

PatBase - Search results 28 October 2019

Search query: (FN=(22355009 OR 24047011 OR 19852016 OR 19657018 OR 871023 OR 19022035 OR 19955044 OR 8713051 OR 3993053 OR 41152066 OR 656071 OR 541089 OR 20342130 OR 21248139 OR 23112174 OR 25110203 OR 19767207 OR 21609209 OR 70232 OR 18831245 OR 20965266 OR 3872274 OR 92275 OR 22801303 OR 29646374 OR 21396398 OR 22771400 OR 19960475 OR 4940481 OR 19739538 OR 21716548 OR 22925566 OR 22090602 OR 56265650 OR 19596712 OR 1030719 OR 1054719 OR 22608723 OR 20320744 OR 21449744 OR 17188752 OR 19463755 OR 21840767 OR 29682767 OR 29900769 OR 22784819 OR 29900822 OR 21646828 OR 22210847 OR 22862849 OR 21718864 OR 19061886 OR 21419897 OR 19457923 OR 22728931 OR 23062931 OR 21945950 OR 1654968 OR 3801983 OR 22850984 OR 32504012 OR 17012 OR 22834055 OR 3148061 OR 22220076 OR 1145077 OR 25371143 OR 30995186 OR 29913206 OR 22969207 OR 3558218 OR 21164226 OR 70209288 OR 705397 OR 22179442 OR 21359477 OR 13314479 OR 22825504 OR 126512 OR 21408521 OR 14629 OR 21938650 OR 29823653 OR 22712653 OR 29776669 OR 18880708 OR 21285737 OR 29781756 OR 17204757 OR 746795 OR 29681839 OR 17420861 OR 29704866 OR 20387877 OR 19621950 OR 184981 OR 19699002 OR 22972011 OR 18245018 OR 25994172 OR 19583201 OR 19583266 OR 18059272 OR 1127274 OR 20810360 OR 19694423 OR 4646448 OR 29823467 OR 17745524 OR 18649525 OR 9040637 OR 4382696 OR 5174738 OR 19039758 OR 21758759 OR 31548884 OR 3698916 OR 30966933 OR 22953072 OR 22276129 OR 34678218 OR 10334264 OR 34893346 OR 22771396 OR 66216444 OR 23926594 OR 19052703 OR 19212733 OR 28928787 OR 29604843 OR 22632851 OR 21646862 OR 416892 OR 30989951 OR 50755982 OR 22902010 OR 1093208 OR 5043247 OR 42881326 OR 22922493 OR 45938161 OR 33801161 OR 49963182 OR 853232 OR 75589238 OR 48382596 OR 21375695 OR 57897783 OR 14831862 OR 31844889 OR 3293941 OR 707976 OR 19559344 OR 26123404 OR 20134456 OR 20553781 OR 3130818 OR 23413848 OR 17924279 OR 8160345 OR 23094653 OR 58629192 OR 22731482 OR 23085809 OR 23750164 OR 20443039 OR 18695066 OR 20354087 OR 20248103 OR 22384107 OR 71789109 OR 65393112 OR 50736122 OR 1331137 OR 18869143 OR 20551154 OR 19002164 OR 20707168 OR 57789180 OR 22888182 OR 41939184 OR 3607191 OR 22985209 OR 21668249 OR 1138256 OR 28131267 OR 15038289 OR 7572293 OR 30024302 OR 14349318 OR 1548351 OR 3547373 OR 20290395 OR 751408 OR 22699409 OR 25385412 OR 29593444 OR 1765469 OR 30590504 OR 18378517 OR 20561518 OR 30864537 OR 17674562 OR 15358581 OR 1103602 OR 18786610 OR 22975626 OR 53724640 OR 20432659 OR 49897663 OR 14308675 OR 18081709 OR 31337723 OR 20442726 OR 2053729 OR 31165740 OR 3193752 OR 42269790 OR 56089819 OR 25389874 OR 3293879 OR 20179918 OR 20599919 OR 21788925 OR 67957 OR 42022996 OR 7266997))

Results: 227

Search history

Search FT=(top* and cap and bottle and ring and metal and skirt and sheet) (Results 841)

1:

Search 1. edge* (Results 9749)

2:

Search (1) AND IPC=(B65 OR B21) (Results 617)

3:

Search (FN=(22355009 OR 24047011 OR 19852016 OR 19657018 OR 871023 OR 19022035 OR 19955044 OR 8713051 OR 3993053 OR 41152066 OR 656071 OR 541089 OR 20342130 OR 21248139 OR 23112174 OR 25110203 OR 19767207 OR 21609209 OR 70232 OR 18831245 OR 20965266 OR 3872274 OR 92275 OR 22801303 OR 29646374 OR 21396398 OR 22771400 OR 19960475 OR 4940481 OR 19739538 OR 21716548 OR 22925566 OR 22090602 OR 56265650 OR 19596712 OR 1030719 OR 1054719 OR 22608723 OR 20320744 OR 21449744 OR 17188752 OR 19463755 OR 21840767 OR 29682767 OR 29900769 OR 22784819 OR 29900822 OR 21646828 OR 22210847 OR 22862849 OR 21718864 OR 19061886 OR 21419897 OR 19457923 OR 22728931 OR 23062931 OR 21945950 OR 1654968 OR 3801983 OR 22850984 OR 32504012 OR 17012 OR 22834055 OR 3148061 OR 22220076 OR 1145077 OR 25371143 OR 30995186 OR 29913206 OR 22969207 OR 3558218 OR 21164226 OR 70209288 OR 705397 OR 22179442 OR 21359477 OR 13314479 OR 22825504 OR 126512 OR 21408521 OR 14629 OR 21938650 OR 29823653 OR 22712653 OR 29776669 OR 18880708 OR 21285737 OR 29781756 OR 17204757 OR 746795 OR 29681839 OR 17420861 OR 29704866 OR 20387877 OR 19621950 OR 184981 OR 19699002 OR 22972011 OR 18245018 OR 25994172 OR 19583201 OR 19583266 OR 18059272 OR 1127274 OR 20810360 OR 19694423 OR 4646448 OR 29823467 OR 17745524 OR 18649525 OR 9040637 OR 4382696 OR 5174738 OR 19039758 OR 21758759 OR 31548884 OR 3698916 OR 30966933 OR 22953072 OR 22276129 OR 34678218 OR 10334264 OR 34893346 OR 22771396 OR 66216444 OR 23926594 OR 19052703 OR 19212733 OR 28928787 OR 29604843 OR 22632851 OR 21646862 OR 416892 OR 30989951 OR 50755982 OR 22902010 OR 1093208 OR 5043247 OR 42881326 OR 22922493 OR 45938161 OR 33801161 OR 49963182 OR 853232 OR 75589238 OR 48382596 OR 21375695 OR 57897783 OR 14831862 OR 31844889 OR 3293941 OR 707976 OR 19559344 OR 26123404 OR 20134456 OR 20553781 OR 3130818 OR 23413848 OR 17924279 OR 8160345 OR 23094653 OR 58629192 OR 22731482 OR 23085809 OR 23750164 OR 20443039 OR 18695066 OR 20354087 OR 20248103 OR 22384107 OR 71789109 OR 65393112 OR 50736122 OR 1331137 OR 18869143 OR 20551154 OR 19002164 OR 20707168 OR 57789180 OR 22888182 OR 41939184 OR 3607191 OR 22985209 OR 21668249 OR 1138256 OR 28131267 OR 15038289 OR 7572293 OR 30024302 OR 14349318 OR 1548351 OR 3547373 OR 20290395 OR 751408 OR 22699409 OR 25385412 OR 29593444 OR 1765469 OR 30590504 OR 18378517 OR 20561518 OR 30864537 OR 17674562 OR 15358581 OR 1103602 OR 18786610 OR 22975626 OR 53724640 OR 20432659 OR 49897663 OR 14308675 OR 18081709 OR 31337723 OR 20442726 OR 2053729 OR 31165740 OR 3193752 OR 42269790 OR 56089819 OR 25389874 OR 3293879 OR 20179918 OR 20599919 OR 21788925 OR 67957 OR 42022996 OR 7266997)) (Results 227)

1) Family number: 19699002 (GB406165A)

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Title: Improvements in or relating to the capping of bottles or like containers

Abstract: 406,165. Wrenches. KING, G. E., 23, North Cross Road, East Dulwich, London. May 16, 1933, No. 14163. [Class 61 (iii).] A hand-operated tool for applying metal capsules to bottles and c., comprises a ring-member 6 which fits over the bottle, a contractile wire-loop 13 located in a peripheral groove in the member 6 and handles 11 for operating the loop. The handles 11 are pivotally mounted on screws 10 and a finger pressure plate 8 is provided on the opposite side of the tool. A V-shaped spring 16 tends to keep the handles in the open position. An internal shoulder is provided in the ring-member to locate the loop relative to the groove on the bottle neck.

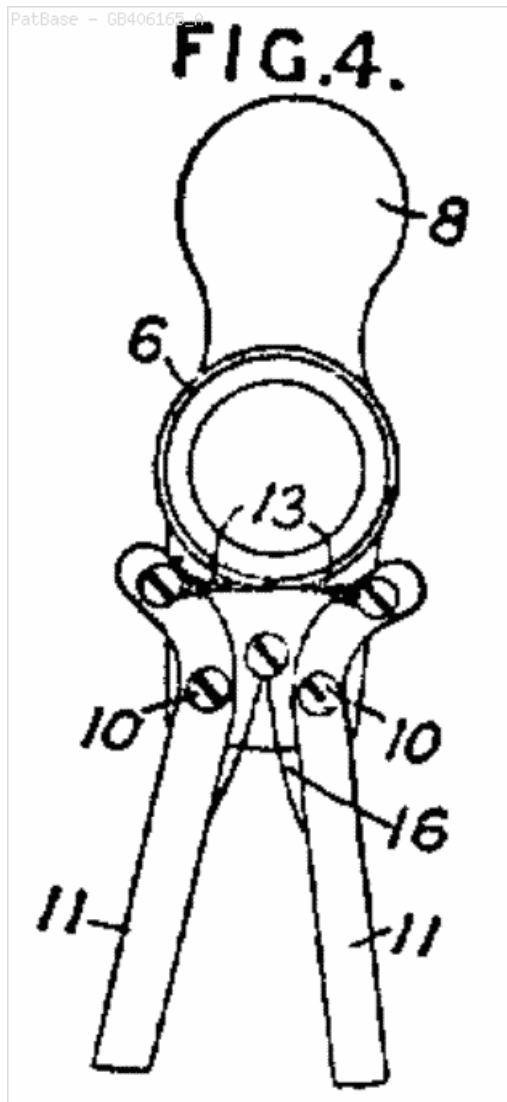
Classifications:

International (IPC 8-9): B65B7/28 B67B3/02
B67B3/10 (Advanced/Invention)

International (IPC 1-7): B67B3/10

CPC: B65B7/28 B67B3/023 B67B3/10

European: B65B7/28 B67B3/02B B67B3/10

**Family:**

Publication number	Publication date	Application number	Application date
GB406165 A	19340222	GB19330014163	19330516

Priority:

GB19330014163 19330516

Probable Assignee:

GEORGE EDGAR KING

Assignee(s): (std):

GEORGE EDGAR KING

2) Family number: 22355009 (US2909879A)

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Title: BOTTLE AND JAR CLOSING APPARATUS

Abstract: (Claim 1) 1. In apparatus for applying screw-threaded closure caps to product-filled containers having threaded necks to accommodate the closure caps, means for moving containers in upright position with closure caps partially telescoped thereover along a horizontal path through a closure cap applying zone, and spinning rolls in said zone for peripheral engagement with diametrically opposed portions of the closure cap skirt to impart rotary movement to the cap and thread it onto a container, at least one of the rolls being formed with an annular series of radially outwardly extending resilient fingers along the periphery.

Classifications:

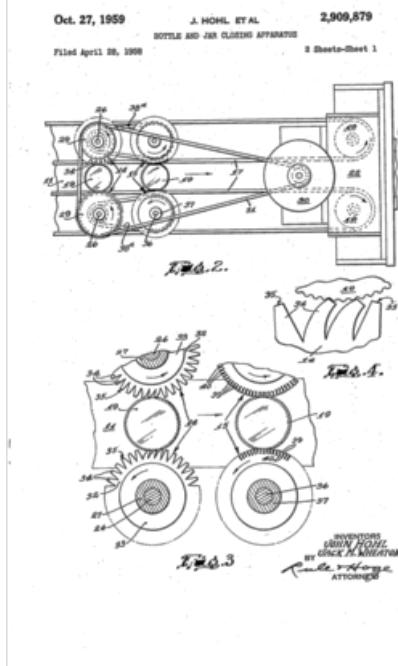
International (IPC 8-9): B67B3/20 (Advanced/Invention);
B67B3/00 (Core/Invention)

International (IPC 1-7): B67B3/20

CPC: B67B3/2046

European: B67B3/20G2

US: 53/317 53/331.5

**Family:**

Publication number	Publication date	Application number	Application date
US2909879 A	19591027	US19580731276	19580428

Priority:

US19580731276 19580428

Probable Assignee:

OWENS ILLINOIS GLASS CO

Assignee(s): (std):

OWENS ILLINOIS GLASS CO

Assignee(s):

OWENS ILLINOIS GLASS COMPANY

Inventor(s): (std):

JOHN HOHL ; WHEATON JACK M

Inventor(s):

HOHL JOHN

3) Family number: 22902010 (US3311077A)

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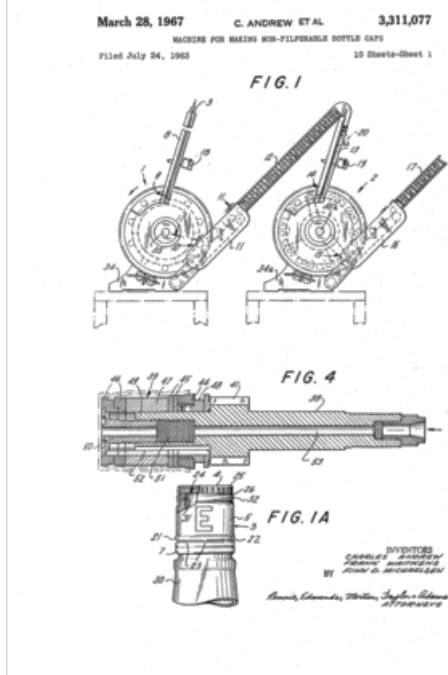
Title: MACHINE FOR MAKING NON-PILFERABLE BOTTLE CAPS

Abstract: (Claim 1) 1. In a machine for finishing cuplike metallic closures for bottles or other containers, the closures having skirt portions with embossed matter thereon, a stationary shaving die having cutting teeth projecting therefrom, a rotating mandrel having a closure member secured thereto, and means for moving the rotating mandrel into cooperative relation to the die so as to cause the teeth thereof to engage the embossed matter and remove the extremities of such matter.

Classifications:**International (IPC 8-9):** B21D51/44 (Advanced/Invention);

B21D51/38 (Core/Invention)

CPC: B21D51/44**European:** B21D51/44**US:** 413/10 413/67

**Family:**

Publication number	Publication date	Application number	Application date
US3311077 A	19670328	US19630297465	19630724

Priority:

US19630297465 19630724

Probable Assignee: ANDREW WAITKENS MACHINE CO INC**Assignee(s):** (std): ANDREW WAITKENS MACHINE CO INC**Assignee(s):** ANDREW WAITKENS MACHINE CO**Inventor(s):** (std): CHARLES ANDREW ; FRANK WAITKENS ; MICHAELSEN FINN D**Inventor(s):** WAITKENS FRANK ; ANDREW CHARLES**4) Family number: 24047011 (US4632265A)**

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Title: Press-on cap and seal

Abstract: An improved press-on bottle cap is disclosed in which the cap comprises a top disk and a thin-walled outer skirt dependent therefrom with an annular tear band which, when separated from the cap, divides the cap into a lower ring and an upper reclosure cap. An annular lip is provided about the outside wall of the cap, approximately in the middle of the reclosure cap and the tear tab, which is integral with the tear band, extends upwardly into contact with the underside of the annular lip. Preferably, the lip is discontinuous with an open sector above the tear tab, and the cap is fabricated without the necessity to use a split-cavity mold, and a preferred mold construction is also disclosed. A compressible, plastic foam gasket is employed in the cap to seal the container contents. A foam gasket is seated on the undersurface of the cap in a position to bear against the upper end of the neck of the container which is received in the cap. The tear band is formed by two circumferential score lines in the cap skirt which also has two circumferential beads about its inner wall which fit into grooves of the neck finish of the container. The cap is positively tamper-proof in that either the gasket or the lower portion of the outer skirt can be sealed to the bottle neck.

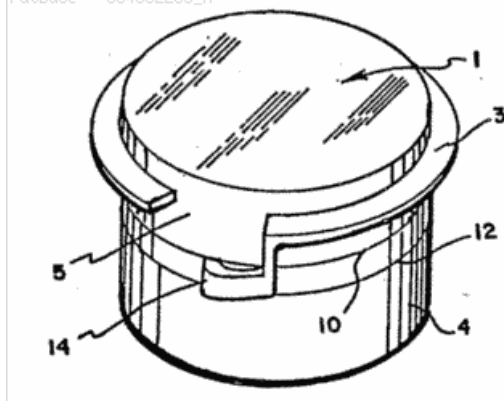
Classifications:**International (IPC 8-9):** B29C45/44 B65D41/48

B65D43/10 (Advanced/Invention);

B29C45/44 B65D41/32 (Core/Invention)

International (IPC 1-7): B29C39/34 B29C45/40 B65D41/32 B65D41/48**CPC:** B29C45/4407 B29L2001/00 B29L2031/565 B65D41/48 B65D2101/0053 B29C2043/5053**European:** B29C45/44B B65D41/48 L29C43/50D L29L1/00 L29L31/56B L65D101/00A3E**US:** 215/232 215/256 215/320 215/347 215/348 249/124 249/142 249/144 249/151 249/160 249/67 425/556 425/577

PatBase - US4632265_A

**Family:**

Publication number	Publication date	Application number	Application date
US4632265 A	19861230	US19850709534	19850308
US4819906 A	19890411	US19860947043	19861229
US4951830 A	19900828	US19890335767	19890410

US5207340 A	19930504	US19910702064	19910517
USRE33764 E	19911210	US19890368251	19890619

Priority:

US19830507342 19830624 US19850709534 19850308 US19860947043 19861229
US19890335767 19890410 US19890368251 19890619 US19890368250 19890619
US19910702064 19910517

Probable Assignee: COCHRANE BENJAMIN A

Assignee(s): (std): COCHRANE BENJAMIN A

Inventor(s): (std): COCHRANE BENJAMIN A

5) Family number: 22972011 (FR1341274A)

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Title: DISPOSITIF DE BOUCHAGE POUR BOUTEILLES CLOSURE DEVICE FOR BOTTLES (Machine translation)

Abstract: Source: FR1341274A [FR] (Claim 1) 1 **ATTENTION** debut du champ CLMS peut contenir fin de DESC **. contre l'interieur du col de la bouteille 10 assure un haut degre d'etancheite, tandis que toute pression de gaz interne tend a agir sur la jupe 15 vers l'exterieur pour la presser en contact etroit avec la paroi interieure du col de la bouteille 10. Cependant il est clair que la pression qui agit directement vers l'exterieur peut etre suffisante quelquefois pour faire sortir le bouchon 13 du col de la bouteille 10 et, pour eviter ceci, on dispose une membrane

Machine translation: (Claim 1) 1 ** WARNING ** start of CLMS field may contain end of DESC **. against the inside of the bottle neck 10 provides a high degree of tightness, while all internal gas pressure tends to act on the skirt 15 to the outside for the press in close contact with the inner wall of the cervical bottle 10. However it is clear that the pressure acting directly to the outside can sometimes be enough to pop the cap 13 of the neck of the bottle 10 and, to avoid this, one has a membrane

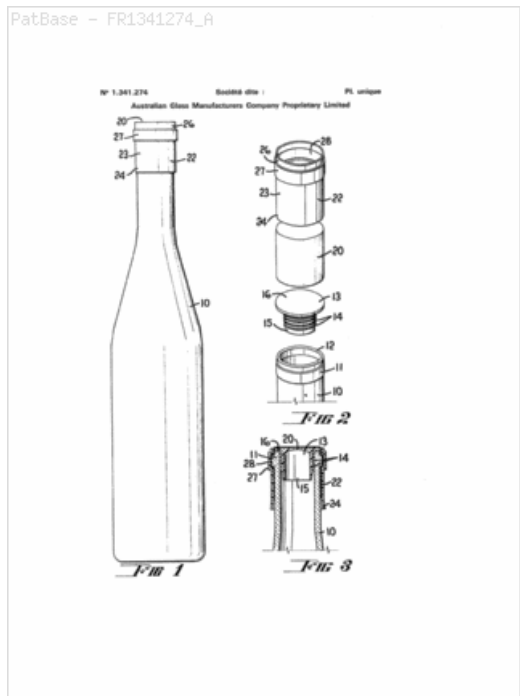
Classifications:

International (IPC 8-9): B65D41/60 (Advanced/Invention);
B65D41/32 (Core/Invention)

International (IPC 1-7): B65D55/16

CPC: B65D41/60

European: B65D41/60



Family:

Publication number	Publication date	Application number	Application date
FR1341274 A	19631025	FR19620918762	19621215

Priority:

FR19620918762 19621215

Probable Assignee: AUSTRALIAN GLASS MANUFACTURES

Assignee(s): (std): AUSTRALIAN GLASS MANUFACTURES

Assignee(s): AUSTRALIAN GLASS MANUFACTURES CO PROPRIETARY LTD ; AUSTRALIAN GLASS MANUFACTURES COMPANY PROPRIETARY ; AUSTRALIAN GLASS MANUFACTURES COMPANY PROPRIETARY LIMITED

6) Family number: 32504012 (US2007107190A)

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Title: METHOD FOR PRODUCING DECORATED BOTTLE CAPS WITH IMPROVED MECHANICAL STRENGTH

Abstract: Aspects of embodiments of the invention concern a method comprising: a) providing sheet or format metal; b) swaging said metal by means of a swaging lubricant, so as to form a swaged blank (1); c) degreasing said swaged blank (1), so as to typically remove the remains of the swaging lubricant, to form a degreased blank (2) capable of being lacquer coated; d) lacquer coating said degreased blank (2), said resulting lacquer coated blank (3) being then optionally decorated; e) an optional finishing step. The method is characterized in that during the degreasing at step c), said swaged blank (1) is subjected to an energetic radiation emission treatment of selected intensity and duration to eliminate or decompose said remains of lubricant, said treatment being wholly carried out at a metal temperature less than 150 degrees centigrade, and for a duration typically less than 1 second, so as to obtain, following said treatment, a surface tension not less than 34 dynes/cm. The invention also concerns a device for implementing said method. The invention provides the advantage that

Classifications:

Publication number	Publication date	Application number	Application date
AT385864 E	20080315	AT20050763703T	20050502
AU2005251969 AA	20051222	AU20050251969	20050502
AU2005251969 BB	20100610	AU20050251969	20050502
CA2564640 AA	20061025	CA20052564640	20050502
CA2564640 C	20130702	CA20052564640	20050502
DE602005004783 D1	20080327	DE200560004783T	20050502
DE602005004783 T2	20090212	DE200560004783T	20050502
EP1755804 A1	20070228	EP20050763703	20050502
EP1755804 B1	20080213	EP20050763703	20050502
ES2301034 T3	20080616	ES20050763703T	20050502
FR2869820 A1	20051111	FR20040004885	20040506
FR2869820 B1	20070622	FR20040004885	20040506
MXPA06012814 A1	20070126	MX2006PA12814	20050502
NZ550928 A	20091224	NZ20050550928	20050502
US2007107190 AA	20070517	US20060557015	20061106
US7832075 BB	20101116	US20060557015	20061106
WO05120743 A1	20051222	WO2005FR01091	20050502
ZA200609232 A	20080730	ZA20060009232	20050502

FR20040004885 20040506 WO2005FR01091 20050502

Assignee(s): (std): DE GUERRY JEAN ; GUICHENEY RAYMOND ; ALCAN PACKAGING CAPSULES ; PECHINEY CAPSULES
SOC PAR ACTI

Inventor(s): (std): DE GUERRY JEAN ; GUICHENEY RAYMOND ; GUERRY JEAN DE ; JEAN DE GUERRY ; RAYMOND GUICHENEY

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Abstract: 1.245.291. Feeding bottles. AMERICAN FLANGE and MFG. CO. Inc. 14 Nov., 1968 [30 Nov., 1967]. No. 54116/68.

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between the bottle contents and the nipple. The cap 20 seals against a flexible gasketing portion 16 of the nipple and provided with a centrally-positioned upwardly-protruding dimple 28 which helps to preserve the shape of the end of the nipple against which it presses when the bottle is sealed. The bottle is prepared for use by pulling a ring portion 27 of the cap upwardly so that the tear strip part 25 of the cap separates from the main part of the cap along weakened tearing lines 26 such that the nipple springs up through the opening created in the cap. The torn cap may be completely removed by continued pulling on the ring 27.

Classifications:

International (IPC 8-9): A61J11/00 (Advanced/Invention);

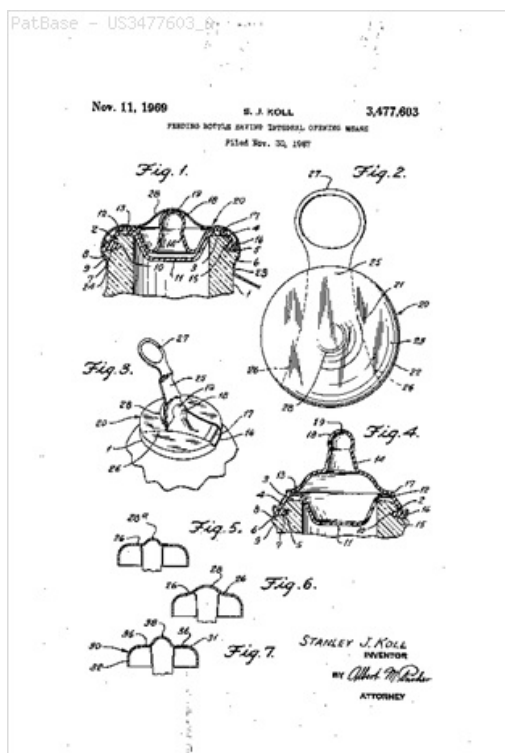
A61J11/00 (Core/Invention)

International (IPC 1-7): A61J11/00 A61J11/04 A61J9/00 A61J9/08 B65D43/02

CPC: A61J9/008 A61J11/008

European: A61J11/00Z2 A61J9/00E

US: 215/11 215/11.6 215/251 215/254 215/321 222/541.9



Family:

Publication number	Publication date	Application number	Application date
AT294323 B	19711125	AT19680011650	19681129
BE724466 A	19690502		19681126
BR6804394 A0	19730426	BR19680204394	19681128
CH497893 A	19701031	CH19680017678	19681127
DE1811428 A1	19690724	DE19681811428	19681125
DK121666 B	19711115	DK19680005785	19681127
FR1594894 A	19700608		19681127
GB1245291 A	19710908	GB19680054116	19681114
IE32489 B	19730822	IE19680001361	19681111
IE32489 L	19690530	IE19680001361	19681111
NL6817126 A	19690603	NL19680017126	19681129
NO125837 B	19721113	NO19680004784	19681129
US3477603 A	19691111	US19670686856	19671130

Priority:

US19670686856 19671130

Probable Assignee: AMERICAN FLANGE AND MFG

Assignee(s): (std): AMERICAN FLANGE AND MFG

Assignee(s): AMERICAN FLANGE AND MFG CO INC ; AMERICAN FLANGE AND MFG CO INC ; AMERICAN ELANG AND MFG CO INC ; AMERICAN FLANGE AND MANUFACTURING CO INC

Inventor(s): (std): KOLL S ; KOLL STANLEY J ; STANLEY JOSEPH KOLL

Inventor(s): JOSEPH KOLL STANLEY ; STANLEY J KOLL

8) Family number: 19852016 (GB521860A)

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Title: Improvements in or relating to closures for bottles and like containers

Abstract: 34578. [Class 125 (iii)] A closure for a bottle or like container comprises a metal member 7 of a cup like form having a top portion 8, Fig. 1, and an integral continuous skirt 9 of uniform depth which is flared outwardly at 10 towards its lower end over the greater part of its depth and terminates in an intumed marginal flange 11 which lies parallel to the top portion 8, a sealing disc or ring 12 being secured between the part 8 and the top of the container by pressing the flare 10 inwardly so as to remove the flare and cause the intumed flange 11 to assume an upwardly inclined position with its peripheral edge in contact with a rib 2 on the container, Fig. 2. The rib 2 may be formed with parts 13 of lesser diameter than the parts 14, Fig. 4, and the cap used as a re-closure, the parts of the intumed flange 11 facing the parts 13 being buckled against the inner surface of the skirt 9.

