 7/0227</a>	..	{ by an ejection plunger ( <a href="#">B67D 7/0238</a> takes precedence) }
<a href="#">B67D 7/0233</a>	...	{ the plunger being gas driven }
<a href="#">B67D 7/0238</a>	..	{ utilising compressed air or other gas acting directly or indirectly on liquids in storage containers (for dispensing beverages on draught <a href="#">B67D 1/04</a> ) }
<a href="#">B67D 7/0244</a>	...	{ by using elastic expandable bags }
<a href="#">B67D 7/025</a>	....	{ specially adapted for transferring liquids of high purity }
<a href="#">B67D 7/0255</a>	...	{ squeezing collapsible or flexible storage containers (for dispensing beverages on draught <a href="#">B67D 1/0462</a> ) }
<a href="#">B67D 7/0261</a>	....	{ specially adapted for transferring liquids of high purity }
<a href="#">B67D 7/0266</a>	...	{ by gas acting directly on the liquid }
<a href="#">B67D 7/0272</a>	....	{ specially adapted for transferring liquids of high purity }
<a href="#">B67D 7/0277</a>	..	{ using negative pressure }
<a href="#">B67D 7/0283</a>	...	{ specially adapted for transferring liquids of high purity }
<a href="#">B67D 7/0288</a>	..	{ Container connection means (for dispensing beverages on draught <a href="#">B67D 1/0829</a> ) }
<a href="#">B67D 7/0294</a>	...	{ Combined with valves }
<a href="#">B67D 7/04</a>	.	for transferring fuels, lubricants or mixed fuels and lubricants
<a href="#">B67D 7/0401</a>	..	{ arrangements for automatically fuelling vehicles, i.e. without human intervention }
<a href="#">B67D 2007/0403</a>	...	Fuelling robots
<a href="#">B67D 2007/0405</a>	....	Opening devices
<a href="#">B67D 2007/0407</a>	.....	for fuel tank flaps
<a href="#">B67D 2007/0409</a>	.....	using vacuum cups
<a href="#">B67D 2007/0411</a>	.....	using grippers
<a href="#">B67D 2007/0413</a>	.....	using air blast
<a href="#">B67D 2007/0415</a>	.....	for filler caps
<a href="#">B67D 2007/0417</a>	....	Manipulator arms
<a href="#">B67D 2007/0419</a>	....	Fuelling nozzles
<a href="#">B67D 2007/0421</a>	.....	with locking devices
<a href="#">B67D 2007/0423</a>	....	Fuelling hoses
<a href="#">B67D 2007/0425</a>	.....	comprising a single hose for several fuels
<a href="#">B67D 2007/0426</a>	.....	comprising several hoses for several fuels
<a href="#">B67D 2007/0428</a>	.....	having devices to avoid a mix up of different fuels
<a href="#">B67D 2007/043</a>	....	Moveable
<a href="#">B67D 2007/0432</a>	.....	according to a planar coordinate system
<a href="#">B67D 2007/0434</a>	.....	with the ability to compensate movements of the car during filling
<a href="#">B67D 2007/0436</a>	.....	according to a spatial coordinate system
<a href="#">B67D 2007/0438</a>	.....	with the ability to compensate movements of the car during filling
<a href="#">B67D 2007/044</a>	...	Customer interfaces
<a href="#">B67D 2007/0442</a>	....	interface for orders and payments
<a href="#">B67D 2007/0444</a>	...	Sensors

B67D 2007/0446	....	measuring physical properties of the fluid to be dispensed
B67D 2007/0448	.....	Density
B67D 2007/0449	.....	Viscosity
B67D 2007/0451	.....	Temperature
B67D 2007/0453	....	recognising the fuel to be dispensed
B67D 2007/0455	....	recognising the position
B67D 2007/0457	.....	of the car
B67D 2007/0459	.....	by interrogating a transponder
B67D 2007/0461	.....	by calculating from a reference position, e.g. the car's silhouette, reference marks
B67D 2007/0463	.....	optically
B67D 2007/0465	.....	by GPS
B67D 2007/0467	.....	of the fuel tank flap and/or fuel tank opening
B67D 2007/0469	.....	by interrogating a transponder
B67D 2007/0471	.....	by calculating from a reference position, e.g. the car's silhouette, reference marks
B67D 2007/0473	.....	optically
B67D 2007/0474	.....	of the filling nozzle relative to the fuel tank opening, e.g. engagement between nozzle and tank opening
