

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

TRANSPORTING

B67 **OPENING, CLOSING {OR CLEANING} 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](#))

B67B **APPLYING CLOSURE MEMBERS TO BOTTLES JARS, OR SIMILAR CONTAINERS; OPENING CLOSED CONTAINERS** (opening or closing devices attached to, or incorporated in, containers or container closures [B65D](#))

WARNING

The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

B67B 7/46	covered by	B67B 7/30-B67B 7/385
B67B 7/48-B67B 7/52	covered by	B67B 7/24 , B67B 7/26 , B67B 7/28
B67B 7/54-B67B 7/90	covered by	B67B 7/30-B67B 7/385

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|-------------|---|--------|---|
| 1/00 | Closing bottles, jars or similar containers by applying stoppers (stoppers per se B65D 39/00) | 3/064 | . . . from a hopper {(B67B 3/061 takes precedence)} |
| 1/005 | . {Feeding stoppers (in general B65G)} | 3/0645 | {with means for orientating the caps to a position ready to be applied to the container} |
| 1/03 | . Pretreatment of stoppers, e.g. cleaning, steaming, heating, impregnating or coating; Applying resilient rings to stoppers (mechanical working of cork B27J 5/00) | 3/10 | . . Capping heads for securing caps {(B67B 3/023 takes precedence)} |
| 1/04 | . by inserting threadless stoppers, e.g. corks | 3/12 | . . . characterised by being movable axially relative to cap to deform flanges thereof, e.g. to press projecting flange rims inwardly |
| 1/045 | . . {using hand operated devices} | 3/14 | . . . characterised by having movable elements, e.g. hinged fingers, for applying radial pressure to the flange of the cap (B67B 3/16 , B67B 3/18 take precedence) |
| 1/06 | . by inserting and rotating screw stoppers | 3/16 | . . . characterised by having resilient deforming elements, e.g. resilient sleeves or collars (B67B 3/18 takes precedence) |
| 1/08 | . Securing stoppers, e.g. swing stoppers, which are held in position by associated pressure-applying means coacting with the bottle neck | 3/18 | . . . characterised by being rotatable, e.g. for forming screw threads <i>in situ</i> |
| 1/10 | . by inserting disc closures | 3/20 | . by applying and rotating preformed threaded caps (forming threads <i>in situ</i> by resilient deforming means B67B 3/16 , by rotary capping heads B67B 3/18) |
| 3/00 | Closing bottles, jars or similar containers by applying caps (caps per se B65D 41/00) | 3/2006 | . . {using manually-controlled or manually operated devices} |
| 3/003 | . {Pretreatment of caps, e.g. cleaning, steaming, heating or sterilizing} | 3/2013 | . . {by carousel-type capping machines} |
| 3/006 | . {Applying date marks, code marks, or the like, to caps during capping (applying marks to labels B65C 9/46)} | 3/202 | . . . {using friction means for screwing the caps, e.g. belts or guides (B67B 3/2026 , B67B 3/2033 take precedence)} |
| 3/02 | . by applying flanged caps, e.g. crown caps, and securing by deformation of flanges | 3/2026 | . . . {comprising stationary capping heads} |
| 3/023 | . . {using additional means for securing the cap, e.g. adhesives} | 3/2033 | . . . {comprising carousel co-rotating capping heads} |
| 3/026 | . . {the caps being made of thermoplastic material (B67B 3/023 takes precedence)} | 3/204 | . . {Linear-type capping machines} |
| 3/04 | . . Cutting caps from strip material in capping machines (devices for registering moving strip material B65H 23/00) | 3/2046 | . . . {using friction means for screwing the caps, e.g. belts or wheels (B67B 3/2053 takes precedence)} |
| 3/06 | . . Feeding caps to capping heads | 3/2053 | . . . {comprising capping heads} |
| 3/061 | . . . {the caps having an asymmetric footprint, e.g. comprising a gripping lip} | | |
| 3/062 | . . . from a magazine {(B67B 3/061 takes precedence)} | | |