Classifications:

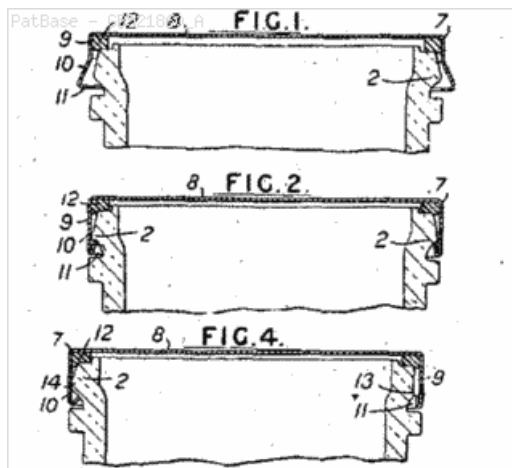
International (IPC 8-9): B65D41/12 (Advanced/Invention);

B65D41/02 (Core/Invention)

International (IPC 1-7): B65D41/06

CPC: B65D41/12

European: B65D41/12



Family:

Publication number	Publication date	Application number	Application date
GB521860 A	19400603	GB19380034578	19381128

Priority:

GB19380034578 19381128

Probable Assignee: WILLIAM BERNARD FINLAYSON

Assignee(s): (std): METAL CLOSURES LTD ; WILLIAM BERNARD FINLAYSON

Assignee(s): METAL CLOSURES LIMITED

9) Family number: 19657018 (US1755597A)

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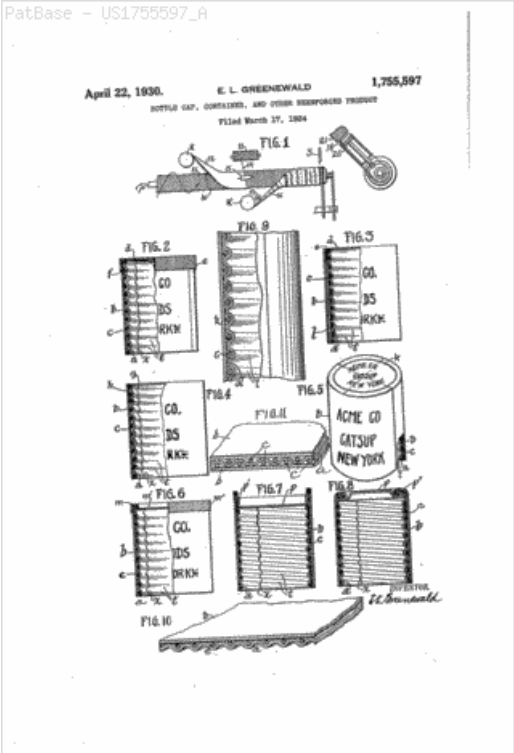
Title: BOTTLE CAP, CONTAINER, AND OTHER REENFORCED PRODUCT

Abstract: I claim: 1. A tubular body having corrugations extending circumferentially thereof, and sheet material permanently united to the crests of said corrugations and reinforcing the latter. 2. A tubular body having circumferentially extending corrugations and a, winding permanently united to and reinforcing said corrugations. 3. A tubular body comprising adjoining layers of sheet material permanently secured together, one of said layers having a helical corrugation, and a continuous reinforcement winding in said corrugation and confined between said layers. 4. A corrugated tubular body of fibrous material having its corrugations occupied by reinforcing means and bridged by a reinforcing member permanently united to the crests of said corrugations. 5. A multi-ply tubular body comprising concentric plies of permanently united sheet material, one of which is corrugated, and reinforcing means in corrugations of such corrugated ply and confined between the latter and an adjacent ply. 6. A device comprising a tubular wall having a bead reinforced by a winding permanently confined between the inside and outside faces of said wall and coextensive with said bead. 7. A device comprising a tubular body of paper or fibrous material having a thread reinforced by means confined within the wall of said body. 8. A receptacle, closure or the like having a threaded tubular wall comprising multiply fibrous material having a reinforcement embedded therein and coextensive with the thread on said wall. 9. A container closure having a cylindrical wall of fibrous material formed to provide integral container-engaging means on one face of said wall, and means embedded within said wall and reinforcing said container-engaging means. 10. A receptacle, closure or the like having a tubular wall of fibrous material provided with an interior thread and a substantially plain exterior surface adapted to carry printing. 11. A bottle cap comprising a cylindrical inner paper wall provided with an interior thread, a cylindrical outer wall of sheet material permanently secured to the outer side of the inner wall and reinforcing the thread thereof. 12. A closure comprising a tubular body having an inner wall of fibrous material provided with an interior helical thread and an exterior groove corresponding to said thread, reinforcing means disposed in said groove, a wall of fibrous material secured to the outside of said inner wall to cover said groove and the reinforcing means therein; and means closing one end of said body. 13. A bottle cap comprising a cylindrical paper body part having an inner wall provided with a helical groove an interior screw thread, and a plain outer wall surrounding the screw-threaded portion of said inner wall and reinforcing the same, and reinforcing material confined in the helical groove between the inner and outer walls. 14. A receptacle, closure or the like having a cylindrical multi-ply body of fibrous material provided with a reinforced screwthreaded portion. 15. A bottle cap comprising a body having an interiorly-threaded tubular inner wall, a winding disposed in the exterior groove corresponding to said interior thread, an outer wall covering the exterior surface of said inner wall and the winding surrounding the same, and means closing one end of the body. 16. A bottle closure comprising a cylindrical body part having an inner wall of sheet material provided with container-engaging means and an outer wall of sheet material surrounding the inner wall and having a plain exterior surface, the inner surface of the outer wall being permanently united to the inner wall. 17. A bottle cap comprising a cylindrical body consisting of a plurality of thicknesses of sheet material permanently united together, container-engaging means adjacent one end of said body, and a separately formed cover part secured to and closing the opposite end of said body. 18. A bottle cap of fibrous material comprising a cylindrical inner wall of paper or fibrous material having an interior helical thread and an exterior groove corresponding member wall of the outer said to said thread, a fibrous reinforcing member disposed in said groove, an outer paper or fibrous material secured to side of said inner wall and bridging groove therein and covering said reinforcing member whereby said thread and the cap are reinforced, and fibrous means closing, one end of the body of the cap. 19. A closure comprising an interiorly threaded self-sustaining tubular body of fibrous material, and a separately-formed metallic top part permanently secured to said body. 20. A closure comprising an interiorly threaded tubular body part having a top comprising inwardly-folded portions integral with and substantially closing one end of said body. 21. A paper closure for containers comprising a skirt having a substantially plain cylindrical exterior surface adapted to carry printing or advertising, and means whereby said closure may be readily secured to and readily detached from a container. 22. A closure comprising a cylindrical body of fibrous material provided with a reinforced screw-threaded portion and also having a top part secured to said body and provided with a corrugated portion forming a grip on said closure. 23. A closure for containers having a top and a depending threaded skirt and carrying printing or advertising on the exterior surfaces of both the top and skirt. 24. An internally threaded bottle cap having a plain cylindrical exterior surface carrying printing or advertising. 25. A composite body comprising a corrugated layer of sheet material, reinforcing means in corrugations of said layer, and a layer of sheet material secured to said corrugated layer and covering said reinforcing means. 26. A composite body comprising a corrugated layer of flexible material, cord like reinforcing means in corrugations of said layer, and a layer of flexible material secured to said corrugated layer and covering said reinforcing means. 27. A composite body comprising a corrugated layer of paper, flexible reinforcing means in the corrugations of said layer, and a layer of fibrous material secured to said corrugated layer and concealing said reinforcing means. 28. A composite body comprising a layer of corrugated paper, fibrous material in the corrugations of said layer, and a layer of paper secured to such corrugated layer and concealing said reinforcing means. 29. A composite tubular body comprising a helically corrugated layer of sheet material, reinforcing means helically of said body and disposed in such helical corrugation, and a layer of sheet material secured to said corrugated layer and covering said reinforcing means. 30. A composite tubular body comprising a helically corrugated layer of paper, a fibrous cord extending helically of said body

and disposed in such helical corrugation, and a layer of paper secured to said corrugated layer and covering said cord. 31. A closure or receptacle comprising a tubular body consisting of a helically corrugated layer of sheet material, a cord-like reinforcing member disposed in such helical corrugation, and a layer of sheet material secured to said corrugated layer and covering said reinforcing member. 32. A reinforced product comprising 11 layer of flexible sheet material corrugated to provide corrugations in both of its faces. and cord-like reinforcement means disposed in and extending lengthwise of the corrugations in one of said faces. 33. A reinforced product comprising a layer of sheet material corrugated to provide corrugations in both of its faces, and cord-like reinforcement means disposed in and extending lengthwise of corrugations in both of said faces. 34. A reinforced product comprising a layer of sheet material corrugated to 'provide corrugations in both of said faces, reinforcements in said corrugations and layers of sheet material secured to the opposite faces of such corrugated layer to conceal such reinforcements and further reinforce said product. 35. A reinforced product comprising a. layer of paper corrugated to provide corrugations in both of its faces, cord-like reinforcement means disposed in and' extending lengthwise of corrugations in both of said faces, and layers of sheet material secured to the opposite faces of such corrugated layer to conceal such reinforcements and further reinforce said product. 36. A composite reinforced product comprising a layer of sheet material corrugated to provide corrugations in both of its faces, a layer of sheet material permanently secured to one face of said corrugated layer, and reinforcing means disposed in the corrugations of said face between said layers. 37. A composite reinforced product comprising a corrugated layer of sheet material having; corrugations in both of its faces, a plain layer of sheet material secured to one face of said corrugated layer, and strip reinforcing means disposed in the corrugations of said face between said layers. 38. A composite reinforced product comprising a corrugated layer of paper having corrugations in both of its faces, a plain layer of paper secured to one face of said corrugated layer, and cord-like reinforcing means disposed in the corrugations of said face between said layers.. V 39. A composite reinforced product comprising a layer of sheet material corrugated to provide corrugations in both of its faces, reinforcing wires disposed in and extending lengthwise of corrugations in at least one of said faces, and layers of sheet material secured to the opposite faces of such corrugated layer to conceal such wires and further reinforce said product. 40. A container closure having a skirt comprising a substantially plain exterior surface carrying printing or advertising, and means on said closure for coupling the same to a container. 41. A sheet of material having corrugations in its opposite faces, and cord-like means disposed in and extending lengthwise of corrugations in both faces to reinforce said sheet. 42. A sheet of paper having' corrugations in its opposite faces, and cord-like means disposed in and extending lengthwise of corrugations in both of said faces to reinforce said sheet. 43. A container closure having a skirt comprising a substantially plain cylindrical exterior surface carrying undistorted printing, said closure being readily attachable to and readily detachable from a container, and such printing being visible when said closure is attached to a. container. In testimony whereof, I affix my signature

Classifications:

International (IPC 8-9): B65D41/04 (Advanced/Invention);
B65D41/04 (Core/Invention)
International (IPC 1-7): B65D3/04 E04C2/18
CPC: B65D41/0492
European: B65D41/04G
US: 215/230 215/323 215/334 229/4.5



Family:

Publication number	Publication date	Application number	Application date
US1755597 A	19300422	US19240699846	19240317

Priority:

US19240699846 19240317

Probable Assignee: GREENEWALD EUGENE L
Assignee(s): (std): GREENEWALD EUGENE L
Inventor(s): (std): GREENEWALD EUGENE L

10) Family number: 18245018 (US3583591A)

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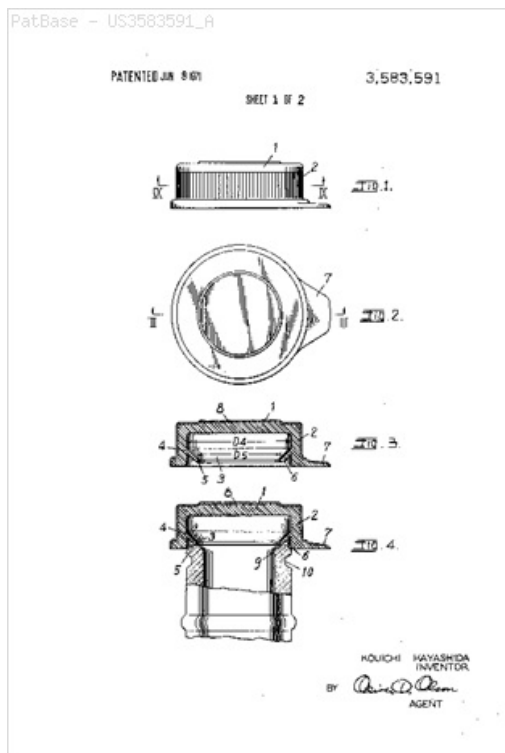
Title: BOTTLE CAP

Abstract: 1,226,245. Injection moulding bottle caps. K. HAYASHIDA. 24 March, 1969 [17 July, 1968], No. 15279/69. Heading B5A. [Also in Division B8] A bottle cap is formed by placing a thin metal sheet 14 into a mould 11, 12, inserting the part 12 of the mould into the part 11, and injecting synthetic resin through an aperture 13, thereby forcing the sheet against the part 11. The sheet 14 is sufficiently thin to allow crimps (15), Fig. 9 (not shown), to be formed in it under the pressure of the resin. The part 12 is recessed to form a flange on the cap interior. The resin may alternatively be injected through an aperture 13¹ thereby forcing the sheet 14 to take up the interior contour of the cap rather than that of the cap exterior.

Classifications:

International (IPC 8-9): B29C45/14 B65D41/18
B65D51/24 (Advanced/Invention);
B29C45/14 B65D41/02 B65D51/24 (Core/Invention)
International (IPC 1-7): B65D23/00 B65D39/00 B65D41/16

B65D41/22 B65D41/44 B65D41/48 B65D41/52 B65D41/62
B65D53/00
CPC: Y10S215/01 B65D51/243 B29C45/1418 B29K2705/00
B29L2031/565 B65D41/18
European: B29C45/14D B65D41/18 B65D51/24D L29K705/00
L29L31/56B
US: 215/316 215/344 215/40 215/DIG.1 D9/454



Family:

Publication number	Publication date	Application number	Application date
BR6908631 A0	19730130	BR19690208631	19690508
DE1915147 A1	19700506	DE19691915147	19690325
ES172813 U	19720216	ES19690172813U	19690428
ES172813 Y	19720816	ES19690172813U	19690428
FR2013085 A1	19700327	FR19690022417	19690701
GB1226245 A	19710324		19690324
SE350944 B	19721113	SE19690008466	19690613
US3583591 A	19710608	US19690830659	19690605

Priority:

JP19680050455 19680717

Probable Assignee: HAYASHIDA

Assignee(s): (std): HAVASHIDA K ; HAYASHIDA K ; HAYASHIDA KOUICHI ; KOUICHI HAYASHIDA

Assignee(s): HAYASHIDA

Inventor(s): (std): HAVASHIDA K ; HAYASHIDA KOUICHI ; HAYASHIDA K

Inventor(s): KOUICHI HAYASHIDA

11) Family number: 871023 (US3451193A)

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Title: APPARATUS FOR SECURING CLOSURE CAPS TO BOTTLES

Abstract: (Claim 1) 1. In apparatus for releasably affixing skirted sheetmetal cover caps to the necks of bottles, means for moving upright bottles with caps loosely telescoped over the necks to an affixing station, means at said station for pressing the cover-caps to sealing position on the bottle necks and means at said station for bending the cap skirt inwardly at two diametrically opposed points of its free lower edge to create fingers holdingly engaging an external shoulder on the neck, the means for pressing the cover caps to sealing position being a rotatable pressure roll mounted on a horizontal axis above the path of travel of the bottles with its periphery at an elevation to contact the caps, the pressure roll having a peripheral portion formed of a cushioning material and means for rotating the roll.

Classifications:

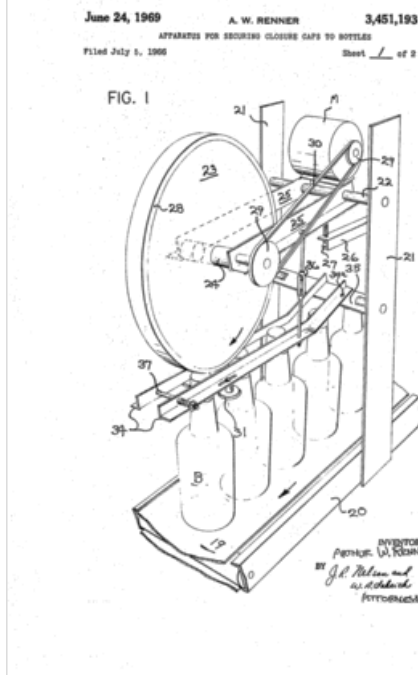
International (IPC 8-9): B67B3/10 (Advanced/Invention);
B67B3/00 (Core/Invention)

International (IPC 1-7): B65B7/28 B67B3/18

CPC: B67B3/10

European: B67B3/10

US: 53/334

**Family:**

Publication number	Publication date	Application number	Application date
US3451193 A	19690624	US19660562658	19660705

Priority:

US19660562658 19660705

Probable Assignee:

OWENS ILLINOIS INC

Assignee(s): (std):

LOUIS M MOYROUD ; OWENS ILLINOIS INC

Inventor(s): (std):

RENNER ARTHUR W

Inventor(s):

ARTHUR W RENNER

12) Family number: 19022035 (US2158683A)

© PatBase

Title: CLOSURE CAP

Abstract: 468,656. Closure caps for bottles. WHITE CAP CO. June 17, 1936, No. 16906. Convention date, June 17, 1935. [Class 125 (iii)] A bottle-cap has an inner shell 10 having a top portion and a depending skirt with an outwardly flared part 10b. The outer shell 12 encompasses the shell 10 and is turned inwardly at the lower edge. The shell 12 is inwardly fluted at 12a, 12b to meet the shell 10. A cylindrical gasket 11 of rubber and c. is compressed within the part 10. Specification 441,236 is referred to.

Classifications:

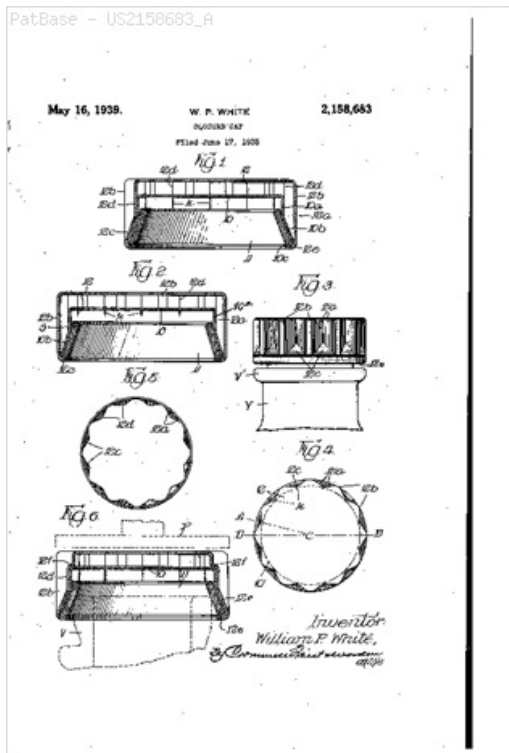
International (IPC 8-9): B65D41/02 (Advanced/Invention);
 B65D41/02 (Core/Invention)

International (IPC 1-7): B65D41/22 B65D55/00

CPC: B65D41/02

European: B65D41/02

US: 215/352

**Family:**

Publication number	Publication date	Application number	Application date
GB468656 A	19370709	GB19360016906	19360617
US2158683 A	19390516	US19350026978	19350617

Priority:

US19350026978 19350617

Probable Assignee:

WHITE CAP CO

Assignee(s): (std):

WHITE CAP CO

Assignee(s):

WHITE CAP COMPANY

Inventor(s): (std):

WHITE WILLIAM P

13) Family number: 20443039 (GB814437A)

© PatBase

Title: Sealing cap for bottles, jars, canisters and similar containers

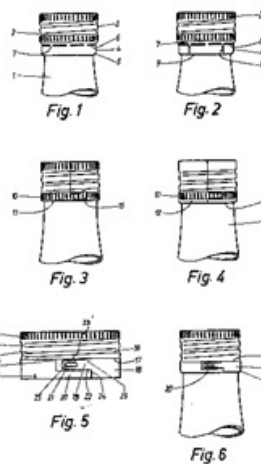
Abstract: 814,437. Bottle capsules. RITZENHOFF, H. [trading as SEIDEL KOMM-GES. GEB] May 31, 1957 [June 1, 1956, July 9, 1956], No. 17445/57. Class 125(3). A bottle sealing cap 14 has screw threads 16, a tear-off line 17 and a lower band 18 which is spun over a projection on the bottle neck, a tongue 19 being punched out between cutting lines 22¹-23 and 21 and a cut 24 running between weakened extension 22 of the cutting line 21 and the edge of the skirt so that the band 18 can be torn off to allow the cap to be unscrewed.

Classifications:**International (IPC 8-9):** B65D41/34 (Advanced/Invention);

B65D41/34 (Core/Invention)

International (IPC 1-7): B65D41/34 B65D41/40 B65D55/00**CPC:** B65D41/348 B65D41/3485 B65D2101/0053**European:** B65D41/34F B65D41/34F2 L65D101/00A3E

PatBase - GB814437_A

814,437 COMPLETE SPECIFICATION
1 SHEET
This drawing is a reproduction of
the Original on a reduced scale.

Family:

Publication number	Publication date	Application number	Application date
CH351855 A	19610131		19570531
CH362939 A	19620630	CH19600007050	19600621
GB814437 A	19590603	GB19570017445	19570531

Priority:

19560601

Probable Assignee: HERMANN RITZENHUFF

Assignee(s): (std): HERMANN RITZENHUFF ; SEIDEL GEB KG ; SEIDEL KG GEB

Assignee(s): GEBRUEDER SEIDEL KG

Inventor(s): (std): HERMANN RITZENHOFF

Inventor(s): RITZENHOFF HERMANN

14) Family number: 19955044 (US1795289A)

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Title: SEALING DEVICE FOR BOTTLE CAPS

Abstract: I claim as my invention » 1. A metallic cap for a bottle comprising a closure having a ring portion over the bottle rim, and having an annular depending skirt whose whole circumference is divided by slits into sections; said slits being made without intermixture of metal, and terminating at the juncture of said ring and flange portions of closure; and said sections, at each slit, having adjacent edges in overlapping engagement. 2. A metallic cap for a bottle comprising a closure having a ring portion over the bottle rim, and having an annular, crimped, depending skirt flange whose whole circumference is divided by slits into sections each of which approximates 90 degrees of a circle; each said slit being formed in a peak of said crimp, all the original metal continuing present, and each terminating at the juncture of said ring and flange portions of closure; and the adjacent edges of said sections at each slit being in overlapping engagement, with one portion of a peak thus slit reaching over the slope of the other portion of the same peak. 3. A metallic cap for a bottle comprising a closure having a ring portion over the bottle rim, and having an annular, crimped, depending skirt flange whose whole circumference is divided by slits into sections each of which approximates 90 degrees of a circle; each said slit being formed at an incline in a peak of said crimp, all the original metal continuing present, and each terminating at the juncture of said ring and flange portions of closure; and the adjacent edges of said sections at each slit being in overlapping engagement, with one portion of a peak thus slit reaching over the slope of the other portion of the same peak and locking said sections together. 4. A metallic cap for a bottle comprising a non-resilient closure having an annular plane ring portion over the bottle rim and a gasket underlying said ring portion, said closure also having a peripheral annular skirt flange and a central portion having a mound whose base is sufficiently less in diameter than the mouth of the bottle to be a leverage distance therefrom and to permit said base to descend below the level of the ring when knocked from above, whereby descent of the dome operates to free the skirt flange from the bottle neck. Signed at Boston, Massachusetts, this 30th day of June, 1930.

Classifications:

International (IPC 8-9): B65D51/24 (Advanced/Invention);

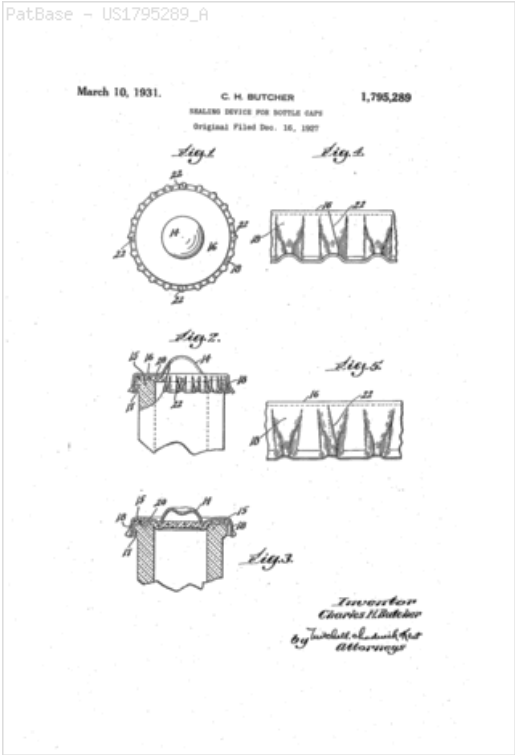
B65D51/24 (Core/Invention)

International (IPC 1-7): B65D41/12

CPC: B65D51/243

European: B65D51/24D

US: 215/301



Family:

Publication number	Publication date	Application number	Application date
US1795289 A	19310310	US19300465264	19300702

Priority:

US19300465264 19300702

Probable Assignee: BUTCHER CHARLES H

Assignee(s): (std): BUTCHER CHARLES H

Inventor(s): (std): BUTCHER CHARLES H

Title: WINE BOTTLE AND CLOSURE

Abstract: A wine bottle having a neck finish (10) and a cap-type closure (30) therefor. The finish (10) includes an incomplete annular groove (16) between its rim (14) and a transfer bead (12). The groove (16) includes at least one cam section (18). In use, a depending skirt (34) of the cap (30) extends over the groove (16) and is deformed into the groove (16) to seal the cap on the bottle. The deformed portion of the skirt (34) is reformable by the cam section (18) upon relative rotation of the cap (30) on the finish (10) to render the cap removable from the bottle. The finish and closure have the appearance of a conventional cork mouth wine bottle for consumer acceptance reasons, but avoids problems such as cork tainting and manufacturing difficulties associated with conventional cork mouth wine bottles.

Classifications:

International (IPC 8-9): B65D1/02 B65D41/00 B65D41/12

B65D41/16 B65D41/17 (Advanced/Invention);

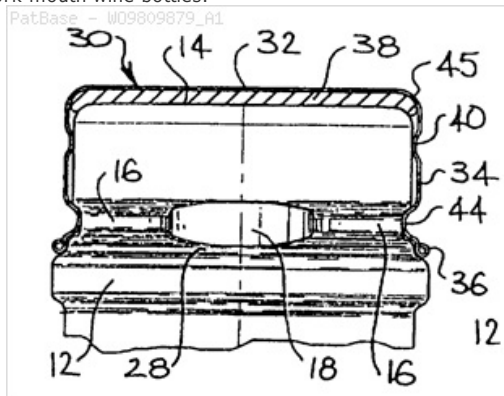
B65D1/02 B65D41/00 B65D41/02 (Core/Invention)

International (IPC 1-7): B65D1/02 B65D41/00 B65D41/16

B65D41/17

CPC: B65D1/0253 B65D41/12

European: B65D1/02D1C B65D41/12

**Family:**

Publication number	Publication date	Application number	Application date
AU199739344 A1	19980326	AU19970039344	19970901
AU206696 A0	19960926	AU1996PO02066	19960902
AU717893 B2	20000406	AU19970039344	19970901
EP0929460 A1	19990721	EP19970936523	19970901
JP2001505167 T2	20010417	JP19980512046T	19970901
WO9809879 A1	19980312	WO1997AU00559	19970901

Priority:

AU1996PO02066 19960902 AU19970039344 19970901 WO1997AU00559 19970901

Probable Assignee: A C I OPERATIONS

Assignee(s): (std): A C I OPERATIONS ; GRANAT RODNEY JOHN

Assignee(s): ACI OPERATIONS PTY LTD

Inventor(s): (std): GRANAT RODNEY JOHN

Inventor(s): RODNEY JOHN GRANAT

Agent(s): PHILLIPS ORMONDE FITZPATRICK

Designated states: AL AM AT AU AZ BA BB BE BG BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SL SZ TJ TM TR TT UA UG US UZ VN YU ZW

Title: CONTAINER CLOSURE

Abstract: 1468627 Bottle cap; pull ring ALUMINUM CO OF AMERICA 9 Sept 1975 37114/75 Heading B8T A sheet metal closure to be secured on a container having an outwardly projecting annular bead 34 around its entrance mouth comprises a top panel 12, a depending skirt 14 and a pull ring 16 concentric with the bottom edge of the skirt 14, the skirt having a pair of weakening lines 20, 22 defining a tear strip 18 across the skirt, the pull ring 16 comprising a curled bead integrally connected to the outer end of the tear strip 18 to facilitate severance of the weakening lines 20, 22 and removal of the closure. The pull ring 16 is preferably attached to the skirt 14 by a frangible portion 24 in the form of a score line or alternating slits and bridges, the frangible portion being broken when the closure is secured on a container by inward constriction of the skirt 14. The pull ring 16 is an inwardly curled bead preferably of oval or elliptical cross-section with its major axis parallel to the external surface 40 of the container when secured thereon. When the pull ring is pulled upwardly the curled bead formation exerts a camming action on the edge of the tear strip 18 to sever the lines 20, 22.

Classifications:

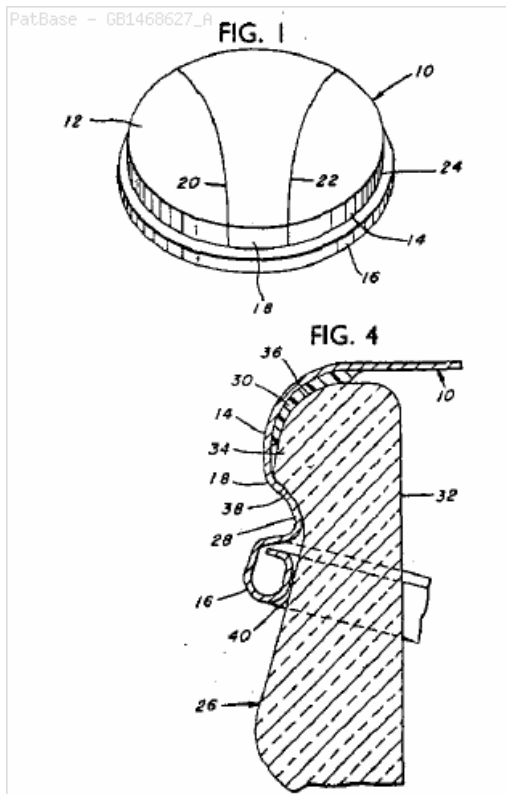
International (IPC 8-9): B65D41/44 (Advanced/Invention);

B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/40

CPC: B65D41/44

European: B65D41/44

**Family:**

Publication number	Publication date	Application number	Application date
GB1468627 A	19770330	GB19750037114	19750909

Priority:

GB19750037114 19750909

Probable Assignee:

ALUMINUM CO OF AMERICA

Assignee(s): (std):

ALUMINUM CO OF AMERICA

17) Family number: 22834055 (US3057503A)

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Title: CLOSURE FOR BOTTLES AND CONTAINERS

Abstract: (Claim 1) 1. In combination with a vessel having a neck with a bead and an annular depression below said bead: a split ring engaging the neck immediately below said bead and extending around said neck, and a closure cap of resilient material closing said vessel and having a top part extending across the top of the neck and also having a skirt part extending downwardly around said bead and said ring, the outer surface of said ring and the inner surface of the skirt part of said cap having interengaging means releasably interlocking the cap and ring.