B67D 7/0476	..	{ Vapour recovery systems }
B67D 7/0478	...	{ constructional features or components (vapour recovery nozzles <a href="#">B67D 7/54</a> ) }
B67D 7/048	....	{ Vapour flow control means, e.g. valves, pumps }
B67D 7/0482	.....	{ using pumps driven at different flow rates }
B67D 7/0484	.....	{ Liquid jet pumps, e.g. venturis }
B67D 7/0486	.....	{ Pumps driven in response to electric signals indicative of pressure, temperature or liquid flow }
B67D 7/0488	....	{ Means for preventing the formation of condensation on, or for removing condensation from, vapour recovery lines }
B67D 7/049	....	{ Vapour recovery methods, e.g. condensing the vapour }
B67D 7/0492	....	{ Vapour storing means, e.g. dedicated ullage spaces, separate tanks }
B67D 2007/0494	....	Means for condensing the vapours and reintroducing them into the storage tanks
B67D 7/0496	...	{ Performance test devices therefor }
B67D 7/0498	..	{ Arrangements specially adapted for transferring biofuels, e.g. ethanol-gasoline mixture }
B67D 7/06	.	Details or accessories
B67D 7/061	..	{ Means for transferring liquids from a chosen level of a storage container }
B67D 7/062	...	{ from the free surface level of the liquid }
B67D 7/064	..	{ Drive-off preventing means, e.g. in case of non-payment }
B67D 7/065	...	{ acting on the vehicle }
B67D 7/067	...	{ using communication means }
B67D 7/068	...	{ using imaging means, e.g. cameras }
B67D 7/08	..	Arrangements of devices for controlling, indicating, metering or registering quantity or price of liquid transferred ( <a href="#">arrangement of flow- or pressure-control valves</a> )

- [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 <a href="#">G01M 3/2892</a> ) }
B67D 7/3218	...	{ relating to emergency shut-off means }
B67D 7/3227	...	{ relating to venting of a container during loading or unloading }
B67D 7/3236	...	{ relating to electrostatic charges }
B67D 7/3245	...	{ relating to the transfer method }
B67D 7/3254	....	{ using a pressurised liquid acting directly or indirectly on the bulk of the liquid to be transferred }
B67D 7/3263	....	{ using a pressurised gas acting directly or indirectly on the bulk of the liquid to be transferred (use of compressed air or gas for transferring liquids <a href="#">B67D 7/0238</a> , <a href="#">B67D 7/72</a> ) }
B67D 7/3272	....	{ using pumps }
B67D 7/3281	...	{ Details }
B67D 2007/329	....	Function indicator devices
B67D 7/34	...	Means for preventing unauthorised delivery of liquid
B67D 7/342	....	{ by discriminating the kind of liquid by analysis or by physical properties, e.g. vapour-pressure }
B67D 7/344	....	{ by checking a correct coupling or coded information }
B67D 7/346	.....	{ by reading a code }
B67D 7/348	.....	{ by interrogating an information transmitter, e.g. a transponder ( <a href="#">B67D 7/145</a> takes precedence) }
B67D 7/36	..	Arrangements of flow- or pressure-control valves ( <a href="#">associated with nozzles B67D 7/42</a> )
B67D 7/362	...	{ combined with over-fill preventing means (indicating or measuring liquid level <a href="#">G01F 23/00</a> ; level control <a href="#">G05D 9/00</a> ) }
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 ( <a href="#">hoses in general F16L 11/00</a> )
B67D 7/40	...	Suspending, reeling or storing devices ( <a href="#">supports for storing lengths of hoses, in general B65H 75/34</a> )
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 ( <a href="#">mixing devices B67D 7/74</a> ) }
B67D 7/425	...	{ including components powered by electricity or light }
B67D 7/426	...	{ including means for displaying information, e.g. for advertising ( <a href="#">B67D 7/425</a> 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