

CPC**COOPERATIVE PATENT CLASSIFICATION****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 used in the CPC scheme. Subject-matter covered by these groups is classified in the following CPC groups:

[B67B 7/46](#) covered by [B67B 7/30](#) to [B67B 7/385](#)

[B67B 7/48](#) to [B67B 7/52](#) covered by [B67B 7/24](#), [B67B 7/26](#), [B67B 7/28](#)

[B67B 7/54](#) to [B67B 7/90](#) covered by [B67B 7/30](#) to [B67B 7/385](#)

B67B 1/00

Closing bottles, jars or similar containers by applying stoppers (stoppers per se [B65D 39/00](#))

B67B 1/005

- {Feeding stoppers (in general [B65G](#))}

B67B 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](#))

B67B 1/04

- by inserting threadless stoppers, e.g. cork

B67B 1/045

- . {using hand operated devices}

B67B 1/06

- by inserting and rotating screw stoppers

B67B 1/08

- Securing stoppers, e.g. swing stoppers, which are held in position by associated pressure-applying means coacting with the bottle neck

B67B 1/10

- by inserting disc closures

B67B 3/00

Closing bottles, jars or similar containers by applying caps (caps per se [B65D 41/00](#))

B67B 3/003

- {Pretreatment of caps, e.g. cleaning, steaming, heating or sterilizing}

B67B 3/006

- {Applying date marks, code marks, or the like, to caps during capping ([applying marks to labels B65C 9/46](#))}

B67B 3/02

- by applying flanged caps, e.g. crown caps, and securing by deformation of flanges

B67B 3/023

- . {using additional means for securing the cap, e.g. adhesives}

B67B 3/026

- . {the caps being made of thermoplastic material ([B67B 3/023](#) takes precedence)}

B67B 3/04

- . Cutting caps from strip material in capping machines ([devices for registering moving strip material B65H 23/00](#))

B67B 3/06

- . Feeding caps to capping heads

B67B 3/061

- . . {the caps having an asymmetric footprint, e.g. comprising a gripping lip}

B67B 3/062

- . . from a magazine {([B67B 3/061](#) takes precedence)}

B67B 3/064

- . . from a hopper {([B67B 3/061](#) takes precedence)}

B67B 3/0645

- . . . {with means for orientating the caps to a position ready to be applied to the container}

- B67B 3/10 . . Capping heads for securing caps {(B67B 3/023 takes precedence)}
- B67B 3/12 . . . characterised by being movable axially relative to cap to deform flanges thereof, e.g. to press projecting flange rims inwardly
- B67B 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)
- B67B 3/16 . . . characterised by having resilient deforming elements, e.g. resilient sleeves or collars (B67B 3/18 takes precedence)
- B67B 3/18 . . . characterised by being rotatable, e.g. for forming screw threads in situ
- B67B 3/20 . by applying and rotating preformed threaded caps (forming threads in situ by resilient deforming means B67B 3/16, by rotary capping heads B67B 3/18)
- B67B 3/2006 . . {using manually-controlled or manually operated devices}
- B67B 3/2013 . . {by carousel-type capping machines}
- B67B 3/202 . . . {using friction means for screwing the caps, e.g. belts or guides (B67B 3/2026, B67B 3/2033 take precedence)}
- B67B 3/2026 . . . {comprising stationary capping heads}
- B67B 3/2033 . . . {comprising carousel co-rotating capping heads}
- B67B 3/204 . . {Linear-type capping machines}
- B67B 3/2046 . . . {using friction means for screwing the caps, e.g. belts or wheels (B67B 3/2053 takes precedence)}
- B67B 3/2053 . . . {comprising capping heads}
- B67B 3/206 . . {Means for preventing rotation of the container or cap}
- B67B 3/2066 . . {Details of capping heads (B67B 3/2073 takes precedence)}
- B67B 3/2073 . . {comprising torque limiting means (torque limiters in wrenches or screwdrivers B25B 23/14; couplings or clutches per se F16D)}
- B67B 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)}
- B67B 3/2086 . . . {Magnetic or electromagnetic clutches}
- B67B 3/2093 . . . {whereby the applied torque limit is varied}
- B67B 3/22 . by applying snap-on caps
- B67B 3/24 . Special measures for applying and securing caps under vacuum
- B67B 3/26 . Applications of control, warning, or safety devices in capping machinery
- B67B 3/261 . . {Devices for controlling the tightening of threaded caps, e.g. testing the release torque (torque testers in general G01L 5/00)}
- B67B 3/262 . . {Devices for controlling the caps}
- B67B 3/264 . . . {positioning of the caps}
- B67B 3/265 . . . {presence of a cap}
- B67B 3/267 . . . {positioning of the cap-label}
- B67B 3/268 . . {devices for avoiding damage to the closing machine}
- B67B 3/28 . Mechanisms for causing relative movement between bottle or jar and capping head

B67B 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](#))

- B67B 5/03 . Applying protective or decorative covers to closures, e.g. by forming in situ
- B67B 5/032 . . {Dies for securing overcaps}
- B67B 5/034 . . {the covers being elastic}
- B67B 5/036 . . {the covers being heat-shrinkable}
- B67B 5/038 . . {the covers being applied wet, whereby shrinkage occurs on drying}
- B67B 5/05 . . by applying liquids, e.g. by dipping
- B67B 5/06 . Devices for securing bottle closures with wire ([B67B 1/08](#) takes precedence)