Classifications:

International (IPC 8-9): B65D41/48 B65D55/08 (Advanced/Invention); B65D41/32 B65D55/02 (Core/Invention)

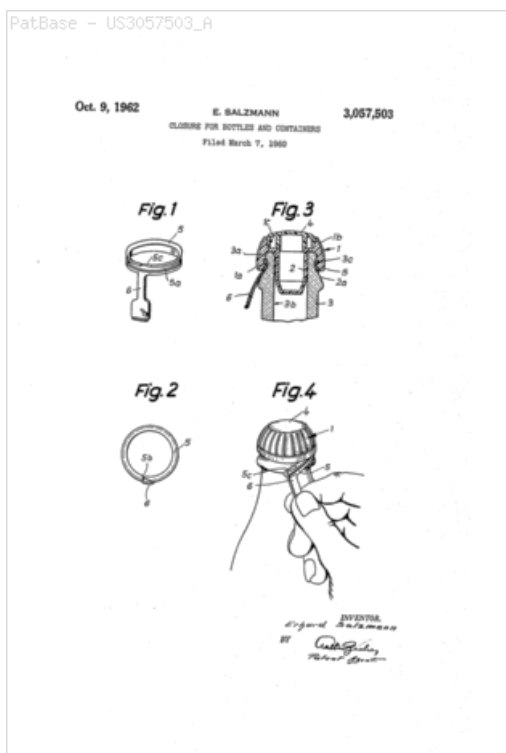
International (IPC 1-7): B65D55/00

CPC: B65D41/485 B65D55/0827

European: B65D41/48B B65D55/08B1

US: 215/253 215/320

PatBase - US3057503_A



Family:

Publication number	Publication date	Application number	Application date
US3057503 A	19621009	US19600012999	19600307

Priority:

19590512 US19600012999 19600307

Probable Assignee: ZELLER PLASTIK KOEHN GRAEBNER

Assignee(s): (std): ZELLER PLASTIK KOEHN GRAEBNER

Assignee(s): ZELLER PLASTIK KOEHN GRABNER AND CO

Inventor(s): (std): ERHARD SALZMANN

Inventor(s): SALZMANN ERHARD

18) Family number: 3148061 (FR2230555A)

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Title: SHEET METAL SCREW TOP FOR BOTTLE - HAS TEAR OFF STRIP BETWEEN LOCKING DEFORMATIONS ENGAGING DEFORMATION IN BOTTLE

Abstract: The parent patent describes the type of screw top for bottles made from pressed metal. The metal cap is sealed onto the bottle top by means of a groove in the neck of the bottle, the end of the cap being rolled to conform with the profile of the groove. The bottle may be opened by tearing off a central strip in the bottle top. The strip has perforated sides so that it may easily be torn. The present invention is an improvement to the main patent in that the retaining seal which remains on the neck of the bottle is backed by an additional ring (13) in the neck of the bottle.

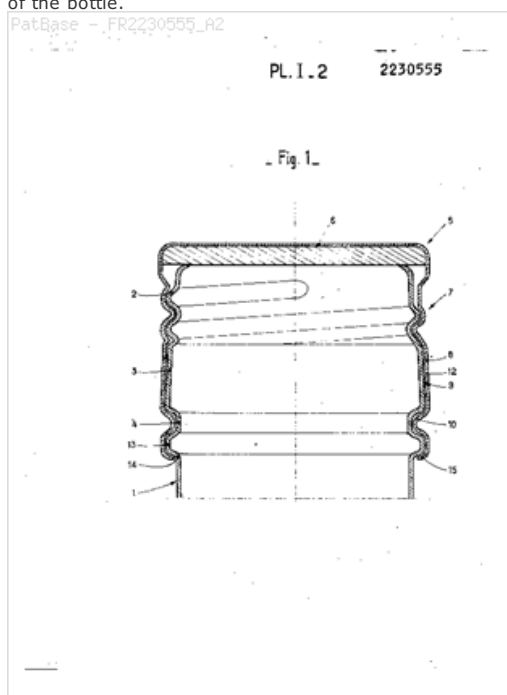
Classifications:

International (IPC 8-9): B65D1/02 B65D41/34 (Advanced/Invention); B65D1/02 B65D41/34 (Core/Invention)

International (IPC 1-7): B65D1/00 B65D1/02 B65D41/38

CPC: B65D1/0246 B65D41/348 B65D2101/003 B65D2101/0053

European: B65D1/02D1B B65D41/34F L65D101/00A3B L65D101/00A3E

**Family:**

Publication number	Publication date	Application number	Application date
FR2230555 A2	19741220	FR19730019027	19730525
FR2230555 B2	19760611	FR19730019027	19730525

Priority:

FR19730019027 19730525

Probable Assignee: SCAL GP CONDIT ALUMINIUM

Assignee(s): (std): CEBAL CONDITIONNEMENTS ALUMINI ; SCAL GP CONDIT ALUMINIUM

Assignee(s): CEBAL CONDITIONNEMENTS ALUMINIUM ; SCAL CONDITIONNEMENTS ALUMINIUM FR

19) Family number: 18695066 (US3974931A)

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Title: Bottle cap

Abstract: A tear-off convenience bottle cap formed of lightweight sheet metal having a circular top panel surrounded by a cylindrical skirt. An annular sealing gasket disposed within said cap at the juncture of the top and skirt. An integrally formed pull member extends away from the skirt edge with a score line commencing at either side of the pull member extending upwardly across the cap skirt. The score lines continue part way about the periphery of the cap top panel protected against exposure to the bottle contents by the annular sealing gasket and are then directed radially outwardly into the cap skirt opposite the pull member, thus minimizing the pull force required to dislodge the cap from the underlying bottle finish at the termination of the tearing action.

Classifications:

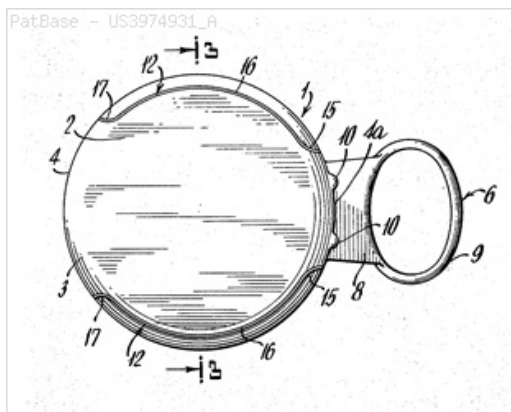
International (IPC 8-9): B65D41/32 B65D41/34 B65D41/42 B65D41/44 (Advanced/Invention);

B65D41/32 B65D41/34 (Advanced/Non-invention);

B65D41/32 B65D41/34 (Core/Invention)

International (IPC 1-7): B65D41/00 B65D41/32 B65D41/40

B65D41/42 B65D41/44 B65D51/20 B65D53/02 B65D53/04
B65D53/06 B67B3/00
CPC: B65D41/42 B65D41/44
European: B65D41/42 B65D41/44
US: 215/254



Family:

Publication number	Publication date	Application number	Application date
AR208600 A1	19770215	AR19760263279	19760513
AR212247 A1	19780615	AR19760264874	19760927
AT358939 B	19801010	AT19760008335	19761110
AT368975 B	19821125	AT19760003907	19760528
AT390776 A	19820415	AT19760003907	19760528
AT833576 A	19800215	AT19760008335	19761110
AU197613738 A1	19771110	AU19760013738	19760507
AU197617881 A1	19780323	AU19760017881	19760917
AU497391 B2	19781214	AU19760017881	19760917
AU508259 B2	19800313	AU19760013738	19760507
BE842094 A	19760916	BE19760167231	19760521
BE846871 A	19770131	BE19760171182	19761001
BR7603497 A	19770104	BR19760003497	19760531
BR7607339 A	19770920	BR19760007339	19761029
CA1078780 A1	19800603	CA19760251838	19760505
CA1078781 A1	19800603	CA19760261732	19760921
CH608999 A	19790215	CH19760006544	19760524
CH611224 A	19790531	CH19760012097	19760923
DE2623889 A1	19761202	DE19762623889	19760525
DE2623889 C2	19900531	DE19762623889	19760525
DE2659243 A1	19770929	DE19762659243	19761224
DK146619 B	19831121	DK19760002347	19760528
DK147675 B	19841112	DK19760005384	19761130
DK147675 C	19850513	DK19760005384	19761130
DK234776 A	19761130	DK19760002347	19760528
DK538476 A	19770916	DK19760005384	19761130
EG13539 A	19811231	EG19760000300	19760522
EG14089 A	19830331	EG19760000660	19761027
ES234647 U	19780616	ES19760234647U	19761013
ES234647 Y	19781016	ES19760234647U	19761013
ES448325 A1	19770716	ES19760448325	19760528
FI64109 B	19830630	FI19760001286	19760507
FI64109 C	19831010	FI19760001286	19760507
FI64329 B	19830729	FI19760002772	19760929
FI64329 C	19831110	FI19760002772	19760929
FI761286 A	19761130	FI19760001286	19760507
FI762772 A	19770916	FI19760002772	19760929
FR2312417 A1	19761224	FR19760015043	19760519
FR2312417 B1	19781117	FR19760015043	19760519
FR2344463 A1	19771014	FR19760035330	19761124
FR2344463 B1	19790928	FR19760035330	19761124
GB1549348 A	19790808	GB19760019768	19760513
GB1561073 A	19800213	GB19760038421	19760916
GR60313 B	19780508	GR19760150830	19760527
GR61778 B	19790116	GR19770153001	19770315
IE43227 B	19810114	IE19760001105	19760525
IE43227 L	19761129	IE19760001105	19760525
IE44386 B	19811104	IE19760002049	19760914
IE44386 L	19770915	IE19760002049	19760914
IN142874 A	19770903	IN1976CA00788	19760505
IT1069284 A	19850325	IT19760049668	19760526
IT1081921 A	19850521	IT19770048336	19770307
JP52112480 A2	19770920	JP19760120793	19761007
JP52125084 A2	19771020	JP19760062162	19760528
JP56059548 U1	19810521	JP19800139468U	19800930
JP56062955 U1	19810527	JP19800137039U	19800926
JP57023328 Y2	19820520	JP19800137039U	19800926
JP60030195 Y2	19850911	JP19800139468U	19800930
JP6076085 U1	19941025	JP19910082047U	19911009
JP62093046 U1	19870613	JP19860146576U	19860926
MX145153 A	19820112	MX19760166578	19761006
MX3692 U	19810429	MX19760100467U	19760513

NL171880 B	19830103	NL19760011310	19761013
NL171880 C	19830601	NL19760011310	19761013
NL7605331 A	19761201	NL19760005331	19760519
NL7611310 A	19770919	NL19760011310	19761013
NO143841 B	19810112	NO19760003469	19761012
NO143841 C	19810422	NO19760003469	19761012
NO151782 B	19850225	NO19760001831	19760528
NO761831 A	19761130	NO19760001831	19760528
NO761831 L	19761130	NO19760001831	19760528
NO763469 A	19770916	NO19760003469	19761012
NO763469 L	19770916	NO19760003469	19761012
NZ180788 A	19780306	NZ19760180788	19760506
NZ182092 A	19780306	NZ19760182092	19760917
PH12407 A	19790207	PH19760018483	19760527
PH12581 A	19790620	PH19770019361	19770119
PT65127 A	19760601	PT19760065127	19760524
PT65127 B	19771011	PT19760065127	19760524
PT65818 A	19761201	PT19760065818	19761110
PT65818 B	19780515	PT19760065818	19761110
SE417417 B	19810316	SE19760005935	19760525
SE428366 B	19830627	SE19760012795	19761116
SE428366 C	19831006	SE19760012795	19761116
SE7605935 A	19761130	SE19760005935D	19760525
SE7605935 L	19761130	SE19760005935	19760525
SE7612795 A	19770916	SE19760012795D	19761116
SE7612795 L	19770916	SE19760012795	19761116
US3974931 A	19760817	US19750581881	19750529
US4003488 A	19770118	US19760667266	19760315
YU131176 A	19820630	YU19760001311	19760528
YU252276 A	19820531	YU19760002522	19761014
YU40150 B	19850831	YU19760002522	19761014
ZA7602726 A	19770427	ZA19760002726	19760506
ZA7605550 A	19770831	ZA19760005550	19760915

Priority:

US19750581881 19750529 US19760667266 19760315 JP19860146576 19760528

Probable Assignee: AMERICAN FLANGE AND MFG

Assignee(s): (std): AMERICAN FLANGE AND MAN CO INC ; AMERICAN FLANGE AND MFG ; AMERICAN FLANGE AND MFG CO INC ; AMERICAN FLANGE AND MFG CO INC TE NEW YO ; AMERICAN FLANGE AND MFG CO INC TE LINDEN ; AMERICAN FLANGE Y MFG CO INC ; AMERICAN FLANGE MFG CO ; AMERICAN FLANGE MFG CO INC

Assignee(s): MOLLER THOMAS G ; AMERICAN FLANGE MANUF CO ; AMERICAN FLANGE MANUF ; AMERICAN FLANGE AND MFG CO INC NEW YORK N Y US ; AMERICAN FLANGE AND MFG CO INC TE LINDEN NEW JERSEY VER ST V AM ; AMERICAN FLANGE AND MFG CO INC TE NEW YORK ; AMERICAN FLANGE AND MFG CO INC NEW YORK ; AMERICAN FLANGE AND MFG CO

Inventor(s): (std): MOLLER T C ; MOLLER THOMAS G ; INVENTEUR A RENONCE A ETRE MENTIONNE ; TOOMASU JII MORAA ; MOLLER TG ; MOLLER GT ; THOMAS G MOLLER ; TC MOLLER ; T G MOLLER ; THOMAS GODFREY MOLLER ; MOLLER TH G ; MOLLER T ; TOMASU JII MORAA ; MOLLER G T ; MOLLER T G ; MOLLER THOMAS GODFREY

Inventor(s): T C MOLLER ; MOLLER THOMAS G RAHWAY N J US ; G MOLLER THOMAS

Agent(s): GH; GRIFFITH HACK; OKABE MASAO; KATO NOBUAKI

20) Family number: 41152066 (US2008023434A)

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Title: METHOD AND APPARATUS FOR A REMOVABLE HANDLE FOR A BOTTLE

Abstract: The device contains a ring structure having at least one interior groove and an exterior threaded portion. The interior grooves of the ring structure are designed to removably engage to an opening on a bottle. A cap is also provided having at least one helical rib to securely attach to the threaded portion of the ring structure when the cap is in a closed position. A handle is further provided that is integral with the rigid skirt.

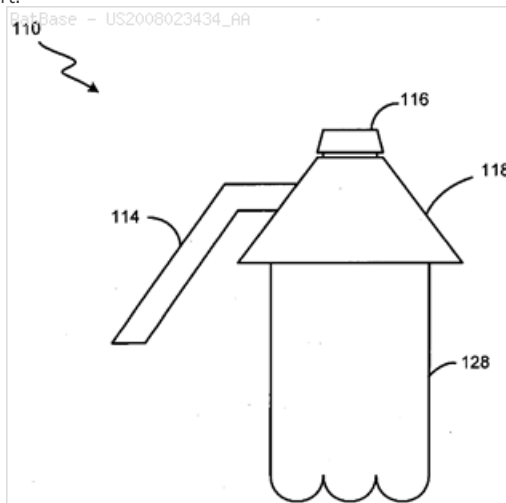
Classifications:

International (IPC 8-9): B65D23/10 (Advanced/Invention); B65D23/10 (Core/Invention)

CPC: B65D23/106

European: B65D23/10D2

US: 215/396



Publication number	Publication date	Application number	Application date
US2008023434 AA	20080131	US20070774032	20070706

US20060820643P 20060728 US20070774032 20070706

TAKAYAMA STEVEN RYUTARO

TAKAYAMA STEVEN RYUTARO

TAKAYAMA STEVEN RYUTARO

HAYES SOLOWAY PC

HAYES SOLOWAY PC

Title: METHOD AND APPARATUS FOR THE MANUFACTURE OF COMPOSITE CLOSURE CAPS, AND COMPOSITE CLOSURE CAPS MANUFACTURED THEREBY

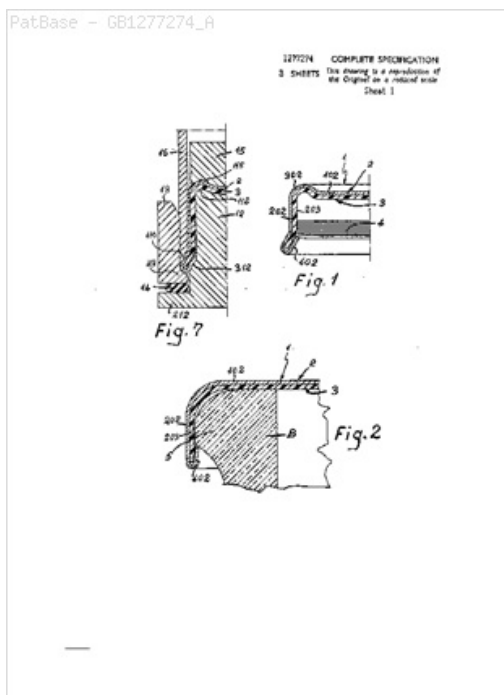
Abstract: 1277274 Stamping caps A PODESTA 3 Sept 1969 [4 Sept 1968 6 Sept 1968] 43711/69 Headings B3A and B3Q [Also in Division B8] A composite cap 1 comprises a metallic cap 2 and a resilient liner 3 crimped at its periphery by an inturned section 402. The cap 1 is symmetrical about the vertical axis which terminates the one half of the cap shown in Fig. 1. The cap 1 is formed in separate operations in each of the sets of dies shown in Figs. 4 and 6. In the first operation the metallic cap 2 and the liner disc 6 are inserted into their corresponding recesses in the die 7. The stem 9 carrying the head 10 and the spring jaw 8 then is moved into the die 7. The jaw 8 grips the grooved annular periphery of the liner 6 and the head 10 pushes the central part of the liner 6 into the metallic cap. The periphery of the liner being deformed as it is pulled from the jaw 8 so that it grips the inside of the cap 2. The lower part of the metallic cap skirt is left free from the liner and the cap in this state is placed in the second set of dies, shown in Fig. 6, which are symmetrical about the vertical axis terminating to one half of the die shown. The punching member 16 and the counter punch 15 are moved vertically downwards at the same time, the bottom of the cap being punched into the shape shown in Fig. 1 due to the coaction of the annular ridge 112 and the groove 115. The punching member 16 then continues its downward movement forming the cap against the outside wall of the punch 12. The free end of the metal cap is bent inwards by the shaped heel portion 113 and the annular inclined surface 312 to grip the liner periphery. As the punching member reaches the bottom of its stroke the cap skirt is squeezed firmly on to the liner 6 between the two parallel annular surfaces 116, 312, the heel portion 113 yielding on a buffer member 14 which may be a helical spring. When it is to be placed on a bottle the material of the annular connecting part 302 is drawn down around the lip of the bottle and the inturned section 402 is crimped under the lip to produce a final sealed closure as in Fig. 2 (not shown).

International (IPC 8-9): B65D41/16 (Advanced/Invention);
B65D41/02 (Core/Invention)

International (IPC 1-7): B65D17/06 B65D41/00 B65D41/12
B65D41/42

CPC: B65D41/16 B65D2251/205

European: B65D41/16 L65D251/20B



Publication number	Publication date	Application number	Application date
DE1944346 A1	19700312	DE19691944346	19690901
FR2017374 A1	19700522	FR19690030168	19690904
GB1277274 A	19720607	GB19690043711	19690903

IT19680007288 19680904	IT19680728868 19680904	IT19680007297 19680906
IT19680729768 19680906		

PODESTA ARMANDO

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ARMANDO PODESTA

Title: SELF-OPENING BOTTLE CAP

Abstract: 1,091,796. Crown closures. ARMSTRONG CORK CO. Nov. 30, 1964 [Dec. 5, 1963], No. 48581/64. Heading B8T. A metallic crown closure has a circular tab 6 cut in its top and score lines 8, 9 extending therefrom to the top periphery. A further score line 12 aligned with score line 9 and which may be spaced therefrom extends down the skirt. A liner 14 adhesively secured to the top has a relatively thick central section 15 greater in area than the tabs, and a thinner annulus 16 with concentric sealing rings 17 and a peripheral flange 19.

Classifications:

International (IPC 8-9): B65D41/42 (Advanced/Invention);

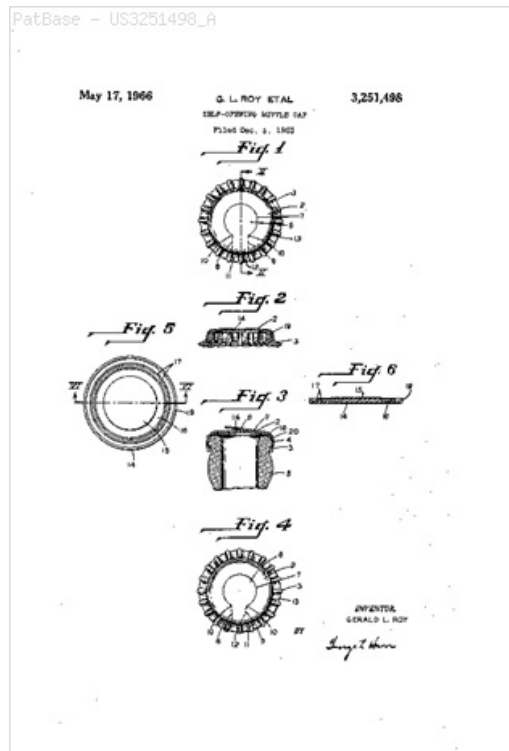
B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/42

CPC: B65D41/42 B65D2101/0053

European: B65D41/42 L65D101/00A3E

US: 215/254 D9/438



Family:

Publication number	Publication date	Application number	Application date
GB1091796 A	19671122	GB19640048581	19641130
US3251498 A	19660517	US19630328332	19631205

Priority:

US19630328332 19631205

Probable Assignee:

ARMSTRONG CORK CO

Assignee(s): (std):

ARMSTRONG CORK CO

Assignee(s):

ARMSTRONG CORK COMPANY

Inventor(s): (std):

ROY GERALD L

23) Family number: 22220076 (US2667999A)

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Title: BOTTLE CAPPING MACHINE

Abstract: (Claim 1) A machine for conditioning and dispensing preformed hood caps having a pleated skirt with a band of thermoplastic adhesive therearound for application to bottles, said machine comprising, a magazine including a dispensing tube for holding a stack of nested caps, a chute through which caps are delivered to the cap applying station of a bottle filling and capping machine, a cap picker mechanism by which caps are successively withdrawn from said dispensing tube and deposited in said chute, heating means comprising

Classifications:

International (IPC 8-9): B67B3/062 B67B5/00 (Advanced/Invention);

B67C7/00 (Advanced/Non-invention);

B67B3/00 B67B5/00 (Core/Invention);

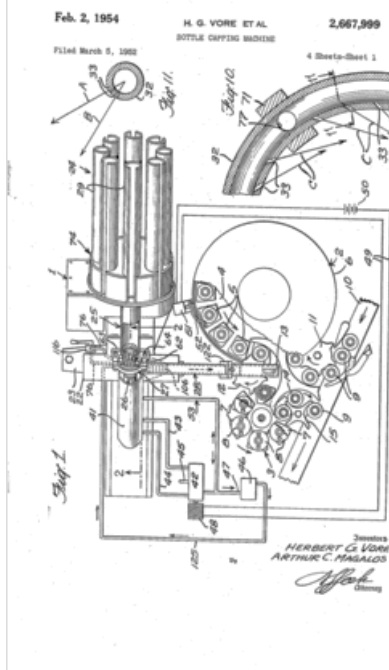
B67C7/00 (Core/Non-invention)

International (IPC 1-7): B67B3/062

CPC: B67B3/062 B67B5/00 B67C2007/0066

European: B67B3/00B B67B3/062 B67B5/00 L67C7/00B200

US: 221/150A 221/211 221/278 312/43 414/795.6 414/797.8 432/10 432/152 432/153 432/226 432/231 432/62 53/141

**Family:**

Publication number	Publication date	Application number	Application date
US2667999 A	19540202	US19520274914	19520305

Priority:

US19520274914 19520305

Probable Assignee: AMERICAN SEAL KAP CORP**Assignee(s):** (std): AMERICAN SEAL KAP CORP ; AMERICAN SEAL KAP CORP OF DELA**Assignee(s):** AMERICAN SEAL KAP OF DELAWARE CORP**Inventor(s):** (std): MAGALOS ARTHUR C ; VORE HERBERT G**24) Family number: 1145077 (US3887100A)**

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Title: ANTI STRIP OVERCAP FOR METAL SCREW CAPS FOR BOTTLES OR CONTAINERS

Abstract: This device consists of a rigid overcap which is applied over a usual metal pilferproof screw cap bottle or container closure. It has means to reduce the possibility of stripping the threads of the metal screw cap, which can occur when a screw cap is overtightened or turned too much in a clockwise direction, as is sometimes done by a user. Such an overcap acts as a safety device, since if the threads of such a screw cap are stripped, the cap can be blown off the bottle in case of carbonated or pressurized fluids in the bottle. Such overcap also improves mechanical advantage and thereby eases opening of screw caps from narrow necked bottles or containers. 9 Claims, 7 Drawing Figures

Classifications:

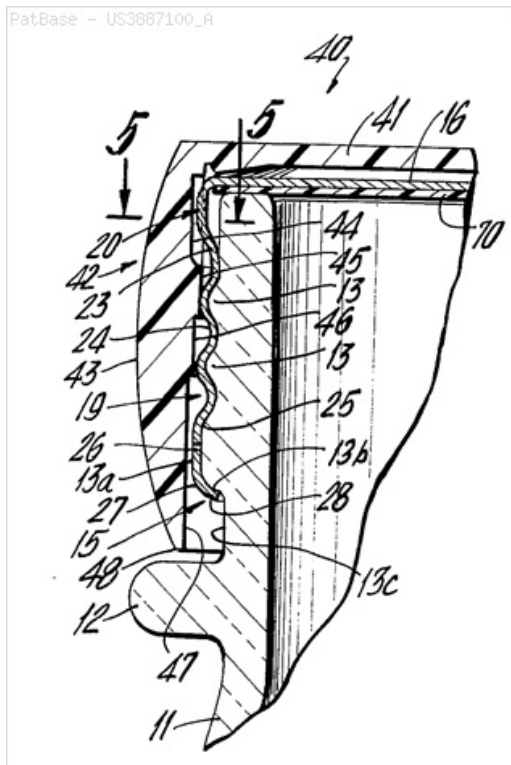
International (IPC 8-9): B65D41/62 (Advanced/Invention);
B65D41/00 (Core/Invention)

International (IPC 1-7): B65D41/00 B65D41/32 B65D41/62

CPC: B65D41/62

European: B65D41/62

US: 215/253 215/256 215/324

**Family:**

Publication number	Publication date	Application number	Application date
FR2248983 A1	19750523	FR19740043265	19741230
FR2248983 B3	19770923	FR19740043265	19741230
US3887100 A	19750603	US19730409762	19731025

Priority:

US19730409762 19731025

Probable Assignee:

MONARCH WINE CO INC

Assignee(s): (std):

MONARCH WINE CO INC

Assignee(s):

MONARCH WINE CO INC US

Inventor(s): (std):

COVEN MONROE J ; MOSS CHESTER C

25) Family number: 20354087 (GB640216A)

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Title: Improvements in or relating to closures for bottles and like containers

Abstract: 18402. [Class 125(iii)] Bottle and c. closures comprising a flangetopped cork fitting in the mouth of the container, the flange being in the form of a peripherally serrated or like meta' cap, have a ring by which the cap is attached to the cork and connected to the cap in a way preventing relative rotation. A ring 4 of U-shaped cross-section is formed on both inner and outer faces 5, 6, with axially extending serrations which respectively bed into the cork 2 and engage corresponding serrations on the inner face of the cap 3. The inner end 16 of the cap is crimped round a flat base portion 7 of the ring and its top abuts on the top of the cork to which it may be adhesively joined. Preferably a small portion of the cork projects above the ring and expands over it when the cap is affixed. The ring may be disposed base uppermost.

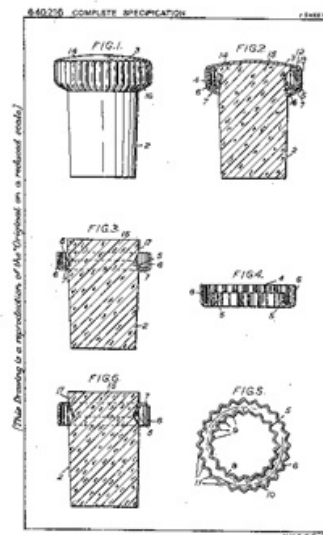
Classifications:

International (IPC 8-9): B65D39/16 (Advanced/Invention);
B65D39/00 (Core/Invention)

International (IPC 1-7): B65D39/16

CPC: B65D39/16

European: B65D39/16

**Family:**

Publication number	Publication date	Application number	Application date
GB640216 A	19500712	GB19480018402	19480708

Priority:

GB19480018402 19480708

Probable Assignee: KORK N SEAL LTD**Assignee(s):** (std): JAMES NOEL STEUART ; KORK N SEAL LTD**Assignee(s):** KORK N SEAL LIMITED**26) Family number: 541089** (GB1377767A)

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Title: BOTTLE CLOSURES

Abstract: 1377767 Caps for bottles OWENS-ILLINOIS Inc 20 Dec 1971 [18 Dec 1970] 58964/71 Heading B8T A metal closure cap 21 for a container comprises a top portion 22 with a depending skirt 25 having a rolled edge 26. Scored in the cap is a V-shaped tear strip 13, with a small radius nose 14, diverging sides 15, 15a, and unequal length terminal legs 16, 16a, such that one leg 16 extends through the rolled edge 26 of the skirt and the other leg 16a terminates on the skirt with a segment of reversed curvature 18, a diametric hinge score 12 extending from the nose 14. The area of tear strip 13 is more than half the area of the cap and the nose portion 14 is situated substantially beyond the centre of the top portion 22 on the opposite side to the legs 16, 16a. A ring 20 is connected by a tongue 27 to a rivet 19 integral with the nose portion 14 of the tear strip 13. When affixed to a container the closure cap 21 has a plastic gasket liner with a vent aperture. Upon lifting ring 20 the front end of the ring engages the top panel 22 outside the tear strip 13 and acts as a fulcrum, initially rupturing nose portion 14 to vent the internal pressure. Further removal of tear strip 13 weakens the cap and breaks the rolled edge 26, though it is retained at the shorter leg 16a, 18. Thereafter further pulling splits the cap 21 open about hinge score 12 and frees the cap from the container mouth.

