## CPC - COOPERATIVE PATENT CLASSIFICATION

### B PERFORMING OPERATIONS; TRANSPORTING

**NOTES omitted**

### TRANSPORTING

**B67** OPENING, CLOSING *(OR CLEANING)* BOTTLES, JARS OR SIMILAR CONTAINERS; LIQUID HANDLING

**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)*

### WARNINGS

1. 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 7/30-7/385
   - B67B 7/48 - 7/52 covered by B67B 7/24, B67B 7/26, B67B 7/28
   - B67B 7/54 - 7/90 covered by B67B 7/30-7/385
2. In this subclass non-limiting references *(in the sense of paragraph 39 of the Guide to the IPC)* may still be displayed in the scheme.

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

<table>
<thead>
<tr>
<th>1/00</th>
<th>Closing bottles, jars or similar containers by applying stoppers <em>(stoppers per se B65D 39/00)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>1/005</td>
<td>[Feeding stoppers <em>(in general B65D)</em>]</td>
</tr>
<tr>
<td>1/03</td>
<td>Pretreatment of stoppers, e.g. cleaning, steaming, heating, impregnating or coating; Applying resilient rings to stoppers <em>(mechanical working of cork B27J 5/00)</em></td>
</tr>
<tr>
<td>1/04</td>
<td>by inserting threadless stoppers, e.g. corks</td>
</tr>
<tr>
<td>1/045</td>
<td>. . . <em>(using hand operated devices)</em></td>
</tr>
<tr>
<td>1/06</td>
<td>by inserting and rotating screw stoppers</td>
</tr>
<tr>
<td>1/08</td>
<td>Securing stoppers, e.g. swing stoppers, which are held in position by associated pressure-applying means coacting with the bottle neck</td>
</tr>
<tr>
<td>1/10</td>
<td>by inserting disc closures</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>3/00</th>
<th>Closing bottles, jars or similar containers by applying caps <em>(caps per se B65D 41/00)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>3/003</td>
<td>. . . <em>(Pretreatment of caps, e.g. cleaning, steaming, heating or sterilizing)</em></td>
</tr>
<tr>
<td>3/006</td>
<td>. . . <em>(Applying date marks, code marks, or the like, to caps during capping (applying marks to labels B65C 9/46)</em></td>
</tr>
<tr>
<td>3/02</td>
<td>. . . <em>(by applying flanged caps, e.g. crown caps, and securing by deformation of flanges)</em></td>
</tr>
<tr>
<td>3/023</td>
<td>. . . <em>(using additional means for securing the cap, e.g. adhesives)</em></td>
</tr>
<tr>
<td>3/026</td>
<td>. . . *(the caps being made of thermoplastic material <em>(B67B 3/023 takes precedence)</em>)</td>
</tr>
<tr>
<td>3/04</td>
<td>. . . <em>(Cutting caps from strip material in capping machines (devices for registering moving strip material B65H 23/00)</em></td>
</tr>
<tr>
<td>3/06</td>
<td>. . . <em>(Feeding caps to capping heads)</em></td>
</tr>
<tr>
<td>3/061</td>
<td>. . . <em>(the caps having an asymmetric footprint, e.g. comprising a gripping lip)</em></td>
</tr>
<tr>
<td>3/062</td>
<td>. . . <em>(from a magazine <em>(B67B 3/061 takes precedence)</em>)</em></td>
</tr>
<tr>
<td>3/064</td>
<td>. . . <em>(from a hopper <em>(B67B 3/061 takes precedence)</em>)</em></td>
</tr>
<tr>
<td>3/0645</td>
<td>. . . <em>(with means for orientating the caps to a position ready to be applied to the container)</em></td>
</tr>
<tr>
<td>3/10</td>
<td>. . . <em>(Capping heads for securing caps <em>(B67B 3/023 takes precedence)</em>)</em></td>
</tr>
<tr>
<td>3/12</td>
<td>. . . <em>(characterised by being movable axially relative to cap to deform flanges thereof, e.g. to press projecting flange rims inwardly)</em></td>
</tr>
<tr>
<td>3/14</td>
<td>. . . <em>(characterised by having movable elements, e.g. hinged fingers, for applying radial pressure to the flange of the cap <em>(B67B 3/16, B67B 3/18 take precedence)</em>)</em></td>
</tr>
<tr>
<td>3/16</td>
<td>. . . <em>(characterised by having resilient deforming elements, e.g. resilient sleeves or collars <em>(B67B 3/18 takes precedence)</em>)</em></td>
</tr>
<tr>
<td>3/18</td>
<td>. . . <em>(characterised by being rotatable, e.g. for forming screw threads in situ)</em></td>
</tr>
<tr>
<td>3/20</td>
<td>. . . <em>(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)</em></td>
</tr>
<tr>
<td>3/2006</td>
<td>. . . <em>(using manually-controlled or manually operated devices)</em></td>
</tr>
<tr>
<td>3/2013</td>
<td>. . . <em>(by carousel-type capping machines)</em></td>
</tr>
<tr>
<td>3/202</td>
<td>. . . <em>(using friction means for screwing the caps, e.g. belts or guides <em>(B67B 3/2026, B67B 3/2033 take precedence)</em>)</em></td>
</tr>
<tr>
<td>3/2026</td>
<td>. . . <em>(comprising stationary capping heads)</em></td>
</tr>
<tr>
<td>3/2033</td>
<td>. . . <em>(comprising carousel co-rotating capping heads)</em></td>
</tr>
<tr>
<td>3/204</td>
<td>. . . <em>(Linear-type capping machines)</em></td>
</tr>
<tr>
<td>3/2046</td>
<td>. . . <em>(using friction means for screwing the caps, e.g. belts or wheels <em>(B67B 3/2053 takes precedence)</em>)</em></td>
</tr>
<tr>
<td>3/2053</td>
<td>. . . <em>(comprising capping heads)</em></td>
</tr>
</tbody>
</table>
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 5000)]
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 A471 43/06, A471 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
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, crowncap 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