B67B 6/00 **Closing bottles, jars or similar containers by applying closure members, not provided for in groups [B67B 1/00](#) - [B67B 5/00](#)**

B67B 7/00 **Hand- or power-operated devices for opening closed containers** ([nail pullers or extractors B25C 11/00](#); {for expelling solid content, e.g. pills, from blister packs [B65B 69/0058](#)}; attached to, or incorporated in, containers or container closures [B65D](#); {dispensers for pills from blister packs [B65B 69/0058](#)})

- B67B 7/02 . for removing stoppers
- B67B 7/04 . . Cork-screws
- B67B 7/0405 . . . {Power-operated cork-screws, e.g. operated by an electric motor}
- B67B 7/0411 . . . {without supporting means for assisting the pulling action}
- B67B 7/0417 . . . {with supporting means for assisting the pulling action}
- B67B 7/0423 {of wine-waiter, i.e. sommelier type}
- B67B 7/0429 {having means for varying the effective lever arm length}
- B67B 7/0435 {with a pantograph extracting mechanism}
- B67B 7/0441 {whereby the supporting means abut around the whole periphery of the neck of the bottle}
- B67B 7/0447 {whereby the supporting means abut around parts of the periphery of the neck of the bottle}
- B67B 7/0452 . . . {adapted to be mounted on walls}
- B67B 2007/0458 . . . {Means for cutting sealing capsules}
- B67B 2007/0464 . . . {Means for counting}
- B67B 2007/047 . . . {Means for reducing friction}
- B67B 2007/0476 {by coating the screw}
- B67B 2007/0482 {by using roller-bearings}
- B67B 2007/0488 . . . {Means for measuring temperature}
- B67B 2007/0494 . . . {Means for varying the lever arm}
- B67B 7/06 . . Other cork removers
- B67B 7/063 . . . {using one or more blades to be inserted between the cork and the inner surface of the bottle neck}
- B67B 7/066 . . . {specially adapted for opening pressurised bottles, e.g. champagne or sparkling wine bottles}

- B67B 7/08 . . . using air or gas pressure
- B67B 7/10 . . with means for retrieving stoppers from the interior of the container
- B67B 7/12 . for removing disc-closures
- B67B 7/14 . for removing tightly-fitting lids or covers, e.g. of shoe-polish tins, by gripping and rotating
- B67B 7/15 . . finger grapple type
- B67B 7/16 . for removing flanged caps, e.g. crown caps
- B67B 7/162 . . {the removing device being formed by at least two articulated parts, e.g. pliers ([B67B 7/164](#) takes precedence)}
- B67B 7/164 . . {Power-operated devices}
- B67B 2007/166 . . {Means for attaching the opener to fingers}
- B67B 2007/168 . . {Means for counting}
- B67B 7/18 . for removing threaded caps ([B67B 7/14](#) takes precedence; wrenches [B25B 13/00](#))
- B67B 7/182 . . {power-operated}
- B67B 7/184 . . {by use of a flexible loop gripping the cap skirt or the container body by friction}
- B67B 7/186 . . . {the loop having an adjustable length}
- B67B 2007/188 . . {Means for attaching the opener to fingers}
- B67B 7/20 . for breaking vacuum seals between lids or covers and bodies of preserving jars, e.g. by wedge action
- B67B 7/22 . . incorporating loops, e.g. of wire, which are tightened around seal
- B67B 7/24 . {Hole-piercing devices}
- B67B 7/26 . . {combined with spouts}
- B67B 7/28 . . . {and associated with receptacle holders}
- B67B 7/30 . Hand-operated cutting devices
- B67B 2007/303 . . {can openers}
- B67B 2007/306 . . . {Means for counting}
- B67B 7/32 . . propelled by rotary gears or wheels around periphery of container
- B67B 7/34 . . with rotatable cutters
- B67B 7/36 . . adapted to be mounted on walls
- B67B 7/38 . {Power-operated cutting devices (machines for domestic use with a plurality of interchangeable units [A47J 43/06](#), [A47J 44/00](#))}
- B67B 7/385 . . {specially adapted to be hand-held}
- B67B 7/40 . Devices for engaging tags, strips, or tongues for opening by tearing, e.g. slotted keys for opening sardine tins
- B67B 7/403 . . {adapted for engaging the ring of a pull tab for opening an aperture}
- B67B 7/406 . . . {and subsequently tearing off the top of the can}
- B67B 7/42 . Devices for removing barrel bungs
- B67B 7/44 . Combination tools, e.g. comprising cork-screws, can piercers, crowncap removers (combinations of opening devices with cutting tools [B26](#); with devices serving other purposes, see appropriate subclasses, e.g. [B25F](#); [B43K 29/00](#))

B67B 7/92

- . by breaking, e.g. for ampoules

B67B 2201/00

Indexing codes relating to constructional features of closing machines

B67B 2201/01

- . Orienting closure means

B67B 2201/012

- . . Stoppers

B67B 2201/015

- . . . Cylindrical stoppers

B67B 2201/017

- . . Caps

B67B 2201/03

- . applying two closures on a container

B67B 2201/06

- . Details of cap feeding devices

B67B 2201/065

- . . Use of magnets

B67B 2201/08

- . Aseptic features

B67B 2201/10

- . Quick or easy connection means for connecting a capping head to a spindle

B67B 2201/12

- . Details related to spray caps, i.e. caps comprising a pump and a tube for dispensing content from a container