Classifications:

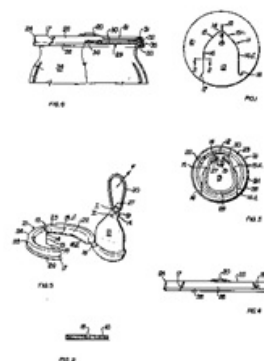
International (IPC 8-9): B65D41/32 B65D41/40 B65D41/42
B65D51/18 (Advanced/Invention);
B65D41/32 B65D51/18 (Core/Invention)

International (IPC 1-7): B65D17/16 B65D41/00 B65D41/32
B65D41/40 B65D41/42 B65D41/44 B65D47/36 B65D51/18 B67B

CPC: B65D41/42**European:** B65D41/42

PatBase - GB1377767_A

1377767 COMPLETE SPECIFICATION
1 SHEET
This drawing is a reproduction of the Original in a reduced scale



Family:

Publication number	Publication date	Application number	Application date
AU197136556 A1	19730614	AU19710036556	19711207
AU462186 B2	19750619	AU19710036556	19711207
CA981626 A1	19760113	CA19710130395	19711217
DE2162141 A1	19720706	DE19712162141	19711215
DK138883 B	19781113	DK19710006156	19711216
DK138883 C	19790430	DK19710006156	19711216
FR2118176 A1	19720728	FR19710045579	19711217
FR2118176 B1	19760917	FR19710045579	19711217
GB1377767 A	19741218	GB19710058964	19711220
NL7117261 A	19720620	NL19710017261	19711216
ZA7108167 A	19730829	ZA19710008167	19711206

Priority:

US19700099453 19701218

Probable Assignee: OWENS ILLINOIS INC**Assignee(s):** (std): OWENS ILLINOIS INC**Assignee(s):** OWENSILLINOIS INC ; PUDLICKI LEONARD K ; MATSON ROGER N ; OWENS ILLINOIS**Inventor(s):** (std): MATSON ROGER NEIL ; PUDLICKI LEONARD KARL ; PUDLICKI L ; MATSON R ; PUDLICKI LEONARD K ; MATSON ROGER N**Inventor(s):** LEONARD KARL PUDLICKI ; MATSON R N ; ROGER NEIL MATSON ; PUDLICKI L K**27) Family number: 20248103 (GB420738A)**

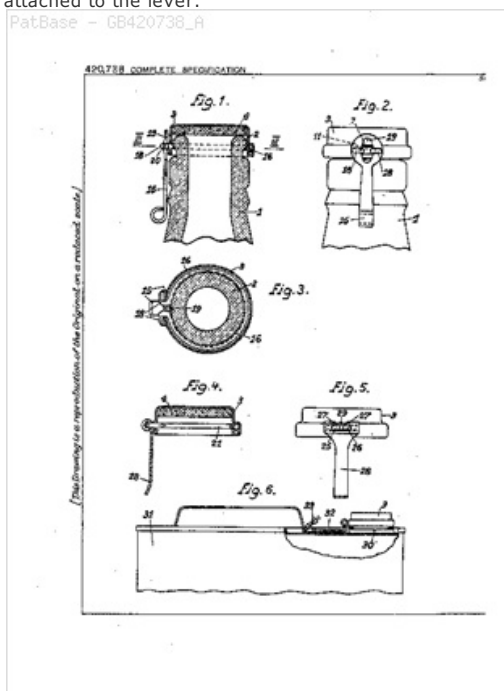
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Title: Removable closure for bottles and other vessels

Abstract: 7787. Addition to 403,588. [Class 125 (iii)] The parent Specification describes a closure for bottles, and c., having a contractible locking ring which is located in an annular recess in the cap so that it is free to move inwardly to secure the cap. According to the present invention a rotatably mounted lever 15 in such a closure is provided with suitably shaped surfaces engaging the hook shaped free ends of the locking ring for altering the diameter of the ring. The lever may have an elliptical or oblong aperture 19 into which the free ends of the clamping ring engage, so that in turning the lever the hooks 18 move towards or away from each other. In a modification the lever moves radially in respect to the cap 3 and is provided with converging ear faces which operate the hooks. Notches 11 may be provided to locate the hooks in the 'closed' position and prevent unintentional operation of the lever. The cap may be of glass, earthenware or composite material. In the case of cans fitted with such closures, a lead, and c. seal may be attached to the lever.

Classifications:**International (IPC 8-9):** B65D45/34 (Advanced/Invention);

B65D45/00 (Core/Invention)

CPC: B65D45/34**European:** B65D45/34**Family:**

Publication number	Publication date	Application number	Application date
GB420738 A	19341206	GB19340007787	19340312

Priority:

GB19340007787 19340312

Probable Assignee: KONTROLL A G**Assignee(s):** (std): HUBERT JEZLER ; KONTROLL A G**28) Family number: 22384107 (US3303955A)**

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Title: CONTAINER CLOSURE

Abstract: A tamperproof bottle cap is made of an aluminium base alloy which consists essentially of aluminium with:-
.manganese.0.3 to 1.5 percent.magnesium.0.2 to 0.8 percent.silicon.not more than 0.6 percent.iron.not more than 0.7 percent.copper.not more than 0.4 percent.chromium.not more than 0.25 percent.zinc.not more than 0.4 percent.titanium.not more than 0.1 percent.impurities.not more than 0.15 percent

Classifications:

International (IPC 8-9): B65D41/34 (Advanced/Invention);

B65D41/34 (Core/Invention)

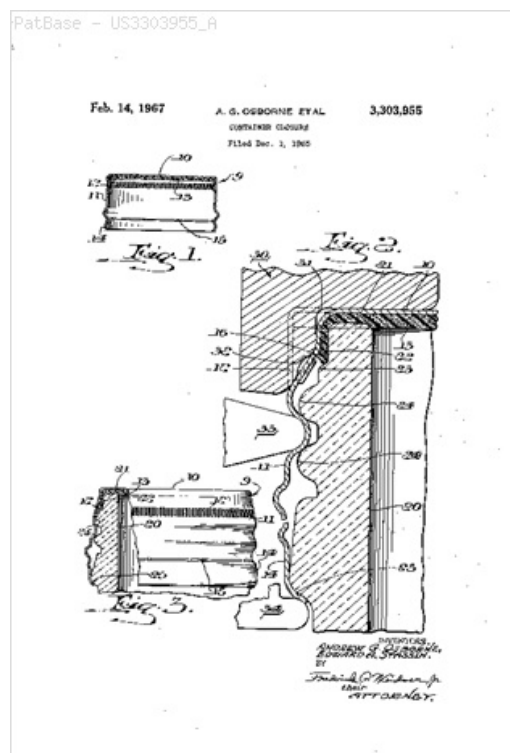
International (IPC 1-7): B65D41/34 B65D55/08 B65D85/72

C22C21/02

CPC: B65D41/348

European: B65D41/34F

US: 215/252



Family:

Publication number	Publication date	Application number	Application date
BE690086 A	19670523		19661123
DE1511931 A1	19720323	DE19661511931	19661123
DE1953178 U	19670105	DE1966A026743U	19661123
DK121281 B	19710927	DK19660006061	19661123
DK121281 C	19750512	DK19660006061	19661123
GB1104350 A	19680221	GB19660049413	19661103
JP50003713 B4	19750208	JP19660076986	19661125
US3303955 A	19670214	US19650510855	19651201

Priority:

US19650510855 19651201

Probable Assignee: ALUMINUM CO OF AMERICA

Assignee(s): (std): ALUMINUM CO OF AMERICA

Assignee(s): ALUMINUM COMPANY OF AMERICA ; ALUMINUM CO

Inventor(s): (std): STASSIN EDWARD A ; STASSIN E A ; STASSIN E ; OSBORNE ANDREW G ; OSBORNE A G ; OSBORNE A ; GUSTAV OSBORNE ANDREW ; ALBERT STASSIN EDWARD

Inventor(s): EDWARD ALBERT STASSIN ; ANDREW GUSTAV OSBORNE

29) Family number: 71789109 (US2018318174A)

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Title: CHILD-RESISTANT DOSING CAP

Abstract: The current disclosure is directed to a container with a dispensing schedule and, in various described implementations, to a container and a complementary cap that includes a dispensing schedule. During each dispensing cycle, which includes removing the cap from the container to allow access to the contents of the container and re-securing the cap to the container, the display schedule is automatically advanced to a next indication. In one implementation, the container is a bottle with a threaded neck and the cap is complementarily threaded and has a cylindrical rim and a schedule display. An indication on or within the schedule display is displayed through an aperture in the cap rim. Features included in the cap and the schedule display interoperate to ensure that the displayed indication is advanced to a next indication when the cap is unscrewed from, and subsequently threaded onto, the bottle.

Classifications:

International (IPC 8-9): A61J1/03 A61J7/04 B65D50/04

B65D83/04 (Advanced/Invention)

CPC: A61J7/04 B65D50/04 B65D2215/02 B65D2583/0409

B65D2583/0472 B65D2585/56 A61J1/03 A61J1/1418 A61J7/0076

B65D50/041 B65D83/04

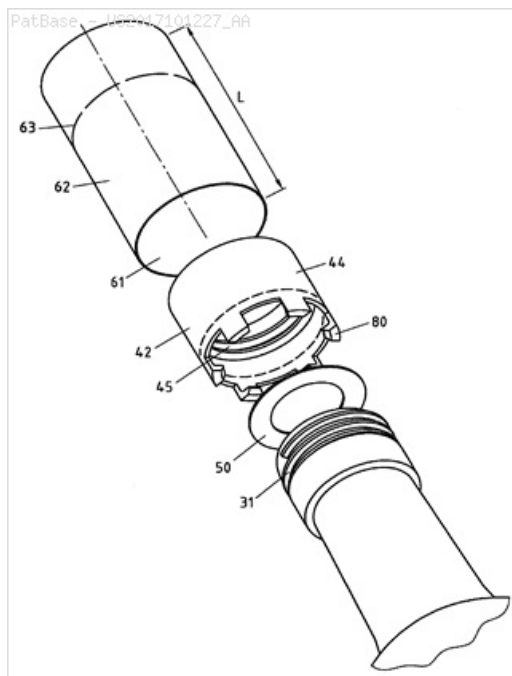
US: 1/1 206/528

Publication number	Publication date	Application number	Application date
US2018318174 AA	20181108	US20180974438	20180508

US20170503099P 20170508 US20180974438 20180508

Inventor(s): (std): GOSSELIN DANIEL ALBERT ; BALAKIER ALFRED RICHARD

B65D2251/0028
US: 1/1 215/44



Family:

Publication number	Publication date	Application number	Application date
EP3362374 A1	20180822	EP20160778402	20161010
US2017101227 AA	20170413	US20160292687	20161013
WO17063976 A1	20170420	WO2016EP74142	20161010

Priority:

US20150240933P 20151013 WO2016EP74142 20161010 US20160292687 20161013

Probable Assignee: VINVENTIONS USA LLC

Assignee(s): (std): AAGAARD OLAV MARCUS ; KIRCH MARCO JOSEF OTTO ; NOMACORC LLC ; THOMPSON MALCLOM JOSEPH ; VINVENTIONS USA LLC

Inventor(s): (std): KIRCH MARCO JOSEF OTTO ; AAGAARD OLAV MARCUS ; THOMPSON MALCOLM JOSEPH ; THOMPSON MALCLOM JOSEPH

Agent(s): COHAUSZ AND FLORACK

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

31) Family number: 50736122 (AR021504A)

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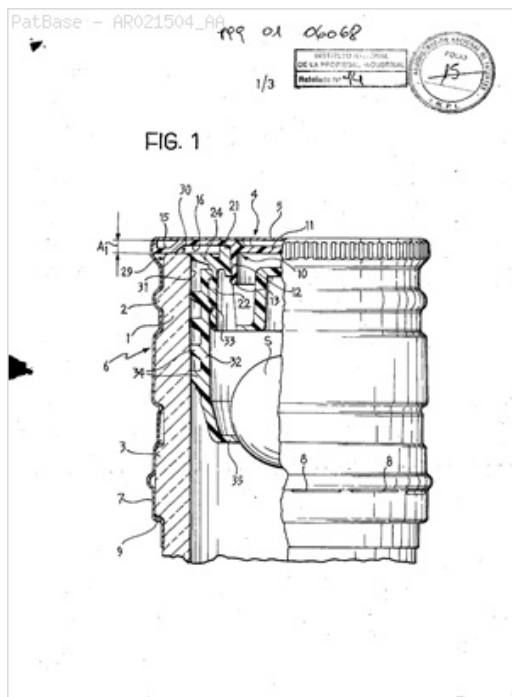
Title: UN CIERRE DE SEGURIDAD PARA BOTELLAS A SECURITY CLOSURE FOR BOTTLES (Machine translation)

Abstract: Source: AR021504A [ES] Un cierre de seguridad para botellas que tiene un cuello (1) roscado, comprende una capsula metalica (4), un vaciador (17) de material plastico rigido, untapon (10) de material plastico blando interpuesto entre la parte inferior de la capsula (4)met alica y el vaciador (17), y un elemento (32) tubular defijacion y sellado, de material plastico blando, interpuesto entre el cuello (1) de la botella y el vaciador (17). El vaciador (17) tiene una pestana (24)intermedia que apoya sobre lasuperficie interior del extremo del cuello (1) de la botella, y una porcion (21) tubular superior de altura reducida, queengancha en una ranura (16) anular formada en la superficie inferior de una parte (14) anular periferica plana del tapon (10).Una vez que e l cierre ha sidoacoplado a la botella, la altura (A1) entre el extremo del cuello (1) de la botella y la parte superior del tapon (10), es igual al espesor de un sellodiscoidal utilizado en un cierre de capsula metalica sin vaciadortras su deformaci on debido al acoplamiento de tal cierre sobre una botella (1).

Machine translation: Safety lock bottle having a neck (1) threaded, comprises a metal capsule (4), a base inlet (17) of rigid plastic material, untapon (10) of soft plastic material interposed between the bottom of the capsule (4) and alica meth base inlet (17), and an element (32) of soft plastic material, interposed between the neck (1) of the bottle and base inlet (17). Base inlet (17) has a tab (24) rests on lasuperficie intermediate inner end of the neck (1) of the bottle, and a portion (21) upper tubular reduced height, queengancha in a slot (16) formed in annular the lower surface of a portion (14) flat peripheral annular cap (10). Once the closure has sidoacoplado to the bottle, the height (A1) between the end of the neck (1) of the bottle and the upper Tampon (10), is equal to the thickness of a sellodiscoidal used in a metal capsule closure without vaciadortras on its warp due to coupling of such a closure on a bottle (1).

Classifications:

International (IPC 1-7): B65D49/04



Family:

Publication number	Publication date	Application number	Application date
AR021504 AA	20020724	AR1999P106068	19991129

Priority:

AR1999P106068 19991129

Probable Assignee:

ALPLAST SPA

Assignee(s): (std):

ALPLAST SPA

Inventor(s): (std):

GIACINTO TORCHIO

32) Family number: 22276129 (US2815148A)

© PatBase

Title: CAP FEEDING APPARATUS

Abstract: 728,107. Stoppering. CROWN CORK and SEAL CO., Inc. May 26, 1953 [Aug. 28, 1952] No. 14691/53. Class 125 (2). [Also in Group 11] Relates to apparatus wherein a procession of bottles picks caps C from the bottom of a shoot 40 the caps being mixed randomly in a hopper 20 and each comprising a skirted body part which contacts the side walls 122, 124, Fig. 8, of the shoot and a skirt-carried locking lever accommodated by the space between the edges 118, 120 of top flanges of the shoot. The invention consists in the apparatus described below for feeding the caps in orientated manner from the hopper 20 to the shoot 40. A main pillar 24 carries a bracket 26 on which is mounted a slightly-inclined cap hopper 20 having a charging door 54. Caps pass from the lower end of the hopper 20 through an arcuate slot 64, Fig. 4, into an agitator chamber 28, the agitator of which comprises three blades 32 carried on a drum 31 rotated through a shaft 65 extending longitudinally of the hopper. Fig. 4, is a section on the line 4-4 of Fig. 1. Any caps fouling the edge 88 of slot 64 are cleared by the projecting part 92 of eccentric disc 90 also mounted on shaft 65. The upper right hand part, Fig. 4, of the side wall 84 of chamber 28 has an aperture (not shown) through which the caps are ejected upwardly. Behind the end wall of chamber 28 there lies a disc 36 carried on a shaft 72 and rotated through a belt 74 by a motor 78 mounted on bracket 26. Agitator shaft 65 is driven through a slipping clutch 68 and a belt 69 from the shaft 72. The disc 36 has a ring of magnetic inserts 38 which pick up the cap ejected from the chamber 28 and carry them round in an anticlockwise direction, Figs. 4 and 8, until they reach a bar 107 which is stationary and spaced from the surface of disc 36 a sufficient distance to allow the body of a cap to pass thereunder if its entire skirt edge contacts the disc 36. Other caps will be removed from disc 36 by bar 107 and diverted back into hopper 20 by plates 96, 97, 98. Correctly positioned stoppers are drawn under bar 107 until their outer edge contacts a second bar 105 disposed at right-angles to disc 36. The cap is then drawn along in a straight line path with its locking lever trailing on the edge 109 of bar 107, until it reaches a short curved slot 114 formed by two edges 112, 116, the slot leading into the cap shoot. The shoot 40 curves downwardly in contact with the disc 36 and then slopes away from the disc. At this point a finger 154 running in a circular groove 152 in disc 36 and carried by the shoot, picks the caps off the surface of the disc for progress down the shoot at the bottom of which they are arrested by inturned pivoted fingers 160. These fingers are spread by a passing bottle to allow extraction of a cap. If caps should build up at the entrance to slot 114, the excess are regularly returned to hopper 20 by a finger 132 regularly reciprocated behind the bar 107 by a cam 146 mounted on the back surface, Fig. 8, of disc 136. The cam acts on a roller 140 carried on one end of double lever 126, 138 pivotally mounted at 128 and carrying at its other end the finger 132. The finger is urged to its raised position by a spring 134. A bar 104 is spaced a sufficient distance from the surface of disc 36 to intercept any cap which is being carried on top of another cap which is itself moving with disc 36. Specification 727,293 is referred to.

Classifications:

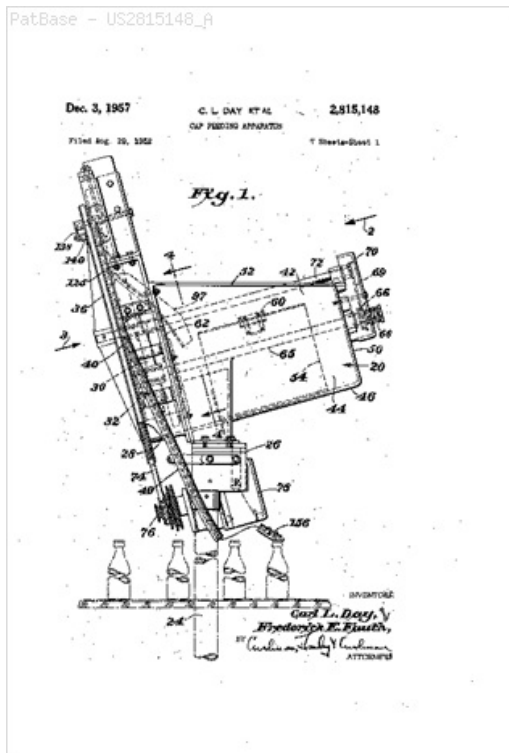
International (IPC 8-9): B67B3/06 B67B3/064 (Advanced/Invention); B67B3/00 (Core/Invention)

International (IPC 1-7): B67B3/064

CPC: B67B3/061 B67B3/064

European: B67B3/064 B67B3/06B

US: 221/173 221/183 221/212

**Family:**

Publication number	Publication date	Application number	Application date
GB728107 A	19550413	GB19530014691	19530526
US2815148 A	19571203	US19520306806	19520828

Priority:

US19520306806 19520828

Probable Assignee: CROWN CORK AND SEAL CO**Assignee(s):** (std): CROWN CORK AND SEAL CO**Assignee(s):** CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL COMPANY INC**Inventor(s):** (std): DAY CARL L ; FAUTH FREDERICK E**33) Family number: 20342130 (US1985650A)**

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Title: HOOD CAP FOR BOTTLES AND THE LIKE

Abstract: 1. A single-thickn sheet-paper mnterlnl hood esp disk, at least the annular hood-cap-securing skirt portion of which carries s highmeltng point skirt-stiffening binder that is sumclently sdhaslve on glass to be normally glass fouling when In n substantially fused state, said binder constituting an Impregnum located wholly within the single-thlelness paper, whereby said skirt carrying said internal binder will strip or peel from glass surfaces without fouling the same.

Classifications:

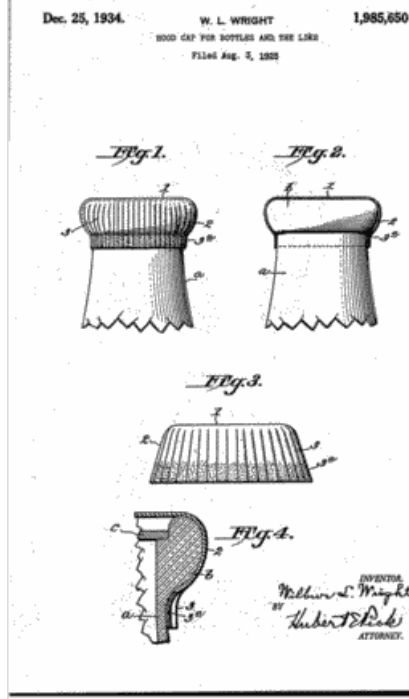
International (IPC 8-9): B65D41/14 (Advanced/Invention);
B65D41/02 (Core/Invention)

International (IPC 1-7): B65D41/14

CPC: B65D41/14

European: B65D41/14

US: 106/231 215/233 215/326 427/374.4

**Family:**

Publication number	Publication date	Application number	Application date
US1985650 A	19341225	US19250047975	19250803

Priority:

US19250047975 19250803

Probable Assignee:

OSWEGO FALLS CORP

Assignee(s): (std):

OSWEGO FALLS CORP

Inventor(s): (std):

WRIGHT WILBUR L

34) Family number: 1331137 (US4256233A)

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Title: Blank for a bottle cap

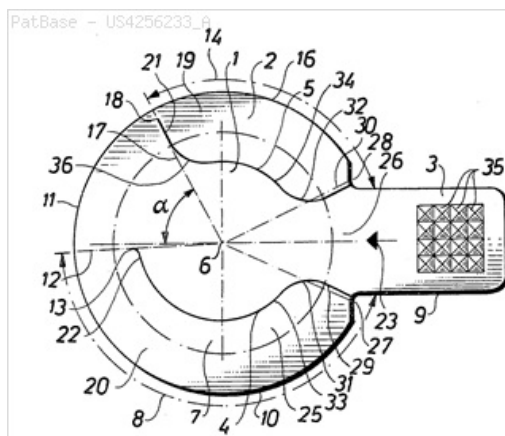
Abstract: A blank for forming a bottle cap is disclosed, the completed bottle cap having a tear tab cooperating with score lines extending across the top of the cap for manual removal of the cap from a bottle. Two score lines are provided which extend from the tear tab to the opposite side of the blank, the score lines being asymmetrical to facilitate the formation of a tear-off tab. The described arrangements of score lines serve to obtain an easy removal of the cap from a bottle after the tearing operation.

Classifications:**International (IPC 8-9):** B65D41/44 (Advanced/Invention);

B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/32 B65D41/42 B65D41/44

B65D53/02

CPC: B65D41/44**European:** B65D41/44**US:** 215/254**Family:**

Publication number	Publication date	Application number	Application date
AU197833279 A1	19790823	AU19780033279	19780214
AU511594 B2	19800828	AU19780033279	19780214
DE2805529 A1	19780831	DE19782805529	19780210
FR2381680 A1	19780922	FR19780005038	19780222
FR2381680 B1	19800829	FR19780005038	19780222
GB1567884 A	19800521	GB19780005588	19780213
IT1092752 A	19850712	IT19780020340	19780216
IT7820340 A0	19780216	IT19780020340	19780216
NL7801744 A	19780828	NL19780001744	19780216

SE414619 B	19800811	SE19770002037	19770224
SE414619 C	19801127	SE19770002037	19770224
SE7702037 A	19780824	SE19770002037D	19770224
US4256233 A	19810317	US19780876728	19780210

Priority:

SE19770002037 19770224

Probable Assignee: WICANDERS KORKFABRIKER AB

Assignee(s): (std): WICANDERS KORKFABRIKER AB

Assignee(s): WICANDERS KORKFABRIKER SCHLISSF ; AB WICANDERS KORKFABRIKER ; AB WICANDERS KORKFABRIKER TE ALVAENGEN ZWEDEN

Inventor(s): (std): HARDING S ; HARDING SUNE

Inventor(s): S HARDING ; SUNE HARDING

Agent(s): WE; E F WELLINGTON AND CO

35) Family number: 21248139 (US2096426A)

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Title: BOTTLE FITMENT

Abstract: 1. The combination with a bottle of an orificed cover member therefor provided with an annular slot in its outer surface, a ferrule for holding the cover member in place and having a flange entered into said slot, and a cap for the cover member having a skirt portion interengaged with that portion of the ferrule flange that is entered into said slot.

Classifications:

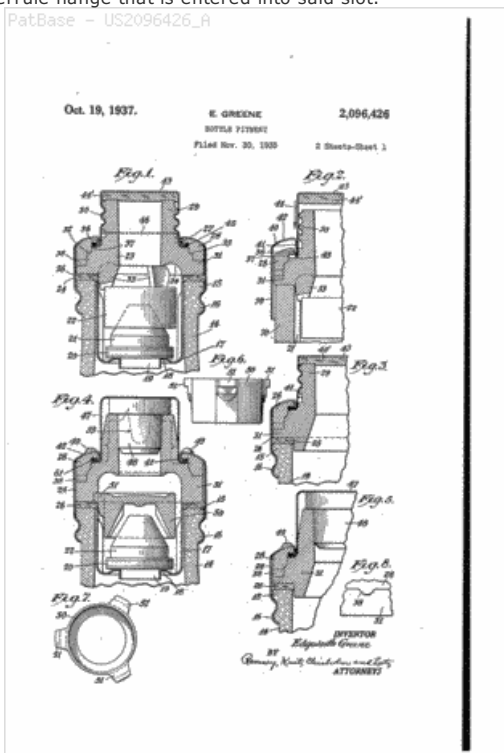
International (IPC 8-9): B65D41/42 B65D49/06 (Advanced/Invention); B65D41/32 B65D49/00 (Core/Invention)

International (IPC 1-7): B65D49/02

CPC: B65D41/42 B65D49/06

European: B65D41/42 B65D49/06

US: 215/22 215/256 215/307



Family:

Publication number	Publication date	Application number	Application date
US2096426 A	19371019	US19350052300	19351130

Priority:

US19350052300 19351130

Probable Assignee: EDGEWORTH GREENE

Assignee(s): (std): EDGEWORTH GREENE

Inventor(s): (std): EDGEWORTH GREENE

Inventor(s): GREENE EDGEWORTH

36) Family number: 25371143 (GB653873A)

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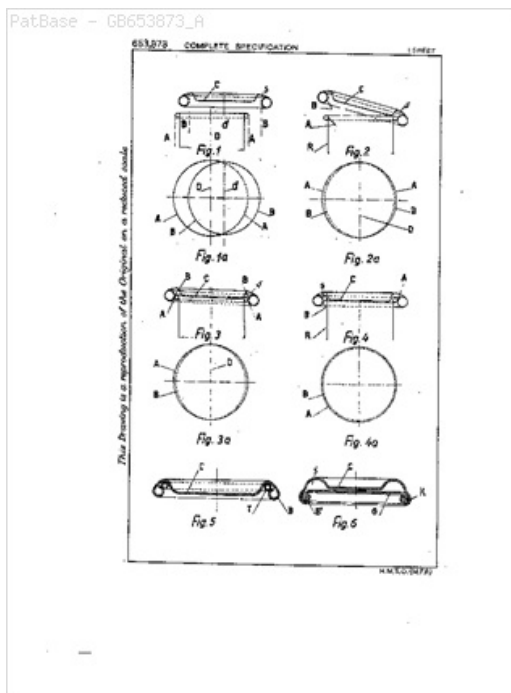
Title: Improvements in or relating to closure means for bottles or like containers

Abstract: 7, 1948. [Classes 66 and 125(iii)] A closure C for a bottle or like container R having an outer rigid annular bead A near its mouth has a restricted mouth portion B with an internal perim eter which is smaller than the outer perimeter of the bead A, and an impressed central portion so as to provide an annular groove S in which at least part of packing material may be inserted or deformed to permit the inclination of the closure with respect to the bottle during its application or removal. The cap C may have an annular gasket T. preferably of rubber tubing, as shown in Fig. 5. The cap shown in Fig. 6 has a curved border K enclosing a ring B¹ of metal or hard flexible material, and a packing disc G, e.g. of rubber, cork, foil, waterproof cardboard and c.

Classifications:

International (IPC 8-9): B65D41/16 B65D43/02 (Advanced/Invention); B65D41/02 B65D43/02 (Core/Invention)

International (IPC 1-7): A47J36/06 B65D3/10 B65D41/16
CPC: B65D41/16 B65D43/0212 B65D2251/205 B65D2543/00092
 B65D2543/00277 B65D2543/00527 B65D2543/00537
 B65D2543/00638 B65D2543/00685 B65D2543/0075
 B65D2543/00796 B65D2543/00888 B65D2543/00972
 B65D2543/00981
European: B65D41/16 B65D43/02S3E L65D251/20B
 L65D543/00Y10E L65D543/00Y1F2C L65D543/00Y1M4
 L65D543/00Y20B1 L65D543/00Y20B3 L65D543/00Y8D1N
 L65D543/00Y8D3 L65D543/00Y8S1B6 L65D543/00Y8S1D2
 L65D543/00Y8S3B6 L65D543/00Y8S3D2



Family:

Publication number	Publication date	Application number	Application date
CH282319 A	19520430		19480114
DK75383 C	19530202	DK19480001096	19480331
GB653873 A	19510530	GB19480020475	19480803
LU29176 A	19481001		19480731

Priority:

IT19470007529 19470802 19480207

Probable Assignee: PODESTA ARMANDO

Assignee(s): (std): PODESTA ARMANDO

Assignee(s): ARMANDO PODESTA

Inventor(s): (std): PODESTA ARMANDO ; ARMANDO PODESTA

37) Family number: 18869143 (GB352587A)

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Title: Improvements in closures for bottles or other vessels

Abstract: 12722. [Class 125 (iii).] Relates to replaceable crown-corks of the type which engage screwthreads on the bottle neck. According to the invention the cap. 3 is of thin metal and has a depending flange 4 with outwardly inclined pressed out portions or corrugations and is placed on the neck of a bottle 2 and pressed into engagement therewith by an axially moving die. A sealing ring 7 may be spun into engagement with the bottle neck and released by a tang 11.

