

**B67 OPENING OR CLOSING BOTTLES, JARS OR SIMILAR CONTAINERS; LIQUID HANDLING** (nozzles in general B05B; packaging liquids B65B, e.g. B65B 3/00; pumps in general F04; siphons F04F 10/00; valves F16K; handling liquefied gases F17C)

**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) [5]

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|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1/00 | <b>Apparatus or devices for dispensing beverages on draught</b> (B67D 3/00 takes precedence; apparatus for making beverages A47J 31/00) [3]                                                                                                                                                                                                                                                                                     | 5/14  | . . . . responsive to input of recorded programmed information, e.g. on punched cards [3]                                                                                       |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5/16  | . . . . Arrangements of liquid meters [3]                                                                                                                                       |
| 1/02 | . Beer engines or like manually-operable pumping apparatus                                                                                                                                                                                                                                                                                                                                                                      | 5/18  | . . . . . of piston type [3]                                                                                                                                                    |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5/20  | . . . . . of rotary type [3]                                                                                                                                                    |
| 1/04 | . Apparatus utilising compressed air or other gas acting directly or indirectly on beverages in storage containers                                                                                                                                                                                                                                                                                                              | 5/22  | . . . . Arrangements of indicators or registers (indicating or recording in fluid meters G01F 15/06) [3]                                                                        |
| 1/06 | . Mountings or arrangements of dispensing apparatus in or on shop or bar counters (shop or bar counters <i>per se</i> A47F 9/00)                                                                                                                                                                                                                                                                                                | 5/24  | . . . . . with means for producing or issuing a receipt or record of sale [3]                                                                                                   |
| 1/07 | . Cleaning beverage-dispensing apparatus [5]                                                                                                                                                                                                                                                                                                                                                                                    | 5/26  | . . . . . with resetting or zeroising means [3]                                                                                                                                 |
| 1/08 | . Details                                                                                                                                                                                                                                                                                                                                                                                                                       | 5/28  | . . . . . with automatic means for reducing or intermittently interrupting flow before completion of delivery, e.g. to produce dribble feed [3]                                 |
| 1/10 | . . Pump mechanisms (in general F04)                                                                                                                                                                                                                                                                                                                                                                                            |       |                                                                                                                                                                                 |
| 1/12 | . . Flow- or pressure-control devices or systems                                                                                                                                                                                                                                                                                                                                                                                |       |                                                                                                                                                                                 |
| 1/14 | . . . Reducing valves or control taps                                                                                                                                                                                                                                                                                                                                                                                           | 5/30  | . . . . . with means for predetermining quantity of liquid to be transferred (B67D 5/10, B67D 5/14 take precedence) [3]                                                         |
| 1/16 | . . Devices for collecting spilled beverages                                                                                                                                                                                                                                                                                                                                                                                    |       |                                                                                                                                                                                 |
| 3/00 | <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 G01F)                                                                                                                                                                                                                                        | 5/32  | . . . Arrangements of safety or warning devices (alarm arrangements in general G08B); Means for preventing unauthorised delivery of liquid [3]                                  |
| 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                                                                                                                                                                                                                                                                             | 5/33  | . . . . Means for preventing unauthorised delivery of liquid [5]                                                                                                                |
| 3/04 | . Liquid-dispensing taps or cocks adapted to seal and open tapping-holes of casks, e.g. for beer                                                                                                                                                                                                                                                                                                                                | 5/34  | . . . Arrangements of flow- or pressure-control valves (associated with nozzles B67D 5/37) [3]                                                                                  |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5/36  | . . . Arrangements of hoses, e.g. operative connection with pump motor (hoses in general F16L 11/00) [3]                                                                        |
| 5/00 | <b>Apparatus or devices for transferring liquids, not covered by groups B67D 1/00 or B67D 3/00</b> (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) [3] | 5/365 | . . . . Suspending, reeling, or storing devices (supports for storing lengths of hoses, in general B65H 75/34) [3]                                                              |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5/37  | . . . Filling nozzles (nozzles in general B05B; fluid-delivering valves in general F16K 21/00) [3]                                                                              |
| 5/01 | . from bulk storage containers or reservoirs into vehicles or into portable containers, e.g. for retail sale purposes (B67D 5/68 takes precedence) [3]                                                                                                                                                                                                                                                                          | 5/371 | . . . . automatically closing [3]                                                                                                                                               |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5/372 | . . . . . when liquid in container to be filled reaches a predetermined level [3]                                                                                               |
| 5/02 | . . for transferring liquids other than fuel or lubricants [3]                                                                                                                                                                                                                                                                                                                                                                  | 5/373 | . . . . . by making use of air suction through an opening closed by the rising liquid [3]                                                                                       |
| 5/04 | . . for transferring fuels, lubricants or mixed fuels and lubricants [3]                                                                                                                                                                                                                                                                                                                                                        | 5/375 | . . . . . and provided with an additional hand lever [3]                                                                                                                        |
| 5/06 | . . Details or accessories [3]                                                                                                                                                                                                                                                                                                                                                                                                  | 5/377 | . . . . . and provided with additional flow-controlling valve means [3]                                                                                                         |
| 5/08 | . . . Arrangements of devices for controlling, indicating, metering or registering quantity or price of liquid transferred (arrangement of flow- or pressure-control valves B67D 5/34; measuring volume or volume flow in general G01F; computing, calculating, counting G06; coin-freed apparatus for dispensing fluids G07F 13/00; prepayment devices for metering liquids G07F 15/00) [3]                                    | 5/378 | . . . . . with means for preventing escape of liquid or vapour or for recovering escaped liquid or vapour (B67D 5/371 takes precedence) [5]                                     |
| 5/10 | . . . . operated by keys, push-buttons, or cash registers [3]                                                                                                                                                                                                                                                                                                                                                                   | 5/38  | . . . Arrangements of flow-indicators, e.g. transparent compartments, windows, rotary vanes (indicating or recording presence, absence or direction of movement G01P 13/00) [3] |
| 5/12 | . . . . operated by movement of delivery hose or nozzle or by devices associated therewith [3]                                                                                                                                                                                                                                                                                                                                  | 5/40  | . . . Arrangements of pumps (pumps F04) [3]                                                                                                                                     |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5/42  | . . . . manually operable [3]                                                                                                                                                   |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5/44  | . . . . power operated [3]                                                                                                                                                      |

**B67D**

- 5/46 . . . . . of piston type [3]
- 5/48 . . . . . of rotary type [3]
- 5/50 . . . . . submerged in storage tank or reservoir [3]
- 5/52 . . . . . of two or more pumps in series or parallel [3]
- 5/54 . . . . . Devices for applying air or other gas pressure for forcing liquid to delivery point [3]
- 5/56 . . . . . Devices for mixing two or more different liquids to be transferred (coin-freed apparatus G07F 13/06) [3]
- 5/58 . . . . . Arrangements of devices for purifying liquids to be transferred, e.g. of filters, of air or water separators (filtration, separation, in general B01D) [3]
- 5/60 . . . . . Arrangements of storage tanks, reservoirs or pipe-lines [3]
- 5/62 . . . . . Arrangements of heating or cooling devices for liquids to be transferred [3]
- 5/63 . . . . . Heating only [6]
- 5/64 . . . . . Casings, cabinets or frameworks; Trolleys or like movable supports [3]
- 5/66 . . . . . Illuminating arrangements [3]
- 5/68 . . . . . Loading or unloading ships (ship-based equipment B63B 27/00) [3]
- 5/70 . . . . . using articulated pipes [3]