- 3/206 . . . {Means for preventing rotation of the container or cap}
- 3/2066 . . . {Details of capping heads ([B67B 3/2073](#) takes precedence)}
- 3/2073 . . . {comprising torque limiting means (torque limiters in wrenches or screwdrivers [B25B 23/14](#); couplings or clutches *per se* [F16D](#))}
- 3/208 . . . {Electrical means responsive to the torque applied and acting on motor control means, e.g. strain gauges or power measurement means ([B67B 3/2093](#) takes precedence)}
- 3/2086 . . . {Magnetic or electromagnetic clutches}
- 3/2093 . . . {whereby the applied torque limit is varied}
- 3/22 . . . by applying snap-on caps
- 3/24 . . . Special measures for applying and securing caps under vacuum
- 3/26 . . . Applications of control, warning, or safety devices in capping machinery
- 3/261 . . . {Devices for controlling the tightening of threaded caps, e.g. testing the release torque (torque testers in general [G01L 5/00](#))}
- 3/262 . . . {Devices for controlling the caps}
- 3/264 . . . {positioning of the caps}
- 3/265 . . . {presence of a cap}
- 3/267 . . . {positioning of the cap-label}
- 3/268 . . . {devices for avoiding damage to the closing machine}
- 3/28 . . . Mechanisms for causing relative movement between bottle or jar and capping head
- 5/00 Applying protective or decorative covers to closures; Devices for securing bottle closures with wire (infant feeding teats with means for fastening to bottles [A61J 11/04](#))**
- 5/03 . . . Applying protective or decorative covers to closures, e.g. by forming *in situ*
- 5/032 . . . {Dies for securing overcaps}
- 5/034 . . . {the covers being elastic}
- 5/036 . . . {the covers being heat-shrinkable}
- 5/038 . . . {the covers being applied wet, whereby shrinkage occurs on drying}
- 5/05 . . . by applying liquids, e.g. by dipping
- 5/06 . . . Devices for securing bottle closures with wire ([B67B 1/08](#) takes precedence)
- 6/00 Closing bottles, jars or similar containers by applying closure members, not provided for in groups [B67B 1/00](#) - [B67B 5/00](#)**
- 7/00 Hand- or power-operated devices for opening closed containers (nail pullers or extractors [B25C 11/00](#); attached to, or incorporated in, containers or container closures {[B65D 75/58](#), [B65D 77/30](#)})**
- 7/02 . . . for removing stoppers
- 7/04 . . . Cork-screws
- 7/0405 . . . {Power-operated cork-screws, e.g. operated by an electric motor}
- 7/0411 . . . {without supporting means for assisting the pulling action}
- 7/0417 . . . {with supporting means for assisting the pulling action}
- 7/0423 . . . {of wine-waiter, i.e. sommelier type}
- 7/0429 . . . {having means for varying the effective lever arm length}
- 7/0435 . . . {with a pantograph extracting mechanism}
- 7/0441 . . . {whereby the supporting means abut around the whole periphery of the neck of the bottle}
- 7/0447 . . . {whereby the supporting means abut around parts of the periphery of the neck of the bottle}
- 7/0452 . . . {adapted to be mounted on walls}
- 2007/0458 . . . {Means for cutting sealing capsules}
- 2007/0464 . . . {Means for counting}
- 2007/047 . . . {Means for reducing friction}
- 2007/0476 . . . {by coating the screw}
- 2007/0482 . . . {by using roller-bearings}
- 2007/0488 . . . {Means for measuring temperature}
- 2007/0494 . . . {Means for varying the lever arm}
- 7/06 . . . Other cork removers
- 7/063 . . . {using one or more blades to be inserted between the cork and the inner surface of the bottle neck}
- 7/066 . . . {specially adapted for opening pressurised bottles, e.g. champagne or sparkling wine bottles}
- 7/08 . . . using air or gas pressure
- 7/10 . . . with means for retrieving stoppers from the interior of the container
- 7/12 . . . for removing disc-closures
- 7/14 . . . for removing tightly-fitting lids or covers, e.g. of shoe-polish tins, by gripping and rotating
- 7/15 . . . finger grapple type
- 7/16 . . . for removing flanged caps, e.g. crown caps
- 7/162 . . . {the removing device being formed by at least two articulated parts, e.g. pliers ([B67B 7/164](#) takes precedence)}
- 7/164 . . . {Power-operated devices}
- 2007/166 . . . {Means for attaching the opener to fingers}
- 2007/168 . . . {Means for counting}
- 7/18 . . . for removing threaded caps ([B67B 7/14](#) takes precedence; wrenches [B25B 13/00](#))
- 7/182 . . . {power-operated}
- 7/184 . . . {by use of a flexible loop gripping the cap skirt or the container body by friction}
- 7/186 . . . {the loop having an adjustable length}
- 2007/188 . . . {Means for attaching the opener to fingers}
- 7/20 . . . for breaking vacuum seals between lids or covers and bodies of preserving jars, e.g. by wedge action
- 7/22 . . . incorporating loops, e.g. of wire, which are tightened around seal
- 7/24 . . . {Hole-piercing devices}
- 7/26 . . . {combined with spouts}
- 7/28 . . . {and associated with receptacle hodlers}
- 7/30 . . . {Hand-operated cutting devices}
- 2007/303 . . . {can openers}
- 2007/306 . . . {Means for counting}
- 7/32 . . . {propelled by rotary gears or wheels around periphery of container}
- 7/34 . . . {with rotatable cutters}
- 7/36 . . . {adapted to be mounted on walls}
- 7/38 . . . {Power-operated cutting devices (machines for domestic use with a plurality of interchangeable units [A47J 43/06](#), [A47J 44/00](#))}
- 7/385 . . . {specially adapted to be hand-held}
- 7/40 . . . Devices for engaging tags, strips, or tongues for opening by tearing, e.g. slotted keys for opening sardine tins

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- 7/403 . . {adapted for engaging the ring of a pull tab for opening an aperture}
- 7/406 . . . {and subsequently tearing off the top of the can}
- 7/42 . Devices for removing barrel bungs
- 7/44 . Combination tools, e.g. comprising cork-screws, can piercers, crown cap removers ([combinations of opening devices with cutting tools B26](#); with devices serving other purposes, [see appropriate subclasses, e.g. B25F; B43K 29/00](#))
- 7/92 . by breaking, e.g. for ampoules

2201/00 Indexing codes relating to constructional features of closing machines

- 2201/01 . Orienting closure means
- 2201/012 . . Stoppers
- 2201/015 . . . Cylindrical stoppers
- 2201/017 . . Caps
- 2201/03 . applying two closures on a container
- 2201/06 . Details of cap feeding devices
- 2201/065 . . Use of magnets
- 2201/08 . Aseptic features
- 2201/10 . Quick or easy connection means for connecting a capping head to a spindle
- 2201/12 . Details related to spray caps, i.e. caps comprising a pump and a tube for dispensing content from a container