Classifications:

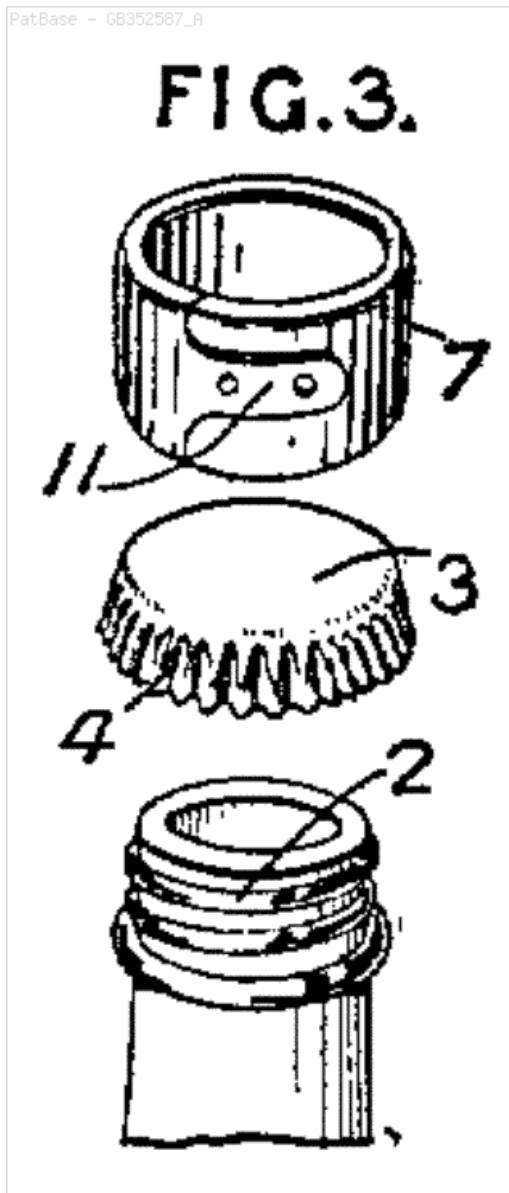
International (IPC 8-9): B65D41/04 B65D55/08 (Advanced/Invention);

B65D41/04 B65D55/02 (Core/Invention)

International (IPC 1-7): B65D41/12

CPC: B65D41/0464 B65D55/0845

European: B65D41/04D4 B65D55/08B2A

**Family:**

Publication number	Publication date	Application number	Application date
GB352587 A	19310716	GB19300012722	19300424

Priority:

GB19300012722 19300424

Probable Assignee:

ROWLAND JAMES WILLIAMS

Assignee(s): (std):

ROWLAND JAMES WILLIAMS

38) Family number: 20551154 (GB454809A)

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Title: Improvements relating to the closing of containers

Abstract: A gasket of comparatively low resilience for use with a snap-on bottle cap is formed of the composition described in Specification 402,623 modified, e.g. by reduction of the sulphur content or the substitution of talc for clay, to render it less resilient. A satisfactory composition consists of rubber, talc and ceresin wax together with stearic acid, sulphur, zinc oxide, lamp black, an accelerator and an antioxidant. Specification 282,591, [Class 125 (iii)], also is referred to.

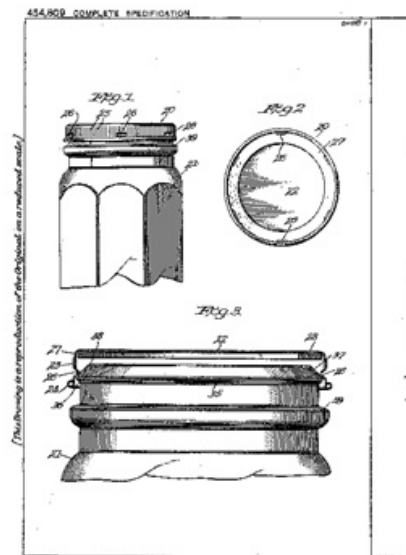
Classifications:

International (IPC 8-9): B65D41/16 (Advanced/Invention);
B65D41/02 (Core/Invention)

International (IPC 1-7): B65D41/00

CPC: B65D41/16 B65D2251/205

European: B65D41/16

**Family:**

Publication number	Publication date	Application number	Application date
GB454809 A	19361008	GB19350019519	19350708

Probable Assignee: CROWN CORK AND SEAL CO

Assignee(s): (std): CROWN CORK AND SEAL CO

Assignee(s): CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL COMPANY INC

39) Family number: 33801161 (FR2885117A)

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Title: STOPPER FOR E.G. WINE BOTTLE, COMPRISES A CONICAL SHAPED CENTRAL BODY CONNECTED TO HALF-SHELLS WHICH HAVE LONGITUDINAL EDGES CONNECTED TO ENGAGE OUTER PART OF BOTTLE NECK, WHERE BODY, STRIPS AND HALF-SHELLS ARE FORMED IN A SINGLE PART

Abstract: A stopper (1) comprises a conical shaped central body (2) with a cap for closing the interior of the neck of a container, where the body is connected to two half-shells (7, 8) by angularly flexible strips (5, 6), the half-shells with longitudinal edges are connected for engaging the outer part of a bottle neck, and the body, the strips and the half-shells are formed in a single part obtained by plastic injection.

Classifications:

International (IPC 8-9): B65D39/16 B65D41/58 (Advanced/Invention); B65D39/00 B65D41/32 (Core/Invention)

CPC: B65D39/04 B65D39/16 B65D51/30 B65D55/08

European: B65D39/04 B65D39/16 B65D51/30 B65D55/08

PatBase - FR2885117_A1

2885117

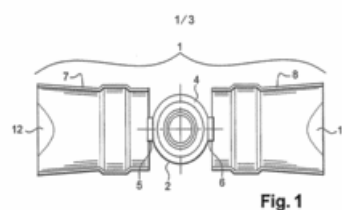


Fig. 1



Fig. 2



Fig. 3

Family:

Publication number	Publication date	Application number	Application date
FR2885117 A1	20061103	FR20050051113	20050428

Priority:

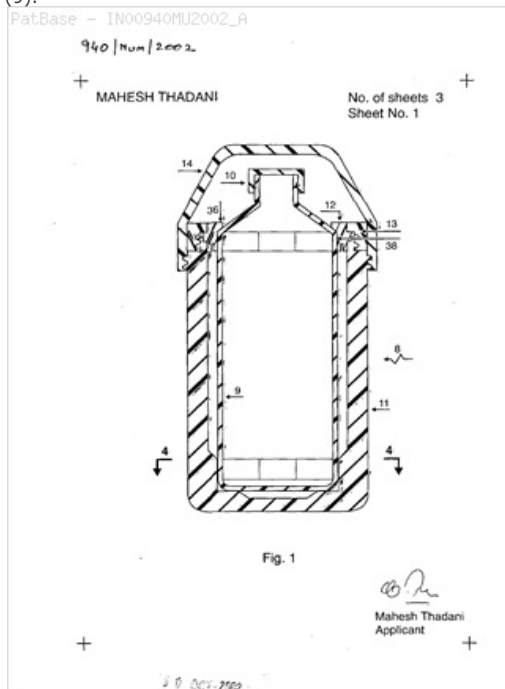
FR20050051113 20050428

Probable Assignee: BARDIEUX SARL**Assignee(s):** (std): BARDIEUX SARL**Assignee(s):** BARDIEUX SOC A RESPONSABILITE LIMITEE ; BARDIEUX SOCIETE A RESPONSABILITE LIMITEE**Inventor(s):** (std): BARDIEUX JEAN MARIE**40) Family number: 45938161** (IN00940MU2002A)

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Title: AN INSULATED BOTTLE

Abstract: (Claim 1) 1. An Insulated Bottle (8), characterized by the combination of a screw closure capped Bottle (9) and an adapted, insulatory, rigid, portable Receptacle (11); said Receptacle being formed from the non-permanent sequential assembly of four polymer components: a Body (11), a Movement Stopper (12), a Holding Ring (13) and a Top Cover Cup (14), said Receptacle accomodating said Bottle (9) in a securable, non-rotatable, mostly non-touching, removable and refittable manner, said Bottle's (9) said Closure Cap (10) being openable and closable without said Bottle's (9) rotation or uplift, said Body (11) being fully opaque with incorporated or applied reflectivity, or opaque and having a fitted clear window (26) in itsv upright wall's central part, or fully clear; said fitted window and said clear Body's upright wall's central part having a specific inner shape to help magnify external viewing of said Bottle (9).

Classifications:**Family:**

Publication number	Publication date	Application number	Application date
IN00940MU2002 A	20040904	IN2002MU00940	20021030

Probable Assignee: MR MAHESH THADANI**Assignee(s):** MR MAHESH THADANI**Inventor(s):** MR MAHESH THADANI**41) Family number: 19002164** (GB363712A)

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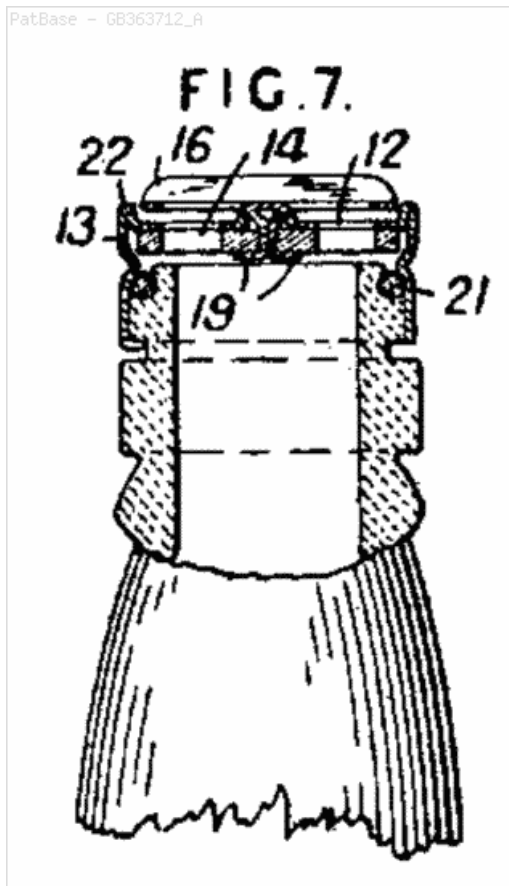
Title: Improvements in bottle, jar and like closures

Abstract: 28096. [Class 125 (iii).] ' Relates to capsules for bottles of the bayonet-joint type. According to the invention the capsule is provided with pouring and vent ports 12 and a disc valve 13 for closing and opening them. The disc 13 is rotatably mounted within the cap and has ports 14 which can be brought into and out of register with the ports 12. A sheet-metal operating handle 16 is fixed to the disc 13 by integral tongues 19. The central hole in the cap, through which the tongues pass has an upset edge to space the handle from the capsule. An annular rim 22 in the capsule is provided to prevent liquid from running down the side of the bottle. The pouring hole may be provided with a small spout. A sealing ring 21 is compressed by the capsule against the neck of the bottle and c.

Classifications:**International (IPC 8-9):** B65D47/26 (Advanced/Invention);

B65D47/04 (Core/Invention)

International (IPC 1-7): B65D47/32**CPC:** B65D47/265**European:** B65D47/26D4

**Family:**

Publication number	Publication date	Application number	Application date
GB363712 A	19311221	GB19300028096	19300919

Priority:

GB19300028096 19300919

Probable Assignee:

JOHN HENRY FAULKNER

Assignee(s): (std):

JOHN HENRY FAULKNER

42) Family number: 23750164 (CH399217A)

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Title: KUNSTSTOFF-FLASCHE MIT DURCH EINE AM FLASCHENHALS ANBRINGBARE SCHRAUB- ODER AUFSTECKKAPPE
VERSCHLISSBAREM FLASCHENHALS PLASTIC BOTTLE WITH BY THE BOTTLE NECK SCREW OR attachable plug cap
lockable BOTTLE NECK (Machine translation)

Abstract: Source: CH399217A [DE] (Claim 1) 1. Kunststoffflasche nach Patentanspruch mit Rollkugerverschluss, dadurch gekennzeichnet, dass das Rollglied (*i* oder *p*) am Boden (*b*) der Kunststoff flasche (*a*) angeordnet und zu seiner Abdeckung bei Nichtgebrauch eine am unteren Ende des Mantels (*a1*), der Flasche anbringbare Kappe (*m*) vorgesehen ist.

Machine translation: (Claim 1) 1 Plastic bottle with roller ball according to claim closure, wherein the rolling element (*i* Or *p*) at the bottom (*b*) of the plastic bottle (*a*) arranged and its cover when not in use one is at the lower end of the shell (*a1*), the bottle cap attachable (*m*) is provided.

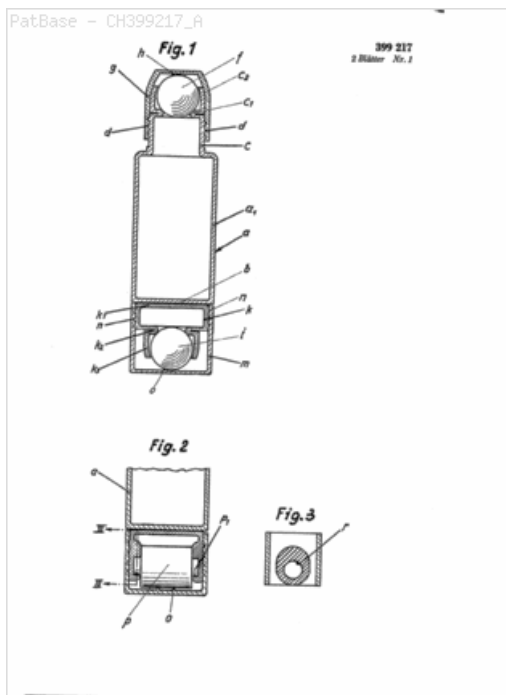
Classifications:

International (IPC 8-9): A45D34/04 (Advanced/Invention);
A45D34/04 (Core/Invention)

International (IPC 1-7): A61H B65D23/00 B65D39/00 B65D47/42
B67B

CPC: A45D34/041

European: A45D34/04B

**Family:**

Publication number	Publication date	Application number	Application date
CH399217 A	19660331	CH19620001200	19620130
DE1829772 U	19610420	DE1961E014915U	19610208

Priority:

DE1961E014915U 19610208 DE1961E015244 19610506

Probable Assignee: FRIEDRICH AND KAUFMANN EFEKA**Assignee(s):** (std): FRIEDRICH AND KAUFMANN EFEKA**Assignee(s):** EFEKA FRIEDRICH AND KAUFMANN**Inventor(s):** (std): HANS ERICH KAUFMANN ; WAGNER JOACHIM DR**Inventor(s):** KAUFMANN HANS ERICH**43) Family number: 20707168 (ZA9811512A)**

© PatBase

Title: SEALS PRODUCED FROM ALPHA-OLEFIN/VINYLIDENE AROMATIC AND/OR HINDERED ALIPHATIC VINYLIDENE/INTERPOLYMER BASED MATERIALS AND SEALING SYSTEMS THEREFROM.

Abstract: ABSTRACT OF THE DISCLOSURE The present invention discloses seals including container closure liners, gaskets and barrier membranes, comprising a polymer composition having an oxygen transmission coefficient at a temperature of 25 degrees centigrade of less than about 300 cm³ssmil/100 in²ssdayssatm. (1.2 cm³/cmssdayssMPa), wherein the polymer composition comprises at least one substantially random interpolpolymer (or a blend comprising at least one substantially random interpolpolymer and at least one other polymer) and from 0 to 80 percent by weight (based on the total weight of the composition) of at least one filler. The present invention also discloses sealing systems which include container closures such as bottle caps comprising these seals. The interpolpolymers or blends used to produce the seals of the present invention (as well as the novel seals themselves) exhibit a unique balance of properties including low oxygen permeability, low Shore A hardness and excellent tensile strain recovery.

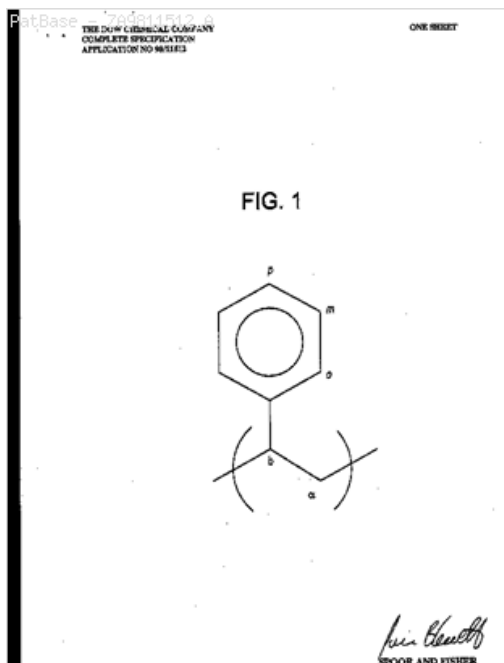
Classifications:

International (IPC 8-9): B32B27/28 C08F210/00 C08F210/02 C08F212/04 C08J5/18 C08J9/04 C08L23/02 C08L23/08 C08L25/00 C08L25/08 C09J123/08 C09K3/10 (Advanced/Invention); B32B27/28 B65D53/06 C08F210/02 C08J5/18 C08L23/02 C08L25/00 C09K3/10 (Advanced/Non-invention); B32B27/28 C08F210/00 C08F212/00 C08J5/18 C08J9/00 C08L23/00 C08L25/00 C09J123/00 C09K3/10 (Core/Invention)

International (IPC 1-7): B32B27/28 B32B27/30 C08F210/00 C08F212/04 C08J5/18 C08J9/04 C08L23/02 C08L25/00 C08L25/02 C09K3/10

CPC: C08L2666/04 C08L2666/24 C09K3/10 C08F210/00 C08F210/02 C08F212/04 C08L23/08 C08L23/0838 C08L25/08 C09J123/08 C09K2200/062 C09K2200/0632 C09K2200/0642

European: C08F210/00 C08F212/04 C08L23/08 C08L25/08 C09J123/08 C09K3/10 M08F210/02 M08L23/08A5 M09K200/06H10 M09K200/06H2B M09K200/06K



Family:

Publication number	Publication date	Application number	Application date
AR017878 AA	20011024	AR1998P106421	19981216
AU199920871 A1	19990705	AU19990020871	19981216
BRPI9812798 A	20001017	BR1998PI12798	19981216
CA2314994 AA	20000615	CA19982314994	19981216
CN1284101 A	20010214	CN19988013214	19981216
EP1040161 A1	20001004	EP19980965396	19981216
JP2002508423 T2	20020319	JP20000539087T	19981216
KR20010033115 A	20010425	KR20007006479	19981216
MY135742 A	20080630	MY19980005689	19981216
NO20003072 A	20000810	NO20000003072	20000615
NO20003072 A0	20000615	NO20000003072	20000615
NO20003072 L	20000810	NO20000003072	20000615
TH42246 A	20010103	TH19981004816	19981214
TW432094 B	20010501	TW19980120869	19981215
WO9931176 A1	19990624	WO1998US26795	19981216
ZA9811512 A	20000615	ZA19980011512	19981215

Priority:

US19970991836 19970616 US19970991836 19971216 WO1998US26795 19981216

Probable Assignee: DOW CHEMICAL CO

Assignee(s): (std): DOW CHEMICAL CO ; DOW CHEMICAL INT CO LTD ; GATHERS JOHN J ; MARKOVICH RONALD P ; GUEST MARTIN J ; LASSUS PHILLIP T DE ; THE DOW CHEMICAL COMPANY ; THE DOW CHEMICAL CO ; CHEUNG YUNWA W

Assignee(s): DE LASSUS PHILLIP T

Inventor(s): (std): CHEUNG Y W ; CHEUNG YUNWA W ; DE LASSUS PHILLIP T ; GATHERS JOHN J ; GUEST M J ; GUEST MARTIN J ; LASSUS PHILLIP T DE ; MARKOVICH R P ; MARKOVICH RONALD P ; YW CHEUNG ; MARTIN J GUEST ; JOHN J GATHERS ; GUEST MARTINI J ; CHIEUNG YUNWA W ; YUNWA W CHEUNG ; RP MARKOVICH ; RONALD P MARKOVICH ; PHILLIP T DE LASSUS ; MJ GUEST

Inventor(s): MARTINI J GUEST ; YUNWA WCHIEUNG ; RONALD P MARKOVICH ; PHILLIP TDE LASSUS ; MARTINI JGUEST ; Y W CHEUNG ; R P MARKOVICH ; M J GUEST ; YUNWA W CHIEUNG

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SMART AND BIGGAR

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

44) Family number: 25994172 (US2974816A)

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Title: CLOSING AND SEALING BOTTLES AND OTHER RECEPTACLES

Abstract: 807,074. Crown corks. FORDS (FINSBURY) Ltd., and SNELLING (LONDON) Ltd., L. C. April 17, 1957 [July 10, 1956; Nov. 12, 1956], Nos. 21358/56 and 34539/56. Class 125(3). A bottle containing liquid under pressure is closed by an aluminium crown cap 1 having an outwardly flared edge part 4 to its skirt 3 and having corrugations forming radial channels 5, the channels being filled by a resilient or deformable sealing compound such as a rubberised compound which is compressed between the bottle rim flange and the skirt when the latter is bent inwardly and downwardly during closing. The sealing compound may be applied as a continuous ring, Fig. 3, or in blobs, Fig. 9, which merge when the closure is applied to the bottle. The cap interior is anodised and/or coated with a protective vinyl lacquer.

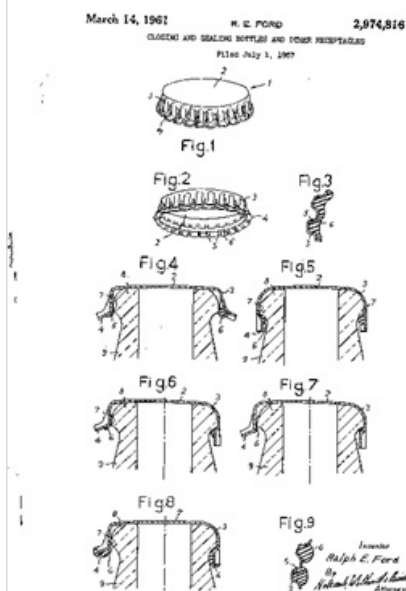
Classifications:

International (IPC 8-9): B65D41/12 D02G1/00 (Advanced/Invention); B65D41/02 D02G1/00 (Core/Invention)

International (IPC 1-7): B65D53/02 D02G1/10

CPC: B65D41/12 D02G1/004

European: B65D41/12 D02G1/00C

**Family:**

Publication number	Publication date	Application number	Application date
BE567121 A	00000000		00000000
CH352248 A	19610215		19570708
CH354542 A	19610531		19561129
DE1078466 B	19600324	DE1957F023411	19570706
DE1078466 C	19600324	DE1957F023411	19570706
ES236446 A1	19580516	ES19570236446	19570709
FR1255914 A	19610317	FR19570742053	19570628
GB807074 A	19590107	GB19560021358	19560710
US2974816 A	19610314	US19570669004	19570701

Priority:

19551130	GB19560021358	19560710	19561112
FR19570742053	19570628	US19570669004	19570701
		DE1957F023411	19570706

Probable Assignee: FORDS LTD

Assignee(s): (std): FORDS FINSBURY LIMITED ; FORDS FINSBURY LTD ; FORDS LTD ; ICI LTD ; L C SNELLING LONDON LTD ; L C SNELLING LONDON LIMITED

Assignee(s): IMPERIAL CHEMICAL INDUSTRIES LIMITED ; LC SNELLING LONDON LTD ; IMP CHEMICAL IND LTD

Inventor(s): (std): RODERICK BRUCE MACLEOD ; RAYMOND HOLDEN SPEAKMAN ; EWART FORD RALPH ; FORD RALPH EWART ; RALPH EWART FORD

Inventor(s): BRUCE MACLEOD RODERICK ; HOLDEN SPEAKMAN RAYMOND

45) Family number: 23112174 (US1928987A)

© PatBase

Title: BOTTLE CAP

Abstract: 1. Having described the invention, what I claim as new and desire to have protected by Letters Patent, is:- As an article of manufacture, a cap of the crown type comprising a metal shell having a corrugated depending skirt and a top having a central depressed portion forming an internal channel around the same within the shell, a sealing gasket in said channel having its surface substantially flush with the surface of the depressed portion and an overlying covering for the surface of said depressed portion within the cap comprising 2. disk of paper substantially coextensive with said surface of the depressed portion but peripherally surrounded by the sealing gasket, said disk having a varnished exposed surface, and a layer of gutta percha coextensive with the said disk and adhesively uniting the same to the shell

Classifications:

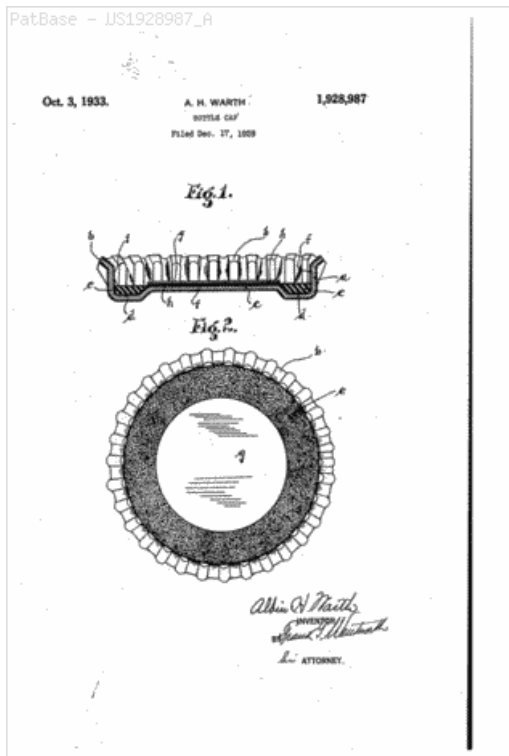
International (IPC 8-9): B65D41/12 (Advanced/Invention);
B65D41/02 (Core/Invention)

International (IPC 1-7): B65D53/02

CPC: Y10S106/04 B65D41/12

European: B65D41/12

US: 106/DIG.4 215/328

**Family:**

Publication number	Publication date	Application number	Application date
US1928987 A	19331003	US19290414615	19291217

Priority:

US19290414615 19291217

Probable Assignee: CROWN CORK AND SEAL CO**Assignee(s):** (std): CROWN CORK AND SEAL CO**Assignee(s):** CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL COMPANY INC**Inventor(s):** (std): WARTH ALBIN H**46) Family number: 57789180 (US2014332494A)**

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Title: CONTAINER WITH A DISPENSING SCHEDULE

Abstract: The current disclosure is directed to a container with a dispensing schedule. In one implementation, the container with a dispensing schedule comprises a bottle with a threaded neck and a complementarily threaded cap having a cylindrical rim and an internal schedule display. An indication on or within the internal schedule display is displayed through an aperture in the cap rim. Features included in the cap and schedule display interoperate to ensure that the displayed indication is advanced when the cap is removed from, and subsequently threaded onto, the bottle container. The displayed indication is relatively large and clear, to facilitate viewing by vision-impaired users, and the indication-advancement mechanism is robust and reliable. In addition, the cap and internal schedule display include features that allow the displayed indication to be set to a particular indication.

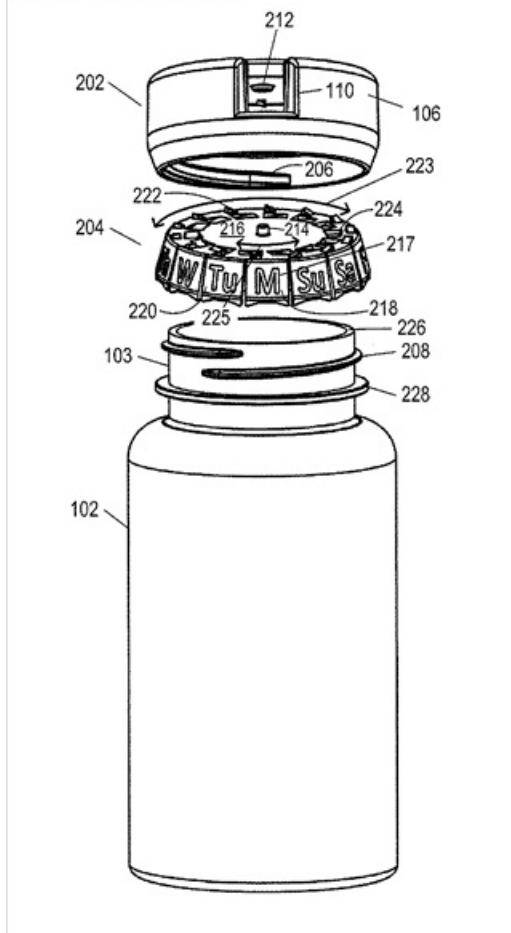
Classifications:**International (IPC 8-9):** A61J1/00 A61J1/03 A61J7/04 B65D1/02

B65D41/04 B65D51/24 B65D55/02 (Advanced/Invention)

CPC: A61J7/04 B65D1/0246 B65D41/0435 B65D51/245 A61J2200/70

A61J7/0436 A61J7/0481 B65D41/0471 B65D41/0478 A61J1/1418

US: 1/1 215/365 368/10

**Family:**

Publication number	Publication date	Application number	Application date
EP2994087 A1	20160316	EP20140794555	20140512
EP2994087 A4	20170118	EP20140794555	20140512
IN03949KN2015 A	20160701	IN2015KN03949	20151203
US2014332494 AA	20141113	US20140275661	20140512
US2017035659 AA	20170209	US20160331873	20161023
US2017202748 AA	20170720	US20170470680	20170327
US9492356 BB	20161115	US20140275661	20140512
WO14183131 A1	20141113	WO2014US37734	20140512

Priority:

US20130822214P	20130510	US20140275661	20140512	WO2014US37734	20140512
US20160331873	20161023	US20160331875	20161023	US20170470680	20170327

Probable Assignee: REDCAP LLC**Assignee(s):** (std): BALAKIER ALFRED RICHARD ; REDCAP LLC**Inventor(s):** (std): BALAKIER ALFRED RICHARD ; GOSSELIN DANIEL ALBERT ; GOSSELIN DAN**Agent(s):** BOULT WADE TENNANT; OLYMPIC PATENT WORKS PLLC; XU JIANGCONG

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

47) Family number: 22888182 (US2963187A)

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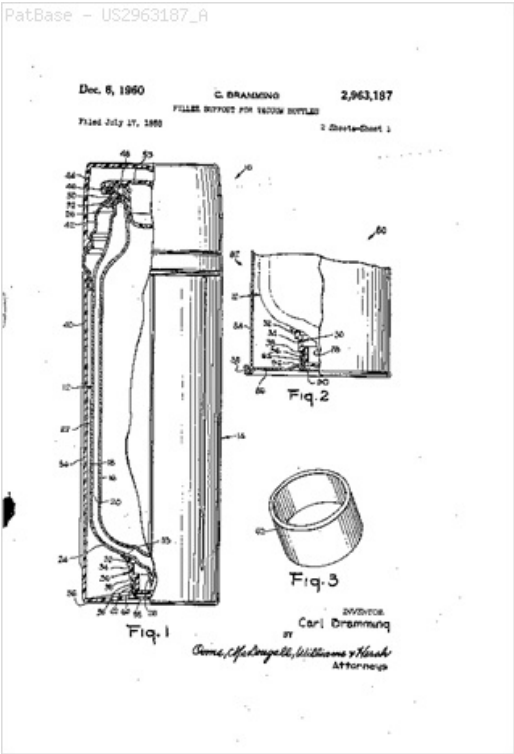
Title: FILLER SUPPORT FOR VACUUM BOTTLES

Abstract: 923,123. Vacuum-jacketed vessels. ALADDIN INDUSTRIES Inc. July 13, 1959 [July 17, 1958], No. 23985/59. Class 64 (2). A cylindrical rubber ring 62 located on the base of a vacuum flask casing 54 fits around the lower end of a synthetic resin cap 30 (cemented to the glass inner vessel 18 to protect the sealing pip 28) to locate and hold the vessel 18 resiliently against a sealing ring at the mouth of the vessel. In Fig. 1, the integral base of the synthetic resin casing 54 is formed with an annular rib 60 for locating the rubber ring 62. In Fig. 5, the base and casing are of metal, the base being formed with an annular rib 158 which extends around a well 162 and locates a V- sectioned annulus 130 in which the ring 62 rests on a flange of the annulus. In Fig. 4 (not shown), the annulus is located in a rib on a synthetic resin base which is connected by a screw-thread to the casing which is of metal. In Fig. 2 (not shown), there is a metal casing and base, and the base, similar to that of Fig. 5 but without the well 162, has an annular rib locating the ring 62.

Classifications:**International (IPC 8-9):** A47J41/02 (Advanced/Invention);

A47J41/00 (Core/Invention)

International (IPC 1-7): A47J41/02**CPC:** A47J41/02**European:** A47J41/02



Family:

Publication number	Publication date	Application number	Application date
GB923123 A	19630410	GB19590023985	19590713
US2963187 A	19601206	US19580749107	19580717

Priority:

US19580749107 19580717

Probable Assignee:

ALADDIN IND INC

Assignee(s): (std):

ALADDIN IND INC

Inventor(s): (std):

CARL BRAMMING

Inventor(s):

BRAMMING CARL

48) Family number: 49963182 (BRPI1003547A)

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Title: aperfeiçoamento em tampa para garrafas Improvement in cap for bottles (Machine translation)

Abstract: Source: BRPI1003547A [PT] APERFEICOAMENTO EM TAMPA PARA GARRAFAS. Compreendendo corpo cilíndrico (1), obtido de um disco de chapa substancialmente fina, repuxada de modo a configurar um topo circular plano (2) que, após arredondamento (3), forma uma saia cilíndrica (4), a qual tem um segmento do seu diâmetro substancialmente prolongado para baixo na forma de aba (5), cuja largura ou bordas laterais (6) coincidem em alinhamento com vincos ou linhas enfraquecidas de rupturas (7), ligeiramente tortuosas, que se estende de forma contornante ao topo (2) e termina no lado oposto da saia cilíndrica (4), configurando uma faixa parcialmente removível (8), tendo uma de suas extremidades coincidindo com a aba prolongada (5), onde é termo-soldada uma peça ordinariamente anelar que configura pega digital (9), através da qual o corpo (1) é removido depois de cravado no gargalo de uma garrafa.

Machine translation: IMPROVEMENT IN COVER FOR BOTTLES. Understanding cylindrical body (1), obtained from a substantially thin plate of hard, stretched in order to configure a flat circular top (2) that, after rounding (3), forms a cylindrical skirt (4), which has a segment its diameter down substantially extended in the form of tab (5), width or side edges (6) coincide in alignment with wrinkles or lines weakened breaks (7), slightly twisted, that extends so enclosing the top (2) and ends on the opposite side of the cylindrical skirt (4), setting a track partially removable (8), with one end coinciding with the flaps extended (5), where and thermo-welded one piece ring that ordinarily takes digital sets (9), through which the body (1) and removed after it plunged into the neck of a bottle.

Classifications:

International (IPC 8-9): B65D41/32 (Advanced/Invention)

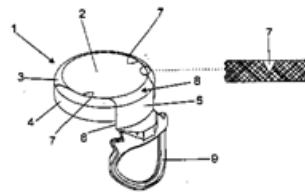


FIG. 1

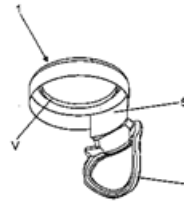


FIG. 2

Family:

Publication number	Publication date	Application number	Application date
BRPI1003547 A2	20111108	BR2010PI03547	20100305

Priority:

BR2010PI03547 20100305

Probable Assignee:

KALFAS DIMITRIOS

Assignee(s): (std):

KALFAS DIMITRIOS

Assignee(s):

DIMITRIOS KALFAS

Inventor(s): (std):

KALFAS DIMITRIOS

Inventor(s):

DIMITRIOS KALFAS

49) Family number: 41939184 (US2010018940A)

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Title: ANTI-REFILLING DEVICE FOR THE NECK OF A CONTAINER, TYPICALLY A BOTTLE, AND A COMPOSITE STOPPER CAP INCLUDING SAID DEVICE

Abstract: An anti-refilling device, designed to be fixed irreversibly to the neck of a container containing a liquid and to be closed by a stopper cap. The device has an axis coinciding with the axis of the neck when it is fixed on the neck, and has an axial dispensing duct for the liquid through which a transverse wall extends, fixed irreversibly to the anti-refilling device and provided with a plurality of traversing channels, each of the channels connecting an external opening, directed towards the outside of the container, to an internal opening, directed towards the inside of the container. The smallest dimension of the external opening is less than a critical dimension determined according to the critical surface tension of the material making up the transverse wall, typically about 0.7 mm, and the smallest dimension of the internal opening is greater than the critical dimension.

Classifications:

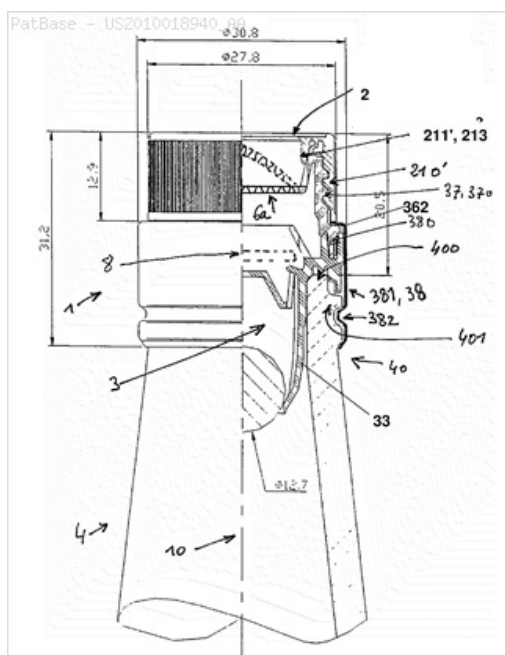
International (IPC 8-9): B65D39/00 B65D47/02 B65D49/00 B65D49/12 (Advanced/Invention); B65D39/00 B65D47/00 B65D49/00 (Core/Invention); B65D (Subclass/Invention)

International (IPC 1-7): B65D47/02

CPC: B65D49/02 B65D49/00 B65D49/12

European: B65D49/00 B65D49/02 B65D49/12

US: 215/26 215/26P 215/355 215/355S

**Family:**

Publication number	Publication date	Application number	Application date
AR064335 AA	20090401	AR2007P105601	20071213
AU2007343186 AA	20080717	AU20070343186	20071206
AU2007343186 BB	20130404	AU20070343186	20071206
BRPI0719992 A2	20140318	BR2007PI19992	20071206
BRPI0719992 B1	20180731	BR2007PI19992	20071206
CA2669740 AA	20080717	CA20072669740	20071206
CA2669740 C	20150505	CA20072669740	20071206
DE602007030950 D1	20130801	DE200760030950T	20071206
DK2102071 T3	20130908	DK20070871800T	20071206
EP2102071 A2	20090923	EP20070871800	20071206
EP2102071 B1	20130605	EP20070871800	20071206
ES2429594 T3	20131115	ES20070871800T	20071206
FR2909978 A1	20080620	FR20060010886	20061213
FR2909978 B1	20090123	FR20060010886	20061213
MX2009005453 A1	20090601	MX20090005453	20071206
NZ576922 A	20111222	NZ20070576922	20071206
PT2102071 T	20130829	PT20070871800T	20071206
RU2009126541 A	20110120	RU20090126541	20071206
RU2415792 C2	20110410	RU20090126541	20071206
US2010018940 AA	20100128	US20070515459	20071206
WO08084143 A2	20080717	WO2007FR02004	20071206
WO08084143 A3	20080912	WO2007FR02004	20071206
WO08084143 C1	20081009	WO2007FR02004	20071206
ZA200903937 A	20101027	ZA20090003937	20071206

Priority:

FR20060010886 20061213 EP20070871800 20071206 WO2007FR02004 20071206

Probable Assignee: ALCAN PACKAGING CAPSULES

Assignee(s): (std): ALCAN PACKAGING CAPSULES ; ALCAN PACKAGING FLEXIBLE FRANCE ; ALCAN PEHKEHDZHING KEHPS JULZ ; AMCOR FLEXIBLES CAPSULES FRANCE ; GRANGER JACQUES ; BOURREAU JEAN MARIE

Inventor(s): (std): GRANZHE ZHAK ; BURRO ZHAN MARI ; JEAN MARIE BOURREAU ; JACQUES GRANGER ; GRANGER JACQUES ; BOURREAU JEAN MARIE

Inventor(s): BURRO ZHAN-MARI

Agent(s): SPRUSON AND FERGUSON; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; GRUENECKER PATENT U RECHTSANWALTE PARTG MBB; FENOT DOMINIQUE; LEHMANN MARIA ISABEL; RIO TINTO FRANCE SAS; DENNISON SCHULTZ AND MACDONALD

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

50) Family number: 30995186 (US2696318A)

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Title: CLOSURE SEALING MEANS FOR JARS, BOTTLES, AND THE LIKE

Abstract: 684,276. Stoppers. KIHM, G. A. July 12, 1950 [March 27, 1950; April 6, 1950; June 15, 1950], No. 17452/50. Class 125(iii) A sealing packing of plastic material, e.g. polyethylene, for closing the neck of a container to be finally sealed by a crimped capsule 5, a " crown cork " or a screw-cap comprises a depressed central part 2c surrounded by an upstanding wall engaging the inside of the receptacle neck and a peripheral flange 2b lying on the receptacle neck and formed with an annular bead 3 engaging the top of the neck. The bead 3 may be opposite an annular groove on the upper surface of flange 2b. As shown in Fig. 9, the upstanding wall is extended at 11 to support the outer cap or as shown in Fig. 11, a prop 23 is provided. The flanges 2b may have projections 24 to engage the skirt of the outer cap.

Classifications:

International (ipc 8-9): B65D39/04 B65D41/28

B65D53/04 (Advanced/Invention);

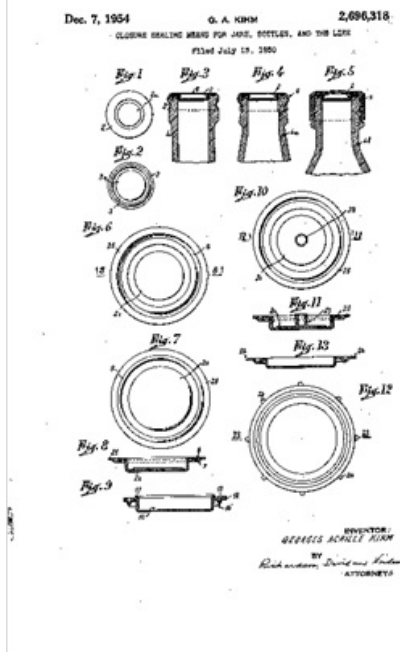
B65D39/00 B65D41/02 B65D53/00 (Core/Invention)

International (ipc 1-7): B65D53/04 F16B17/00

CPC: Y10S215/01 B65D39/04 B65D41/28 B65D53/04

European: 124BG12B2F5C2F B65D39/04 B65D41/28 B65D53/04

US: 215/277 215/343 215/DIG.1

**Family:**

Publication number	Publication date	Application number	Application date
BE496529 A	19501026		00000000
CH288359 A	19530131		19500717
CH289071 A	19530228		19510221
FR1015071 A	19520827		19500327
FR1020206 A	19530203		19500615
FR60170 E	19540923		19500406
GB684276 A	19521217	GB19470017452	19500712
NL80152 C	19560116	NL19500154619	19500705
US2696318 A	19541207	US19500173986	19500715

Priority:

19500327 19500406 US19500173986 19500715

Probable Assignee: GEORGE ACHILLE KIHM

Assignee(s): (std): KIHM GEORGES ACHILLE ; PARKE DAVIS AND CO

Assignee(s): GEORGE ACHILLE KIHM

Inventor(s): (std): DAVIS CO PARKE ; KIHM GEORGES ACHILLE

Inventor(s): ACHILLE KIHM GEORGES ; GEORGES ACHILLE KIHM ; PARKE DAVIS AND CO ; PARKE DAVIS AMP AMP CO

51) Family number: 3607191 (FR2324532A)

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Title: METAL BEER BOTTLE CAP - FOR PLAIN NECKS HAVING ANNULAR RIB AROUND RIM, NO TOOL REQUIRED FOR OPENING

Abstract: A beer bottle cap made from metal has a flat top (18) with sides fitting over the rim and rolled underneath, a layer of plastic inside forming a seal. Attached to the sides by a tab at one point is an oval shaped ring (16), the tab being attached to the large diameter and forming part of a line of weakness (20, 22) on each side, passing over the flat top and diverging outwards to the opposite side. In use, the ring is pulled up and over the cap. The tab bends outwards and the whole can be pulled upwards to tear along the weakness zones.

Classifications:

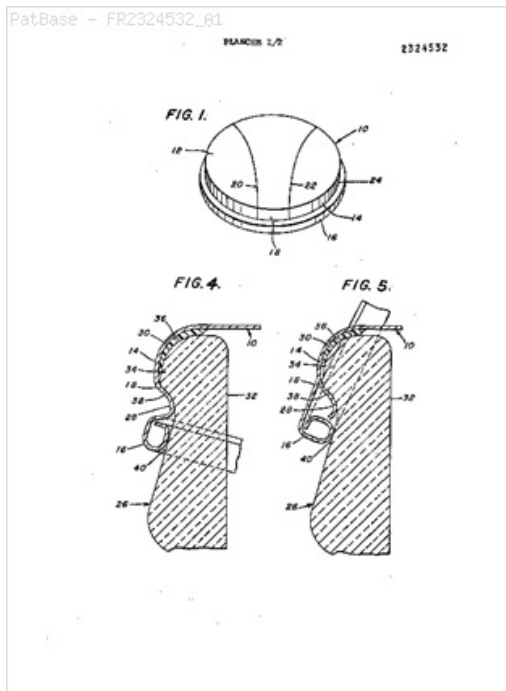
International (IPC 8-9): B65D41/44 (Advanced/Invention);

B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/46

CPC: B65D41/44

European: B65D41/44

**Family:**

Publication number	Publication date	Application number	Application date
FR2324532 A1	19770415	FR19750028480	19750917
FR2324532 B1	19780623	FR19750028480	19750917

Priority:

FR19750028480 19750917

Probable Assignee:

ALUMINUM CO OF AMERICA

Assignee(s): (std):

ALUMINUM CO OF AMERICA

Assignee(s):

ALUMINUM CY OF AMERICA

52) Family number: 58629192 (US2015060389A)

© PatBase

Title: CONTAINER CLOSURE DEVICE

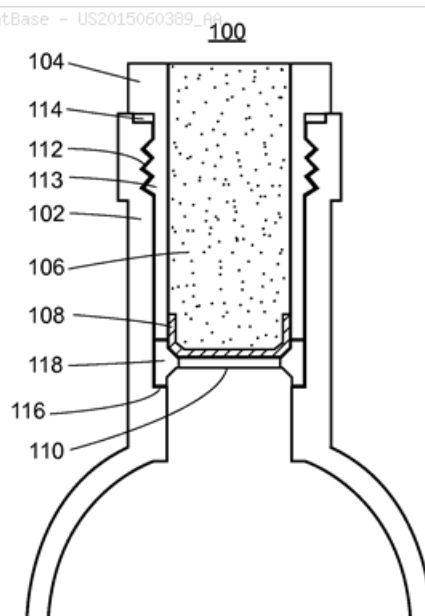
Abstract: The closure device may be used to seal bottles or other liquid containers, while avoiding contamination by 2,4,6-Trichloroanisole (TCA). The closure device may include a sleeve that is inserted into the neck of a bottle. A stopper may be inserted into the sleeve to seal the bottle. To prevent TCA contamination, the stopper may include a stopper cap made of a TCA scavenger material, providing a barrier between the stopper and the contents of the bottle. A filter may be added to remove particulates and impurities from the contents when poured from the unstoppered bottle. Various types and shapes of filters may be used, and the filter may include a spring or other movement assistance or a ventilation mechanism. In some embodiments, the sleeve may be removably attached to the bottle, such as by interfacing threading, or to the filter, such as by frangible connectors.

Classifications:**International (IPC 8-9):** B65D39/00 B65D41/04

B65D55/00 (Advanced/Invention)

CPC: B65D55/00 B65D41/045 B65D2205/00 B65D39/0052**US:** 215/355

PatBase - US2015060389_A1

**Family:**

Publication number	Publication date	Application number	Application date
US2015060389 AA	20150305	US20140471934	20140828
WO15031640 A2	20150305	WO2014US53202	20140828
WO15031640 A3	20150702	WO2014US53202	20140828

Priority:

US20130871680P 20130829 US20140975240P 20140404 US20140471934 20140828

Probable Assignee: BOLGER DAVID V

Assignee(s): (std): BOLGER DAVID V

Inventor(s): (std): BOLGER DAVID V

Agent(s): HEPPERMAN ROGER A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

53) Family number: 19583201 (GB646551A)

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Title: Apparatus for closing caps on bottles and like containers

Abstract: 15898. [Class 125(ii)] Bottle capping devices of the type described in Specifications 478,179 and 508,108, which comprise a thick ring or disc of rubber having a recess in its undersurface adapted to fit over a cap positioned on the mouth of the bottle, the pressing of the closing device against the cap causing the edge of the rubber surrounding the recess to close inwardly to crimp the cap skirt in a groove around the bottle neck, are provided with a movable pressure plate adapted to urge the centre of the rubber ring or disc downwardly to expand the closing edge of the recess and thus facilitate the fitting of the ring over the mouth of the capped bottle. The Figures show the invention as applied to the capping head of a capping machine as described in Specification 646,552. A thick rubber closing ring 23 has an annular recess 24 in its lower face adapted to fit over a capped bottle 4. The outer edge of the ring is held between members 21 and 22 which are adapted to be pressed downwardly, as a unit, by a cam 32 acting against a return spring 26. A pressure plate 35 engages the rear face of ring 23 and is normally urged downwards by a spring 40 to the position shown in Fig. 1, thus enlarging the recess 24 so that it can easily receive the top of bottle 4 with the cap thereon. The capping stroke of the head forces the periphery of ring 23 downwardly, the closing edge of the recess 24 turning inwardly, to the position shown in Fig. 2, to crimp the cap skirt into the groove on the bottle neck, the pressure plate 35 compressing the spring 40. The ring 23 and pressure plate may be incorporated in a hand tool when the spring 40 may be omitted and the pressure plate operated manually.

Classifications:

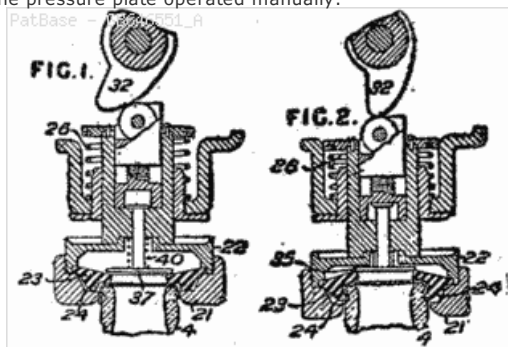
International (IPC 8-9): F16B39/08 (Advanced/Invention);

F16B39/00 (Core/Invention)

International (IPC 1-7): B67B3/14

CPC: F16B39/08

European: 64B23D2C F16B39/08



Family:

Publication number	Publication date	Application number	Application date
GB646551 A	19501122	GB19480015898	19480612

Priority:

GB19480015898 19480612

Probable Assignee: GEOFFREY EWART FORD

Assignee(s): (std): FORDS LTD ; GEOFFREY EWART FORD

Assignee(s): FORDS FINSBURY LIMITED ; FORDS FINSBURY LTD

54) Family number: 25110203 (US3223279A)

© PatBase

Title: SNAP-ON CLOSURE ASSEMBLY

Abstract: 1,049,546. Container closures. AMERICAN FLANGE and MANUFACTURING CO. Inc. April 28, 1965 [May 4, 1964], No. 17850/65. Heading B8T. A closure for a can, bottle, jar and c. consists of a resilient plastics lid 4, enveloped by a metal sealing cap 5 to which a gripping tab 25 is integrally attached. An edge 15 of the lid 4 snaps over an upwardly diverging rim 2, Fig. 4 (not shown), of the can and c. and a sealing member 30, Fig. 7 (not shown), and an anvil 31 compress the metal cap 5 about the rim 2 so that the lid 4 forms a gasket between the metal cap and the rim. A lower portion 32 of the cap skirt 23 is pressed firmly against the can wall. The metal cap 5 is removed by pulling the tab 25, whereupon the cap tears along score lines 27, Fig. 1 (not shown), extending across the top the cap. Access to the can contents is obtained by prising the edge 15 of the lid 4 over the rim 2. In a modification. Figs. 9, 10 (not shown), the metal sealing cap is in the form of a U-shaped, annulus 35 which clamps the lid 4 about the rim 2. A gripping tab 40 lies flat on the lid 4 in the centre of the annulus, score lines 42 enabling the annulus to be destructively removed. The closure may be applied to a can with an inwardly or outwardly curled-over rim. In a second modification, Fig. 13, (not shown), the closure is applied to a bottle having a beaded mouth 55. Since the bottle neck is sufficiently rigid, no back-up anvil 31 is needed with the sealing member 30 and so the centre portion of the closure is not recessed.

Classifications:

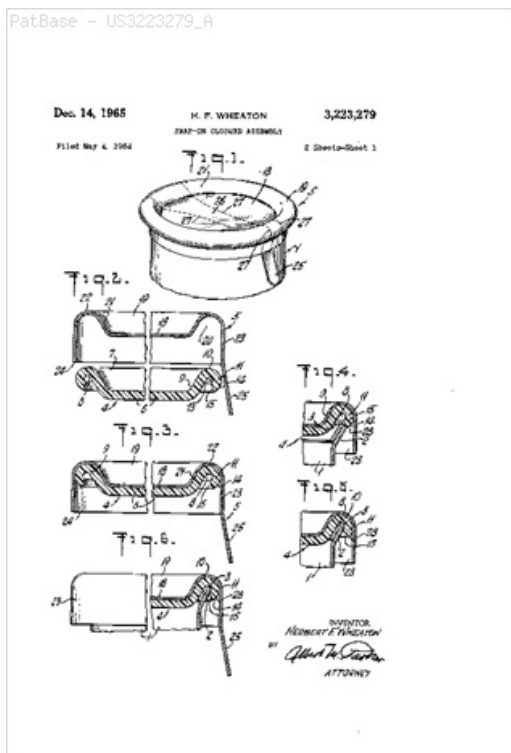
International (IPC 8-9): B65D41/40 B65D41/42 B65D41/48

B65D41/60 B65D41/62 (Advanced/Invention);

B65D41/00 B65D41/32 (Core/Invention)

International (IPC 1-7): B44C1/28 B65D17/16 B65D41/40

B65D41/60 B65D41/62 B65D51/18 B67B
CPC: B65D17/28 B65D41/62 B65D41/40 B65D41/42 B65D41/485
B65D41/60 B65D2101/0053
European: B65D17/16 B65D41/40 B65D41/42 B65D41/48B
B65D41/60 B65D41/62 L65D101/00A3E
US: 220/270



Family:

Publication number	Publication date	Application number	Application date
AT260100 B	19680212	AT19650004065	19650504
BE663253 A	19650817		19650430
CH428470 A	19670115	CH19650006180	19650504
DE1482519 A1	19690703	DE1965A049098	19650504
DE1482519 B2	19760930	DE1965A049098	19650504
DE1482519 C3	19770428	DE1965A049098	19650504
DK116640 B	19700126	DK19650002238	19650503
ES312508 A1	19660301	ES19650312508	19650503
FI45263 B	19711231	FI19650001082	19650503
FI45263 C	19720410	FI19650001082	19650503
FR1450519 A	19660624	FR19650015578	19650503
GB1049546 A	19661130	GB19650017850	19650428
MY6700119 A	19671231	MY19670000119	19671231
NL6505664 A	19651105	NL19650005664	19650504
NO122690 B	19710726	NO19650157898	19650430
US3223279 A	19651214	US19640364577	19640504

Priority:

US19640364577 19640504 FR19650015578 19650503

Probable Assignee: AMERICAN FLANGE AND MFG

Assignee(s): (std): AMERICAN FLANGE AND MANUFACTURING CO INC ; AMERICAN FLANGE AND MANUFACTURING CO INC
NEW YORK ; AMERICAN FLANGE AND MFG

Assignee(s): AMERICAN FLANGE AND MFG CO INC ; AMERICAN FLANGE AND MFG CO INC

Inventor(s): (std): FRANCIS WHEATON HERBERT ; HERBERT FRANCIS WHEATON ; WHEATON H ; WHEATON HERBERT F

Inventor(s): WHEATON HERBERT FRANCIS

55) Family number: 29913206 (US2003682A)

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Title: CAPPING OF BOTTLES AND AN APPARATUS THEREFOR

Abstract: 1. Apparatus for capping bottles comprising rollers to feed forward a strip of flexible capping material, dies to puncture or partially sever the material into cap pieces, apertured guide plates to grip the strip of material, a reciprocating die to hold the material upon the bottle lip and a plunger to force the cap piece in a well-like depression into the bottle mouth and means to raise the bottles into position to receive the caps.

Classifications:

International (IPC 8-9): B67B3/02 (Advanced/Invention);
B67B3/00 (Core/Invention)

CPC: B67B3/02

European: 64B23A7 64B23D B67B3/02

US: 53/130.1 53/296 53/334 53/341

Publication number	Publication date	Application number	Application date
US2003682 A	19350604	US19310568837	19311014

Probable Assignee:	AUTO DAIRY PIONEERS LTD
Assignee(s): (std):	AUTO DAIRY PIONEERS LTD
Assignee(s):	AUTO DAIRY PIONEERS LIMITED
Inventor(s): (std):	GUY ENOCK ARTHUR
Inventor(s):	ENOCK ARTHUR GUY

Abstract: 30719. [Class 125 (iii)] A closure cap 14 for a bottle 10 has a cylindrical skirt provided with continuous or interrupted threads or cams 11 which may engage corresponding members on the bottle neck. The lower end 20 of the skirt is spun over the circumferential ridge 13 on the bottle neck, and a number of arcuate slits 18 are made in the skirt thus forming tabs 19. The indentations 17 in the skirt form the threads to engage the cams 11 on the bottle and are normally arranged in the gaps between the cams while the slits 18 are arranged beneath the cams. A strengthening bead 9 extends round the lower edge of the skirt and over the slits 18. To remove the closure the tabs 19 are torn away removing part of the spun-over portion so that the remaining parts spring over the ridge as the closure is moved axially. When the cap is replaced and rotated the cam surfaces ensure an effective joint. Where a number of interrupted threads are used with their lower ends in circumferential alignment, these ends may take the place of the ridge 13 to engage the edge of the skirt. In the modification shown in Fig. 2 a bayonet joint 23, 24 is used instead of threads or cams.

International (IPC 8-9): B65D41/34 (Advanced/Invention);
B65D41/34 (Core/Invention)
CPC: B65D41/348
European: B65D41/34F



Publication number	Publication date	Application number	Application date
GB520499 A	19400425	GB19380030719	19381024

Priority:

GB19380030719 19381024

Probable Assignee: WALLIS TIN STAMPING CO LT

Assignee(s): (std): FREDERICK GUSTAVOUS GINZLER ; WALLIS TIN STAMPING CO LT ; WALLIS TIN STAMPING COMPANY LT

Assignee(s): WALLIS TIN STAMPING CO LTD ; THE WALLIS TIN STAMPING COMPANY LIMITED

57) Family number: 22969207 (FR1346961A)

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Title: APPAREILLAGE POUR LA FABRICATION DE CAPSULES POUR BOUTEILLES OU ANALOGUES APPARATUS FOR MAKING CAPSULES FOR BOTTLES OR SIMILAR (Machine translation)

Abstract: Source: FR1346961A [FR] [Source: Claim 1] 1. Un appareil servant a former des capsules pour bouteilles ou analogues, lesdites capsules comportant une partie superieure a section legerement decroissante, fermee a une extre. mite, et un bord faisant saillie radialement vers l'exterieur a partir de l'autre extremite., ouverte, de ladite partie superieure, ledit appareil etant remarquable notamment par les caracteristiques suivantes, considerees separement ou en combinaison: a. Il comporte des outils de presse male et femelle dans lesquels l'outil male est monte sur une plaque portee par l'appareil et comporte un poincon ou un plongeur entoure par une bague d'ejection et un element de pression male, sollicite par un ressort, l'outil femelle comprenant un element de pression femelle destine a cooperer avec l'element de pression male et dans lequel est loge un anneau de matricage evide, les outils etant disposes de telle sorte que l'outil femelle est deplace vers l'outil male pour former une capsule de sorte que l'anneau de matricage evide, se deplace autour du poincon male et detend l'element de pression male a ressort de facon a former la capsule precitee, et, apres que la capsule ait ete formee, et que les outils aient commence a se separer, ladite bague d'ejection ejecte la capsule formee a l'interieur de la matrice evidee de l'outil de presse femelle dans laquelle elle est maintenue jusqu'a ce que les outils soient pratiquement totalement separees, a la suite de quoi, la capsule est ejectee au moyen d'un plongeur passant a travers la matrice evidee de l'outil de presse femelle; b. La plaque portant les outils males peut etre facilement detachee de la machine; c. L'outil de presse femelle est monte pour pouvoir etre commande par un mecanisme de barres de liaison en synchronisme avec l'alimentation intermittente en feuillard des outils a partir d'une bobine alimentatrice; d. La capsule formee est maintenue dans la matrice evidee de l'outil femelle par effet de succion cree par le mouvement de l'outil femelle vers l'outil male. II. Une machine destinee a la fabrication de capsules pour bouteilles ou analogues a partir de feuillard, remarquable notamment par les caracteristiques suivantes, considerees separe, ment ou en combinaison: a. Une bobine alimentatrice de feuillard est monte sur un bras tendeur comportant un certain nombre de rouleaux sur lesquels passe le feuillard qui est egalement enroule autour d'un rouleau fixe a la machine, ledit bras tendeur se deplacant lors de la formation d'une boucle detendue dans le feuillard pour appli. quer un freinage au moyen de ladite bobine; b. Le bras tendeur precite est monte pivo. tant sur un arbre traversant le moyeu, un mou vement approprie dudit bras tendeur provo. quant l'application par ledit arbre d'un talon de frein a l'interieur dudit moyeu; c. La machine precitee comprend un dispo. sitif a double bobine d'alimentation monte sui une colonne centrale, ce dispositif pouvant tourner autour de ladite colonne par rapport a la machine mais pouvant etre verrouille dans une position d'utilisation de sorte que les deux bobines peuvent etre basculees selectivement dans une position active et que, par consequent, le feuillard utilise provenant d'une des bobines, l'autre bobine puisse etre rechargee en feuillard et qu'ainsi lorsque la premiere bobine est vide, la deuxieme est prete a etre mise en service; d. Chaque bobine est monte sur un dispositif comportant un bras tendeur, un frein et un moyeu tel que decrit aux points a et b du present paragraphe II; e. La machine precitee comporte un dispositif de freinage de feuillard dispose entre une bobine alimentatrice et les outils de presse, ce dispositif de freinage comportant une paire d'elements de pression concus pour appliquer une pression sur le feuillard de part et d'autre de ce dernier, lesdits elements de pression pouvant se deplacer par un glissement relatif en cas de formation d'une boucle detendue dans le feuillard afin de deplacer en bloc la bande de feuillard, et supprimer ou diminuer sensiblement la boucle; f. Les elements de pression precites sont montes dans une glissiere commandee par un dispositif a cremailiere et pignon, lui-meme entraine par une roue dentee qui commande l'alimentation en feuillard de la machine; g. La glissiere precitee est solidaire d'une cremailiere engrenant avec un pignon commande par la roue dentee precitee. III. Une machine pour matricer ces capsules ou analogues dans une bande de feuillard, remarquable notamment par les caracteristiques suivantes, considerees separement ou en combinaison: a. La bande de feuillard dans laquelle les flans ont ete decoupees est reprise sur un dispositif de bobine a dechet qui comporte un moyeu et un bras tendeur, ledit bras tendeur se deplacant en cas de surcharge du moyeu pour reduire l'effort d'entrainement applique audit moyeu; b. Le bras tendeur precite est monte sur une broche qui entraine en rotation une vis lors des deplacements dudit bras, ladite vis faisant patiner l'embrayage de commande du moyeu. IV. Une machine pour matricer au moyen d'outils de presse des capsules de bouteilles ou analogues a partir d'une bande de feuillard, remarquable notamment par les caracteristiques suivantes, considerees separement ou en combinaison: a. Elle comporte des moyens fonctionnant en cas d'arret de la machine pour permettre aux outils de presse de finir de former les capsules ou analogues, de s'ouvrir et d'ejecter la capsule formee, de sorte que la machine ne puisse pas s'arreter avec une capsule partiellement formee entre les outils de presse; b. Les moyens precites consistent en un embrayage electro-magnetique dont l'arbre menant est relie a un reducteur de vitesse a vis sans fin sur l'arbre menant duquel est prevu un interrupteur a commande par came ne permettant l'arret de la machine qu'a un moment determine du cycle de celle-ci.

Machine translation: [Source: Claim 1] 1. A device used to form capsules for bottles or the like, said capsules comprising an upper portion has slightly nonincreasing section, closed a extre. moth, and an edge projecting radially outward from the other end, open, said upper portion, said apparatus being remarkable in particular for the following characteristics, regarded separately or in combination. a. It includes male and female press tools in which the male tool is mounted on a plate carried by the apparatus and comprises a punch or plunger surrounded by a ring and an ejection pressure of male element, loaded by a spring, the female tool comprising a female element intended to cooperate by pressure with the pressure element male and wherein is housed a ring matrixing Evide, the tools being arranged so that the female tool is moved towards the tool male to form a capsule so that the ring mastering hollowed out moves around the punch male and male relaxes the pressure element has spring way to form the capsule cited above, and, after the capsule has been formed, and the tools have started to separate, said ring ejected ejection capsule shaped on the inside of the recessed die of the female press tool in which it is held until the tools are almost completely separated, as a result whereof, the capsule is ejected by means of a plunger passing through the matrix of the recessed female press tool; b. The plate carrying the male tools can be easily detached from the machine; c. The female press tool is mounted able to be controlled by a mechanism of connecting bars in synchronism with the intermittent supply of strapping tools from a alimentatrice coil; d. Capsule shaped is held in the recessed die of the female tool by suction effect created by the movement of the female tool to the male tool. II. A destiny machine manufacturing bottle caps or the like from strip, especially remarkable by the following characteristics, regarded separated, or in combination: a. Alimentatrice a coil strip is mounted on a tensioner arm having a number of rollers on which pass the strip which is also wound autoui a fixed roll to the machine, said tensioner arm moving during formation of a relaxed loop in strip for app. quer braking by said coil; b. The previously cited tension arm is up pivo. both on a shaft passing through the hub, a soft tively appropriate Provo said tensioner arm. as the application by said shaft of a brake heel has inside said hub; c. The above cited machine comprises available. operative part tandem supply reel mounts sui a central column, this device being rotatable around said shaft relative to the machine but can be locked in so that the two coils use position can be tilted selectively in an active position and that, therefore, uses the strip from a coil, the other coil can be recharged in foil and thus when the first roll is empty, the second is ready to be put into service; d. Each coil is monte on a device comprising a tensioner arm, a brake and a hub as described in paragraphs a and b of this paragraph II; e. The aforesaid machine has a sheet braking device arranged between a coil and alimentatrice press tools, this braking device comprising a designed pair of pressing members to apply pressure on the strip on either side of the latter, said pressure Elements that can move by a relative sliding in case of formation of a loop in the strip relaxed to move to block the Gaza strip, and remove or lessen the

loop; f. The above items are pressure mounted in a chute commanded by a cogwheel and pinion device, itself leads by a toothed wheel that controls the supply of strapping machine; g. The above cited chute is integral with a toothed rack meshing with a drive pinion by the above cited toothed wheel. III. A machine for coining these capsules or the like in a strip of foil, especially remarkable for the following features, regarded separately or in combination: a. The tape strip in which the blanks have been cut is taken up on a reel device trash which comprises a hub and a tensioning arm, said tensioning arm moving in case of overload of the hub to reduce the driving force applied to said hub; b. The said tensioning arm is mounted on a spindle which rotates a screw during the displacements of said arm, said screw and a slipping clutch hub control. IV. A machine for coining by press tools bottles or the like capsules from a strip of foil, especially remarkable by the following characteristics, regarded separately or in combination: a. It includes means operative in case of stop of the machine to allow the press tools to end to form the capsules or the like to open and eject capsule shaped, so that the machine can not s' stop with a capsule partially formed between the press tools; b. The aforementioned means consist of an electro-magnetic clutch with the drive shaft is connected to a speed reducer a worm on the drive shaft which is expected to command a switch cam will allow the stop of the machine that has a cycle time determined thereof.

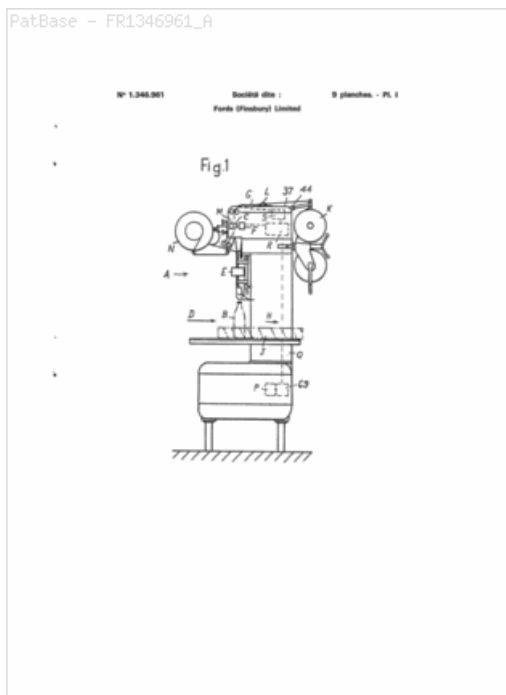
Classifications:

International (IPC 8-9): B21D51/44 (Advanced/Invention);

B21D51/38 (Core/Invention)

CPC: B21D51/44

European: 64B23A7 B21D51/44



Family:

Publication number	Publication date	Application number	Application date
FR1346961 A	19631227	FR19600874601	19600929

Priority:

FR19600874601 19600929

Probable Assignee: FORDS LTD

Assignee(s): (std): FORDS LTD

Assignee(s): FORDS FINSBURY LIMITED ; FORDS FINSBURY LTD

58) Family number: 1093208 (US3834573A)

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Title: METAL CLOSURE

Abstract: The disclosure relates to an improvement in construction of convenience opening type bottle closures. The closure comprises an inner liner cap or gasket engaging the bottle finish and an outer metal closure crimped around the bottle finish or rim. In the top of the outer cap there is a spaced pair of embossed projections which are located to place the pull ring member in tension, that is, to load it in a taut condition and prevent tear strip fracture, accidentally, while the package is in transit or handling prior to opening by the user.

Classifications:

International (IPC 8-9): B65D17/34 B65D43/02 (Advanced/Invention);

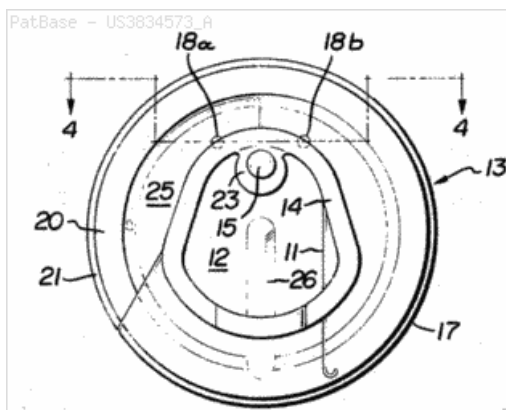
B65D17/28 B65D43/02 (Core/Invention)

International (IPC 1-7): B65D17/24 B65D17/34 B65D43/02

CPC: B65D17/4012

European: B65D17/16B2

US: 215/25.5 215/255



Family:

Publication number	Publication date	Application number	Application date
US3834573 A	19740910	US19720272679	19720717

Priority:

US19720272679 19720717

Probable Assignee: OWENS ILLINOIS INC

Assignee(s): (std): OWENS ILLINOIS INC

Assignee(s): OWENS ILLINOIS INC US ; OWENS ILLINOIS GLASS CONTAINER INC

Inventor(s): (std): AMOS C

Inventor(s): AMOS C US

59) Family number: 22985209 (US3332565A)

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Title: GLASS CONTAINERS AND CLOSURES FOR SAME

Abstract: ABSTRACT OF THE DISCLOSURE

An hermetically sealed bottle or jar having an external side sealing surface about its mouth and a continuous cap retaining shoulder at the lower margin of said surface to secure a skirted primary closure cap to the bottle, with the skirt of the cap shaped to provide a shoulder to holdingly engage a removable reseal cover cap which is usable to close a dispensing opening created by removing a part of the top panel.

Classifications:

International (IPC 8-9): B65D41/42 (Advanced/Invention);

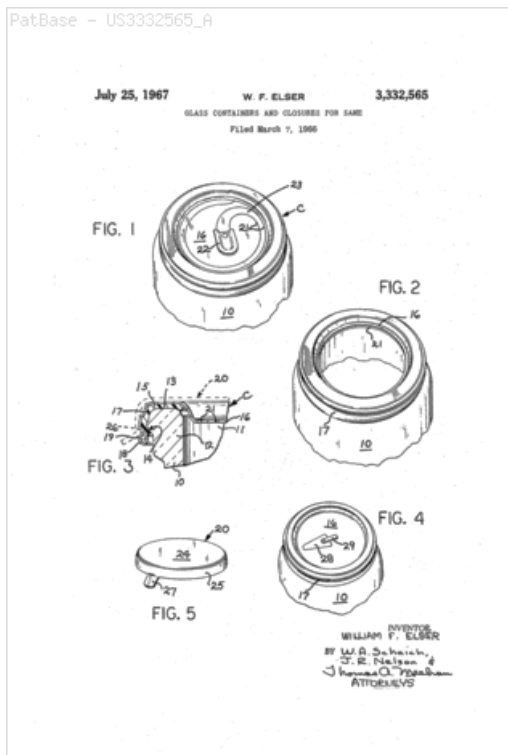
B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/40

CPC: B65D41/42

European: B65D41/42

US: 215/255 215/256 215/277 215/321 215/345 215/352



Family:

Publication number	Publication date	Application number	Application date
US3332565 A	19670725	US19660532377	19660307

Priority:

US19660532377 19660307

Probable Assignee: OWENS ILLINOIS INC

Assignee(s): (std): OWENS ILLINOIS INC

Inventor(s): (std): ELSEY WILLIAM F

60) Family number: 21609209 (US2166501A)

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Title: Method of making over-all bottle caps

Abstract: 1. The herein described method of making bottle caps from sheet material consisting in cutting a disc from the sheet, bending the marginal portions of the disc axially in one direction to form a cap skirt, depressing the central portion of the disc into cup-shaped form, and corrugating the rim of the cap simultaneously with the depression of the central portion.

Classifications:

International (IPC 8-9): B21D51/38 (Advanced/Invention);

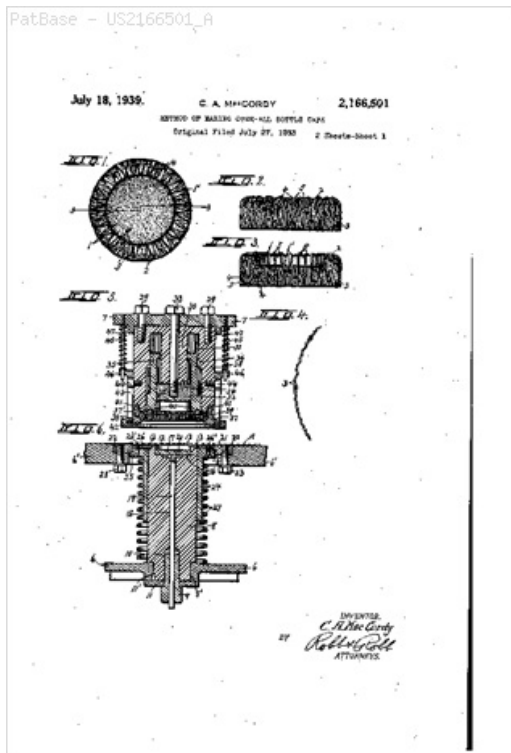
B21D51/38 (Core/Invention)

International (IPC 1-7): B21D51/48 B67B3/14

CPC: B21D51/383

European: B21D51/38B

US: 413/56 413/8 493/152 493/58 72/350 72/403

**Family:**

Publication number	Publication date	Application number	Application date
US2076906 A	19370413	US19330682474	19330727
US2166501 A	19390718	US19370131096	19370315

Priority:

US19330682474 19330727 US19370131096 19370315

Probable Assignee:

SANITARY METAL CAP CORP

Assignee(s): (std):

SANITARY METAL CAP CORP

Inventor(s): (std):

MACCORDY CHARLES A

61) Family number: 3558218 (FR2307594A)

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Title: HIGH SPEED MANUFACTURE OF BOTTLE CAPS WITH SEALS - INVOLVES SLIDING FEED SEALS OVER STRIP AT RIGHT ANGLES AND PUNCHES DESCEND ONTO BLANK AND FORM CAPS

Abstract: The seals for the bottle caps are fed down supply tubes (34) into multiple recesses (2) in reciprocating slides (1, 3), one each side of the forming station (5). These slides are moved alternately (7) into the forming area by means of a swinging arm (18) driven from a gearbox (17). The strip material (8) for the caps is fed progressively (9) under the slides by another arm (12) operating a reciprocating head (14, 16). The forming station has multiple punches (6) descending to first blank out a cap, the same stroke pushes blank and seal into a die to form a skirt. As the punch retracts, an ejector pushes out the finished cap.

Classifications:

International (IPC 8-9): B21D51/46 (Advanced/Invention);

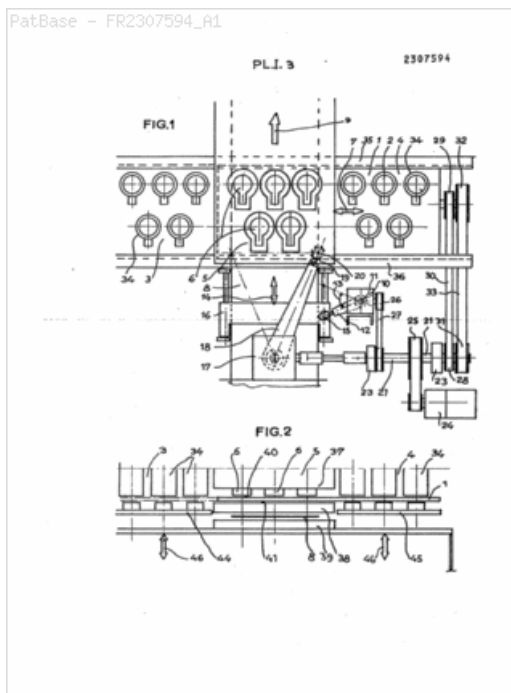
B21D51/38 (Core/Invention)

International (IPC 1-7): B21D51/48 B67B3/02

CPC: B21D51/46

European: B21D51/46

PatBase - FR2307594_A1



Family:

Publication number	Publication date	Application number	Application date
FR2307594 A1	19761112	FR19750011909	19750417

Priority:

FR19750011909 19750417

Probable Assignee:

DEJOUX ANDRE

Assignee(s): (std):

DEJOUX ANDRE

62) Family number: 34678218 (ES1061032Y)

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Title: ABRIDOR PARA BOTELLAS CON TAPON CORONA.

Abstract: Source: ES1061032U [ES] 1. Abridor para botellas con tapon corona, en las que dicho tapon consiste en una chapa circular deformada sobre el propio gollete de la botella configurando una cazoleta de faldon replegado, caracterizado porque esta constituido a partir de un cuerpo base, anular y plano, de reducido espesor, en el que se establece un orificio, central circular, sensiblemente sobredimensionado con respecto al diametro del tapon corona, emergiendo de la cara superior de dicho cuerpo anular un brazo arqueado, a modo de gancho, fijado por soldadura a traves de uno de sus extremos a dicho cuerpo base, y cuyo otro extremo se situa enfrentado hacia el centro del orificio circular del cuerpo base, en las proximidades del mismo.

Machine translation: 1. Opener for bottles with crown cap, in which said plug consists of a circular plate deformed on the neck of the bottle by setting a bowl of refolding skirt, characterized in that it is constituted from a base body, annular and planar, reduced thickness, in which a circular, substantially central orifice, oversized with respect to the diameter of the crown cap, emerging from the upper face of said annular body An arcuate arm hook, fixed by welding through one of its ends to said base body, and another end of which is positioned facing toward the center of the circular hole of the base body, in the vicinity thereof.

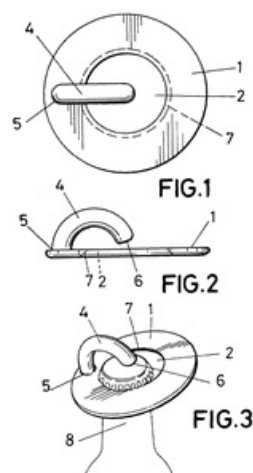
Classifications:**International (IPC 8-9):** B67B7/14 B67B7/16 (Advanced/Invention);

B67B7/00 (Core/Invention)

International (IPC 1-7): B67B7/14 B67B7/16

PatBase - ES1061032_UA

ES 1 061 032 U

**Family:**

Publication number	Publication date	Application number	Application date
ES1061032 UA	20051216	ES20050001986U	20050906
ES1061032 Y1	20060401	ES20050001986U	20050906

Priority:

ES20050001986U 20050906

Probable Assignee:

MENCIA ALMANSA CESAR

Assignee(s): (std):

MENCIA ALMANSA CESAR

Inventor(s): (std):

MENCIA ALMANSA CESAR

63) Family number: 21164226 (US2053763A)

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Title: CAP FEEDING DEVICE

Abstract: Having thus described my invention, I claim: 1. In a unitary cap forming and feeding device for supplying caps to bottles, the combination of means to form caps; means to feed the formed caps; means to feed bottles; releasable means actuated by 9. bottle being fed for releasing caps from said feeding means; and automatic means operably connected with said forming means to control the operation of said forming means and rendered effective upon release of a cap from said feeding means. - 2. In combination in a unitary cap forming and feeding device, means to form caps; an inclined chute in cooperative communication with said forming means for feeding the formed caps; automatically operated means associated with said chute for maintaining a predetermined supply of caps in said chute; and means for releasing caps from said chute.

3. In combination in a cap feeding device, means for feeding the caps, means for retaining a supply of caps for the feeding means, means for forming the caps and supplying same to the retaining means and means responsive to a predetermined supply of caps in the retaining means rendered effective by means on said forming means for controlling the operation of the forming means. 4. In combination in a device of the class described, means for conveying receptacles to be capped, means for forming the caps, control means associated therewith and means for transporting the caps from the forming means and placing them into cooperative relation with the receptacles on the conveying means, a second control means associated with said transporting means and cooperating with said first control means to render said forming means effective. 5. In a cap forming and feeding device, the combination of means to form caps; means including an inclined chute to feed the formed caps; means to feed bottles adjacent said chute; means for releasing caps from said chute, said means being actuated by a bottle; and means to control the operation of said forming means rendered effective upon release of a cap from said chute. 6. In a unitary cap forming and feeding device, the combination of means to form caps; means including an inclined chute in cooperative communication with said forming means for feeding the caps; means to release a CRD from said feeding means and means for controlling the operation of the cap forming means to maintain a supply of caps in the feeding means, said controlling means being automatically actuated in response to the release of a cap from said feeding means. 7. The combination with a cap feeding device having means for feeding the caps, wherein said means includes a retainer for a supply of caps, of receptacle cap forming means in cooperative communication with the retainer for supplying caps thereto, and means operated by said tonning means and by a cap when a predetermined number of caps are contained in the retainer for rendering the cap forming means inoperative. B. The combination with a cap feeding device having means for feeding the caps, wherein said means includes a retainer for a supply of caps, of receptacle cap forming means in cooperative communication with the retainer for supplying caps thereto, and means operated by said forming means and by a cap when retained at a predetermined location in the retainer for rendering the cap forming means inoperative. 9. In combination in a device of the class described, a magazine for retaining receptacle caps in uniform single order, mechanism at one end of the magazine for releasing the caps therefrom, a device at the other end of the magazine for forming and supplying the caps thereto, and means for initiating the operation of said forming device upon release of a cap from said magazine. 10. In combination in a device of the class described, a magazine for retaining the caps in uniform single order, mechanism at one end of the magazine for feeding the caps therefrom, a device at the other end of the magazine for forming and supplying the caps thereto, and mechanism arranged in connection with the magazine so as to be responsive to contact with a cap therein, said mechanism being in controlling connection with the forming device. 11. In combination in a device of the class described, a magazine, feeding mechanism arranged in cooperative connection with the magazine at one end thereof, a forming device arranged in cooperative connection with the magazine at the other end thereof, and mechanism arranged in cooperative connection with the magazine intermediate its ends so as to be responsive to contact therein said mechanism being in controlling connection with the forming device. 12. In combination in a device of the class described, a cap forming device, a retainer arranged in cooperative relation with the forming device for receiving and retaining the formed caps, feeder means arranged in connection with the retainer for the caps, electrically operated means in controlling connection with the forming device for rendering same ineffective, an energizing circuit for the electrically operated means, and switch terminals in said circuit. I. t. said switch terminals being operably associated with the retainer so as to be bridged by a cap when a predetermined number of caps are retained in the retainer. 13. In combination in a device of the class described, a cap forming device adapted to produce metal receptacle caps, a retainer arranged in cooperative relation with the forming device for receiving and retaining in uniform single order the caps formed, feeder means arranged in connection with the retainer for feeding the caps, electrically operated means in controlling connection with the forming device for rendering same ineffective, an energizing circuit for the electrically operated means, and two spaced switch terminals in controlling connection with said circuit and being adapted to close same when bridged by a cap, said switch terminals arranged in cooperative relation with the retainer so as to be bridged by a cap when retained at a predetermined location therein. 14. In combination in a device of the class described, a cap forming device, a retainer arranged in cooperative relation with the forming device for receiving and retaining the caps formed, feeder means arranged in connection with the retainer for the caps, and means associated with the retainer and forming device and adapted to operate upon the coaction of a predetermined number of caps in the retainer and the forming device at a fixed part of a cycle of a cap forming operation thereof for rendering said device ineffective. 15. In combination in a device of the class described, a cap forming device, a retainer arranged in cooperative relation with the forming device for receiving and retaining the caps formed, feeder means arranged in connection with the retainer for the caps, electrically operated means in controlling connection with the forming device for rendering same ineffective, an energizing circuit for the electrically operated means, a switch in said circuit and being operably connected with the forming device so as to close during a fixed part of a cycle of a cap forming operation thereof, and a second switch in said circuit and being in operative connection with the retainer so as to close when a predetermined number of caps are retained therein. 16. The combination with a cap feeding device having a magazine for retaining a supply of caps, of a cap forming device operably associated with the magazine for supplying same, means for operating the forming device, control means on said forming device; a clutch device intermediate the operating means and the forming device for disconnecting same, and means cooperating with said control means and operated by a cap in the magazine when a predetermined number thereof are retained therein for controlling the operation of the clutch device. 17. The combination with a cap feeding device having a magazine for retaining a supply of caps, of a cap forming device operably associated with the magazine for supplying same, means for operating the forming device, a clutch device intermediate the operating means and the forming device and adapted to disconnect same at a fixed part of a cycle of the cap forming operation of said device when operated, and means cooperating with said forming device operating means and operated by a cap in the magazine when retained at a predetermined location therein for operating the clutch device

Classifications:

International (IPC 8-9): B67B3/064 (Advanced/Invention);

B67B3/00 (Core/Invention)

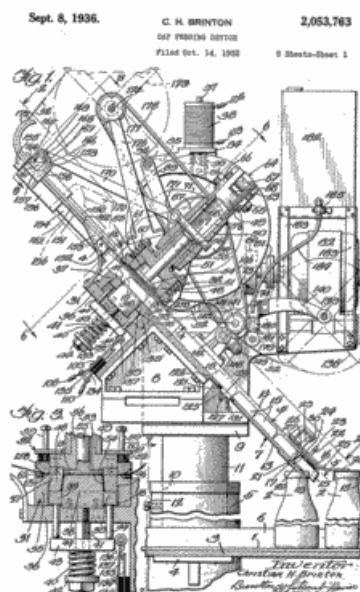
International (IPC 1-7): B67B3/064

CPC: B67B3/064

European: 64B23A3 B67B3/064

US: 470/43 53/296 53/313 53/67

PatBase - US2053763_H



Family:

Publication number	Publication date	Application number	Application date
US2053763 A	19360908	US19320637812	19321014

Priority:

US19320637812 19321014

Probable Assignee: STANDARD CAP AND SEAL CORP**Assignee(s):** (std): STANDARD CAP AND SEAL CORP**Inventor(s):** (std): BRINTON CHRISTIAN H**64) Family number: 70232 (US3371814A)**

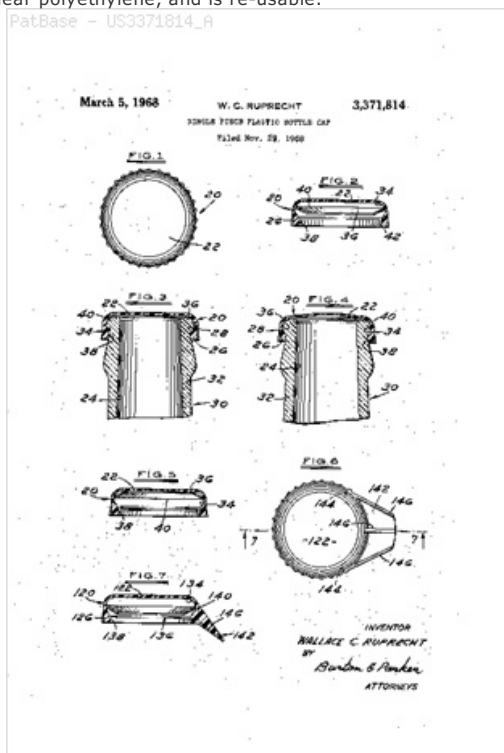
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Title: SINGLE PIECE PLASTIC BOTTLE CAP

Abstract: 1,169,978. Container closures. EX-CEL INDUSTRIES Inc. 28 Nov., 1967 [29 Nov., 1966], No. 54162/67. Heading B8T. A flexible, integral closure member 20 for a container 30 consists of a top 22 connected to an annular skirt 26 by an annular arcuate portion 34 to which is joined an annular member 36 capable of forming a seal against a rim surrounding the opening of the container to which the closure is applied. The container may be a bottle 30 having a rib 28 against which the member 36 is stretched during the capping operation. The top 22 is flexible to enable it to bulge and partially compensate pressure changes. To facilitate removal of the cap 20 from the bottle 30 the skirt 26 may have a tab (142), Fig. 7 (not shown). The closure may be of synthetic plastics material, such as linear polyethylene, and is re-usable.

Classifications:**International (IPC 8-9):** B65D41/18 B65D51/24 (Advanced/Invention);

B65D41/02 B65D51/24 (Core/Invention)

International (IPC 1-7): B65D41/48**CPC:** Y10S215/01 B65D51/243 B65D41/18 Y02W30/807**European:** B65D41/18 B65D51/24D**US:** 215/254 215/321 215/341 215/40 215/DIG.1**Family:**

Publication number	Publication date	Application number	Application date
BE707186 A	19680401		19671128
FR1562849 A	19690411		19671129
GB1169978 A	19691112	GB19670054162	19671128
US3371814 A	19680305	US19660597672	19661129

Priority:

US19660597672 19661129

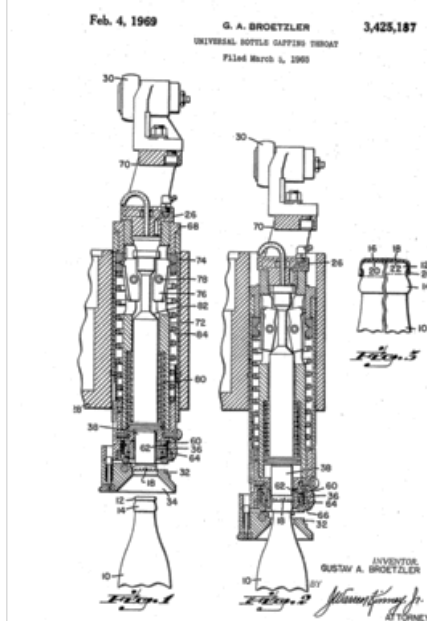
Probable Assignee: EX CEL IND INC**Assignee(s):** (std): EX CEL IND INC**Assignee(s):** EX CEL INDUSTRIES INC**Inventor(s):** (std): RUPRECHT WALLACE C**65) Family number: 853232 (US3425187A)**

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Title: UNIVERSAL BOTTLE CAPPING THROAT

Abstract: (Claim 1) 1. A universal bottle capping throat for use with and adapting the head of a crowner for use with either standard, intermediate or shallow crowns, said throat comprising a body portion having an opening therethrough which tapers uniformly from a maximum to a minimum diametrical dimension at the entry end thereof diametrical dimension ;at the top end thereof wherein said maximum diametrical dimension is .003 inch less and said minimum diametrical dimension is .002 inch greater than the respective diametrical dimensions of bottle capping throats for standard and shallow crowns, respectively, and wherein the axial spacing between said entry and top ends is 1/16 inch. th

Classifications:**International (IPC 8-9):** B67B3/14 (Advanced/Invention)**International (IPC 1-7):** B65B7/28 B67B3/02 B67B3/14



Publication number	Publication date	Application number	Application date
US3425187 A	19690204	US19650437387	19650305

Probable Assignee:	COCA COLA BOTTLING WORKS CO TH
Assignee(s) (std):	COCA COLA BOTTLING WORKS CO TH
Assignee(s):	COCA COLA BOTTLING WORKS CO THE ; CITIBANK NA
Inventor(s) (std):	BROETZLER GUSTAV A
Inventor(s):	GUSTAV A BROETZLER

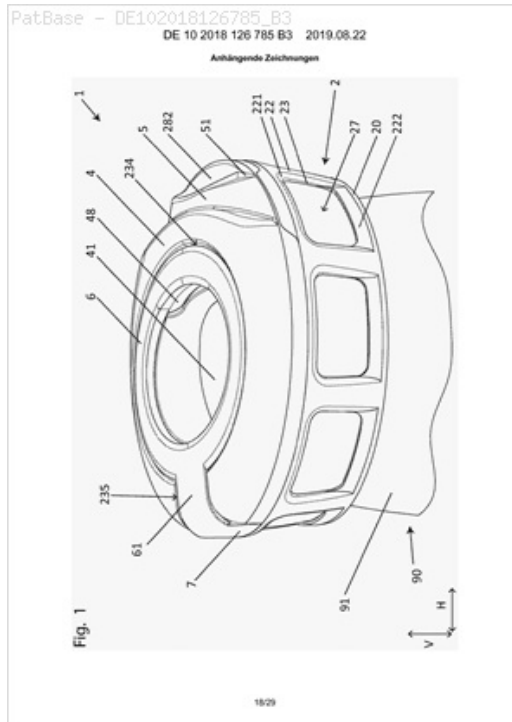
66) Family number: 75589238 (DE102018126785B3)

Title: WIEDERVERSCHLUSS FUER EINE FLASCHE Re-CLOSURE FOR A BOTTLE (Machine translation)

Abstract: Source: DE102018126785B3 [DE] Wiederverschluss (1) fuer eine Flasche (90), aufweisend: eine Aussenkappe (2) mit einer oeffnung (3), wobei die Aussenkappe (2) dichtend auf einen Mund (93) der Flasche (90) aufgesetzt werden kann, einen Verschlusskoerper (4) zum Verschiessen der oeffnung (3) der Aussenkappe (2), wobei der Verschlusskoerper (4) ueber ein erstes Gelenk (5) mit der Aussenkappe (2) verbunden ist; ein Zugorgan (6), das ueber ein zweites Gelenk (7) mit dem Verschlusskoerper (4) verbunden ist; eine Dichtung mit zumindest zwei komplementaeren Dichtungselementen (28; 42) der Aussenkappe (2) und des Verschlusskoerpers (4); wobei der Wiederverschluss (1) derart eingerichtet ist, dass der Verschlusskoerper (4) durch ein Ziehen an dem Zugorgan (6) verkippt werden kann, wodurch die oeffnung (3) geoeffnet wird; und der Verschlusskoerper (4) zum Wiederverschiessen der oeffnung (3) auf die Aussenkappe (2) dichtend aufgedrueckt werden kann.

Machine translation: Re-closure (1) for a bottle (90), comprising: an outer cap (2) with an opening (3), wherein the outer cap (2) sealingly against a mouth (93) of the cylinder (90) may be mounted, a closure body (4) for sealing the opening (3) of the outer cap (2), wherein the closure body (4) via a first joint (5) with the outer cap (2); one Zugorgan (6) via a second joint (7) with the lock body; a seal (4) with at least two complementary sealing elements (28; 42) of the outer cap (2) and (4) of the closure body; wherein the plug (1) is configured in such a way that the closure body (4) by pulling on the Zugorgan (6) is tilted, thereby opening (3) is opened; and the closure body (4) for re-closing of the Opening (3) on the outer cap (2) may be pressed sealingly.

International (IPC 8-9): B65D51/22 (Advanced/Invention)
CPC: B65D47/088 B65D51/22



Family:

Publication number	Publication date	Application number	Application date
DE102018126785 B3	20190822	DE201810126785	20181026

Priority:

DE201810126785 20181026

Probable Assignee: THIELEN EVA MARIA

Assignee(s): (std): THIELEN EVA MARIA

Inventor(s): (std): THIELEN KLAUS

Agent(s): KUHNEN AND WACKER PATENT U RECHTSANWALTSBUERO PARTG MBB

67) Family number: 18831245 (GB436989A)

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Title: IMPROVEMENTS IN OR RELATING TO CLOSURE MEANS FOR BOTTLES AND OTHER CONTAINERS

Abstract: 436,989. Closures for bottles, cans, barrels, and c. COLT'S PATENT FIRE ARMS MANUFACTURING CO., 17, Van Dyke Avenue, Hartford, Connecticut, U.S.A.- (Assignees of Conner, B. F., and Schmalz, W. F.) Sept. 4, 1934, Nos. 25460 and 25461. Convention dates, March 24 and May 4. [Classes 21, 66, 125 (i), and 125 (iii)] A closure for a bottle, can, barrel, or other container comprises an externally visible, preformed, brittle and readily breakable indicator member and a concealed breaking device separate from the indicator member and adapted to allow free movement of the latter in one direction to its normal position but automatically engaging and breaking the indicator member upon movement thereof in the opposite direction out of its normal position; the indicator member may constitute the closure of the container. As shown in Fig. 1, the indicator member takes the form of a cap 3, made of a synthetic resin, engaging a complete or interrupted thread 5 or other means on the bottle 1 and having the external visible breakable portion 6 separated from the remainder of the top of the closure by an annular zone of weakness 7; the metallic breaking device 9 is disposed in a recess 15 in the top of the primary closure 11 so as to be non-rotatable therein and has a pair of resilient pawls 10 which engage teeth on the underside of the portion 6 of the indicator cap 3 as the cap is screwed down into place on to the tightly screwed closure 11. To obtain access to the closure 11 the cap 3 must be unscrewed, the pawls 10 then resisting such movement and breaking away the portion 6 from the cap; the threads of the indicator cap and closure member preferably differ in pitch so as to provide a differential action between the parts should they turn in unison and the threads of the closure may have a considerably greater pitch than those of the cap so that if the closure tends to unscrew with the cap it will rise more rapidly than the latter and break the top thereof and to facilitate such breaking there may be provided an auxiliary annular zone of weakness 16; the threads may be of different hands so as to prevent the cap and closure moving together. The breakable part 6 of the cap may be formed as a dome separated from the remainder of the cap by the zone of weakness and the breaking device is then disposed in a recess in a boss on the closure remaining into the dome; the boss may be of different colour from the cap so as to give ready indication that the contents of the bottle have probably been tampered with. The breaking device may be held from rotation in the closure by a projection on the latter entering a slot in the device and a screwed recess may be provided below the breakable portion 6 of the cap so that when the cap has been broken and removed from the bottle it may be screwed upon a base and used as a drinking cup. The primary closure may be a cork or stopper with a top disc of wood and c. recessed to hold the breaking device. In the form shown in Fig. 13 the indicator member or cap 41 does not directly engage the bottle and c. 33 but is held thereto by a flanged ring 36 which is slipped down over a pair of lugs 37 above a bead 34 on the bottle before the primary closure 40 is screwed into place; the lugs 37 engage recesses in the horizontal flange of the ring to prevent rotation thereof and the vertical flange is screwthreaded for engagement by the indicator cap when the latter is screwed into place with the breaking device 9 engaging the teeth on the underside of the breakable portion 43 of the cap. In the form shown in Fig. 15 the breaking device is in the form of a metallic bridge 46 formed with resilient pawls 50 for engaging the breakable portion 43a of the indicator cap 41, resilient lugs 49 for engagement by the threads of the indicator cap 41a and recessed flanges 47 for engaging the lugs 37 on the bottle etc.; the bridge is snapped over the lugs 37 after the closure 40 has been screwed on and the cap is then pushed down until the lugs 49 engage the threads thereof and the closure 40 may be provided with an annular series of teeth for engaging resilient pawls 52 on the bridge 46 to prevent accidental unscrewing of the closure by vibration or otherwise. In another form a metallic screwed primary closure is formed with breaking pawls on its top and the indicator cap screws on to the primary closure; the lower part of the cap co-operates with a bead on the bottle to prevent access to the primary closure with a tool or, instead of screwing on to the primary closure, the cap may screw on to threads on the bottle below the closure. The primary closure may be corrugated to engage ribs on the bottle to prevent its rotation relatively thereto and is then held in place by the indicator cap which is screwed on to the bottle. In the form shown in Fig. 22, the indicator member 65 also constitutes the primary closure of the bottle 61 which is recessed in the mouth 62 to receive the non-rotatable metallic breaking member 63 having the resilient pawls engaging teeth on the underside of the breakable portion 67 of the closure 65; the closure may have a rabbetted and toothed top upon

which a flanged cover may be engaged to cover the opening in the closure if this is to be used after the bottle has been opened. As shown in Fig. 27 the screwed sheet metal spout 73 of a can 71 is depressed to form a ledge 75 to non-rotatably support the breaking device 74 having pawls engaging the breakable portion 78 of the closure 77. In another form in which the closure is also the indicator member, the breaking device is a metal ring non-rotatably mounted on a shoulder below the screwed neck of the bottle and formed with resilient pawls engaging teeth on the inside of a skirt portion of the closure as the latter is screwed into place; the junction between the closure and its skirt forms the weak breakable portion and after the bottle has been opened the closure may be reused to seal the bottle in the ordinary manner. In the form shown in Fig. 34, the screwed closure 95 has an integral breakable skirt portion 97 and a metallic ring 99 with a small inward projecting flange 100 is fixed on a bead above the skirt. The breaking device is a ring 101 having resilient fingers 102 engaging a bead 94 on the bottle and resilient teeth 103 which as the closure is screwed into place snap over the flange 100 of the ring 99; when the closure is unscrewed it moves the ring 101 upwards and causes the fingers 102 to be forced outwards to break the skirt portion 97 from the closure. The closure may have a depending flange covering the junction between the closure and its skirt so that the broken edge formed on the closure when the bottle is opened is hidden and enhances the appearance of the closure when it is desired to reuse it. In the form shown in Figs. 39 and 42 the indicator member 105 is separate from the primary closure 112 and has a readily breakable portion 107 engaged by one or more discs or rollers 109 disposed in upwardly inclined cam paths 111 in the top of the primary closure. The pitch of the cam paths is considerably greater than that of the threads of the indicator member or cap 105 and the paths and discs or rollers are preferably serrated while the shoulders 116 at the ends of the paths 111 are plain so that, when the indicator cap is screwed on, the discs or rollers move to the shoulders 116 and tend to turn the primary closure in the tightening direction; when the indicator cap is unscrewed the discs or rollers are forced up the cam paths and break away the top portion 107 of the cap. In a modification the indicator cap has an open top, the cam paths and discs or rollers are arranged at the side of the primary closure member and the breakable top of the cap is defined by an annular zone of weakness in the side of the cap. In another form tiltable pins are arranged in narrow recesses in the top of the primary closure and when the indicator cap is unscrewed, the pins are moved from an inclined to the vertical position and break away the top of the cap.

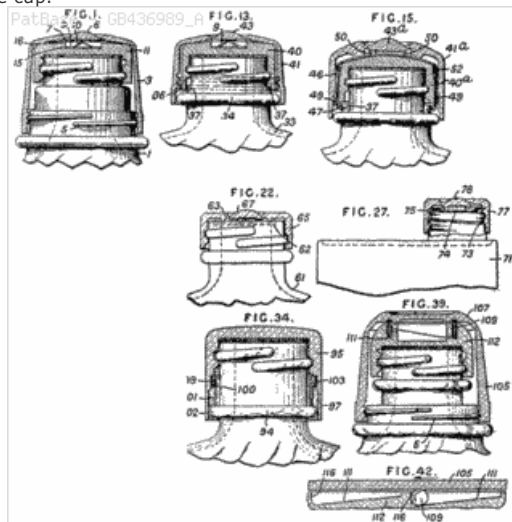
Classifications:

International (ipc 8-9): B65D55/02 (Advanced/Invention); B65D55/02 (Core/Invention)

International (ipc 1-7): B65D41/58 B65D41/60

CPC: B65D55/022

European: B65D55/02D



Family:

Publication number	Publication date	Application number	Application date
GB436989 A	19351022	GB19340025460	19340904

Priority:

GB19340025460 19340904

Probable Assignee: COLT S MFG CO

Assignee(s): (std): COLT S MFG CO

Assignee(s): COLT S PATENT FIRE ARMS MANUFACTURING CO ; COLT S PATENT FIRE ARMS MFG CO

68) Family number: 5043247 (US5119964A)

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Title: Closure for a container

Abstract: A closure for a container has two parts, namely an inner sealing member and an outer cap. The inner sealing member has a tab extending down between a bottle neck and a depending side wall of the cap. The tab is folded around the cap wall to form an upwardly extending portion. A patch of adhesive secures this tab portion to the cap. This prevents unauthorized removal of the cap and provides visible and external evidence of any tampering.

Classifications:

International (ipc 8-9): B65D51/20 B65D51/22 B65D55/02

B65D77/20 (Advanced/Invention);

B65D77/20 (Advanced/Non-invention);

B65D51/18 B65D55/02 (Core/Invention);

B65D77/10 (Core/Non-invention)

International (ipc 1-7): B65D41/00 B65D51/20 B65D51/22

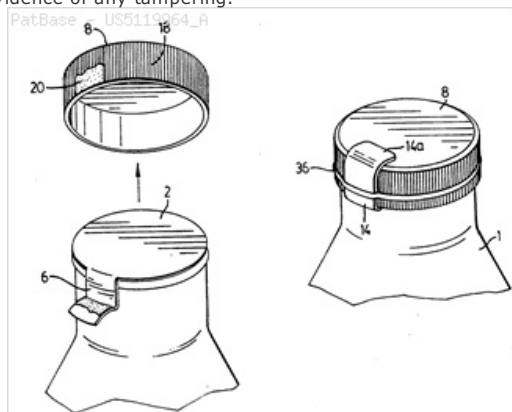
B65D55/02

CPC: B65D51/20 B65D2251/0015 B65D2251/0093 B65D2577/205

European: B65D51/20 L65D251/00Y2D L65D251/00Y6M

L65D577/20M1

US: 215/232 215/251



AU199184920 A1	19920415	AU19910084920	19910920
AU648821 B2	19940505	AU19910084920	19910920
CA2025940 AA	19920322	CA19902025940	19900921
CA2025940 C	19980915	CA19902025940	19900921
CA2091770 AA	19930316	CA19912091770	19910920
CA2091770 C	20000926	CA19912091770	19910920
DE69106719 D1	19950223	DE19916006719	19910920
DE69106719 T2	19950831	DE19916006719T	19910920
EP0550480 A1	19930714	EP19910916004	19910920
EP0550480 B1	19950111	EP19910916004	19910920
US5119964 A	19920609	US19910681827	19910408
WO9205085 A1	19920402	WO1991CA00340	19910920

Priority:

CA19902025940 19900921 US19910681827 19910408 WO1991CA00340 19910920
US19910605315 19911030

Probable Assignee: CANADIAN IMP BANK OF COMMERCE

Assignee(s): (std): STANPAC INC ; STEPHEN H WITT ; WITT STEPHEN H

Assignee(s): STANPAC INC SMITHVILLE ONTARIO CA ; STANPAC INC A CORP OF CANADA ; CANADIAN IMP BANK OF COMMERCE ; PNC BANK CANADA BRANCH

Inventor(s): (std): WITT STEPHEN H

Inventor(s): WITT STEPHEN H SMITHVILLE ONTARIO L0R 2AO CA ; STEPHEN H WITT

Agent(s): GRIFFITH HACK; SIM AND MCBURNEY

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CS DE DK ES FI FR GA GB GN GR HU IT JP KP KR LI LU ML MR NL NO PL RO SE SN SU TD TG US

69) Family number: 21668249 (US2641375A)

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Title: CLOSURE FOR BOTTLES AND LIKE CONTAINERS

Abstract: (Claim 1) I claim: A closure comprising in combination a cork and a, metal top having a cap portion and an annular ring portion surrounding the cork at sa.

Classifications:

International (IPC 8-9): B65D39/16 (Advanced/Invention);

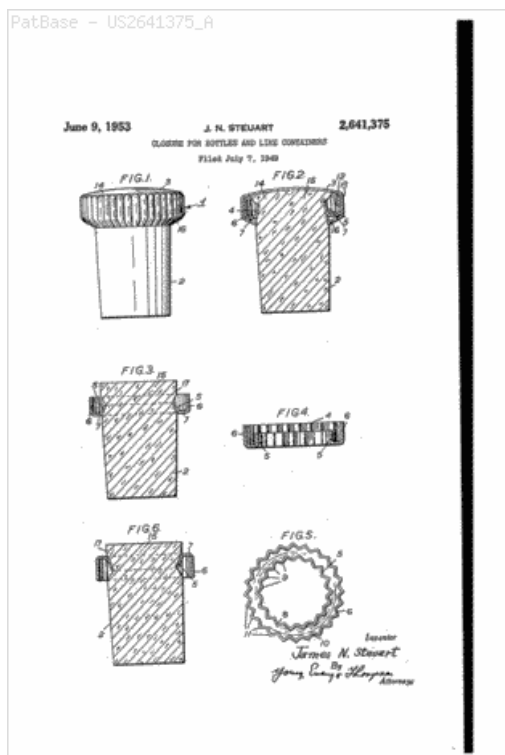
B65D39/00 (Core/Invention)

International (IPC 1-7): B65D39/16

CPC: B65D39/16

European: B65D39/16

US: 215/364



Family:

Publication number	Publication date	Application number	Application date
US2641375 A	19530609	US19490103438	19490707

Priority:

19480708 US19490103438 19490707

Probable Assignee: KORK N SEAL LTD

Assignee(s): (std): KORK N SEAL LTD

Assignee(s): KORK N SEAL LIMITED

Inventor(s): (std): NOEL STEUART JAMES

Inventor(s): STEUART JAMES NOEL

Title: Shipping container for a bottle of radioactive material

Abstract: A shipping container for a bottle of radioactive material comprises a can having a safe therein for receiving the bottle, a screw cap for the can and the safe, and an annular bottle retainer extending downwardly in the safe from its upper end having an outwardly extending flange at its upper end clamped between the cap and the upper end of the safe and an inwardly extending flange at its lower end receiving the neck of the bottle. The cap carries a sponge to absorb spillage from the bottle.

Classifications:

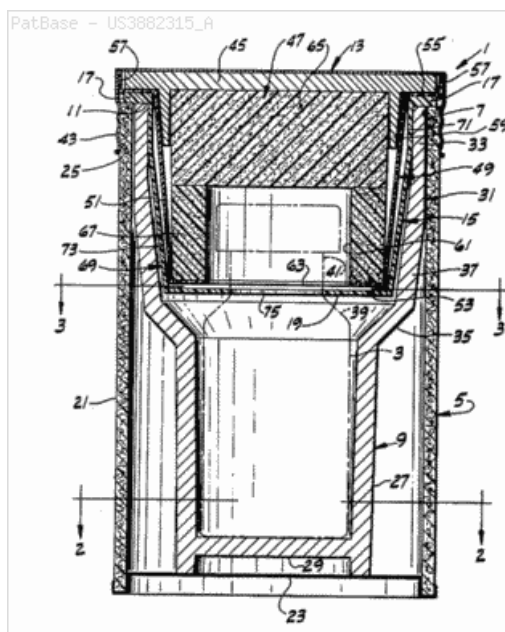
International (IPC 8-9): G21F5/005 (Advanced/Invention);
G21F5/005 (Core/Invention)

International (IPC 1-7): G21F5/00

CPC: G21F5/005

European: G21F5/005

US: 206/204 220/23.83 250/432R 250/506 250/506.1 976/DIG.343



Family:

Publication number	Publication date	Application number	Application date
US3882315 A	19750506	US19730350402	19730412

Priority:

US19730350402 19730412

Probable Assignee: MALLINCKRODT MEDICAL INC

Assignee(s): (std): MALLINCKRODT CHEMICAL WORKS

Assignee(s): MALLINCKRODT INC ; MALLINCKRODT MEDICAL INC

Inventor(s): (std): SOLDAN DONALD W

Title: Tamper evident sleeves and method of forming them

Abstract: A tamper evident sleeve and method of forming the sleeve. The tamper evident sleeve is used in conjunction with a closure or cap, such as a twist-off metal crown seal, for a container or bottle. The sleeve has a skirt made from plastic material which engages the crown seal and rotates with the crown seal in opening and closing the container without discomfort or injury which can be encountered in-directly gripping a metal crown seal. The sleeve also includes a tamper evident feature depending from the skirt of the sleeve which indicates the condition of the container upon the initial removal of the sleeve and crown seal.

Classifications:

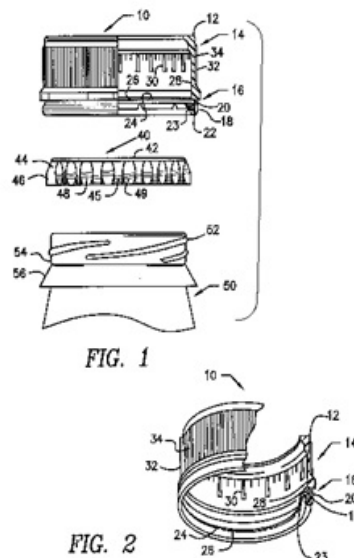
International (IPC 8-9): B29C57/12 B65D55/08 (Advanced/Invention);
B29C57/00 B65D55/02 (Core/Invention)

International (IPC 1-7): B29C57/12 B65D41/34

CPC: B29C57/12 B29L2031/56 B65D55/0863 B65D2101/00

European: B29C57/12 B65D55/08C L29L31/56 L65D101/00

US: 215/252 215/276

**Family:**

Publication number	Publication date	Application number	Application date
AU199732134 A1	19971209	AU19970032134	19970522
US5875906 A	19990302	US19960653454	19960524
WO9744262 A1	19971127	WO1997US08878	19970522

Priority:

US19960653454 19960524 WO1997US08878 19970522

Probable Assignee: ZAPATA INNOVATIVE CLOSURES INC

Assignee(s): (std): ZAPATA INNOVATIVE CLOSURES INC

Inventor(s): (std): GOMEZ CLAUDIO ZAPATA ; KROPKE JAMES ; PRICE MICHAEL L ; ZAPATA GOMEZ CLAUDIO

Inventor(s): CLAUDIO ZAPATA GOMEZ ; MICHAEL L PRICE ; JAMES KROPKE

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

72) Family number: 20965266 (GB923506A)

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Title: Improvements in bottle stoppers

Abstract: 923,506. Container closures. P. A. HOPF, and E. HOPF. Nov. 23, 1959, No. 39619/59. Class 125(3). [Also in Group V] A tamper-proof, bottle stopper comprises an elastically compressible insert 8 held within a cap 7 which has inwardly projecting locking tags 11 arranged to snap into position below a flange 2 on the neck of the bottle, an inward flange 12 on the cap having sectoral openings 13 vertically above the tags 11, sectoral formations, Fig. 4, on the insert 8 mating with those of the cap to form a smooth upper surface to the stopper. The insert 8 has a stopper portion 14 with a bead 20 forming a seal within the bottle neck and an annular rib 16 compressed on the end of the neck when the stopper is applied. Notches 21 on the insert 8 engage axial ribs 22 on the cap in order to align the insert and cap correctly. The cap 7 is of a hard plastics material, e.g. polystyrol or hard PVC and may be moulded by compression or injection; the insert 8 may be of polyethylene. In a modification, Fig. 5 (not shown), the insert has an integral nozzle the tip of which is cut off before use to form a flow passage. A screw threaded extension on the cap skirt may engage screw-threads on the bottle.

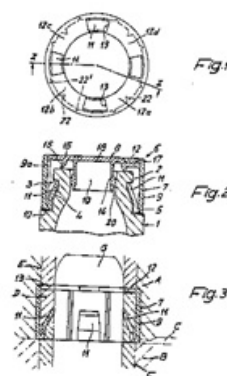
Classifications:

International (IPC 8-9): B65D55/08 (Advanced/Invention); B65D55/02 (Core/Invention)

International (IPC 1-7): B65D45/02 B65D55/12

CPC: B65D55/08

European: B65D55/08

**Family:**

Publication number	Publication date	Application number	Application date
GB923506 A	19630410	GB19590039619	19591123

Priority:

GB19590039619 19591123

Probable Assignee: PAUL ADOLF HOPF**Assignee(s):** (std): EBERHARD HOPF ; PAUL ADOLF HOPF**Inventor(s):** (std): HOFFMANN FRANZ**73) Family number: 19583266** (US2599820A)

© PatBase

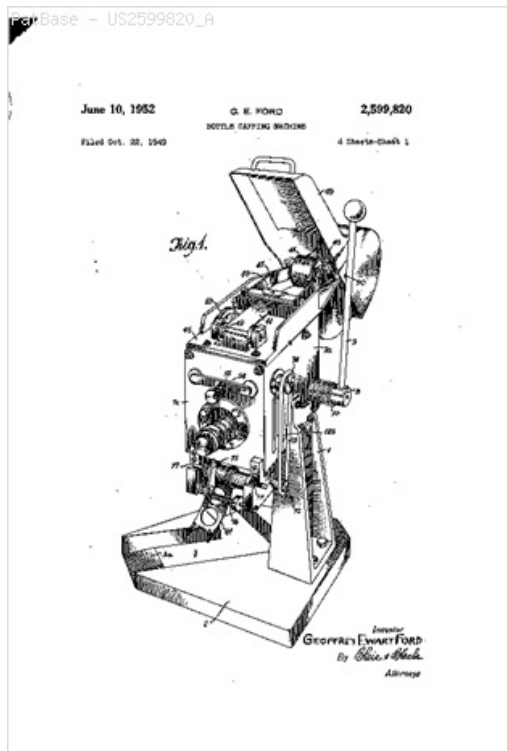
Title: BOTTLE CAPPING MACHINE

Abstract: 646,552. Shaping bottle closures. FORD, G. E., and FORDS (FINSBURY), Ltd. June 12, 1948, No. 15900. [Class 100 (ii)] [Also in Group XVII] The cap-making portion of a bottle capping machine (see Group XVII), wherein caps 84 are formed from a strip of metal foil 41 fed therethrough, includes a manually or power-driven shaft 8 movement of which in opposite directions, within limits, operates the cap-forming and strip-feeding mechanisms respectively. The maximum counterclock movement of the shaft 8 causes the die 16 to move as a whole to the left along guides until a ring 116 (slidable against a spring 117 relatively to the rest of the die) pushes the strip against the cylindrical member 100 of the punch 19. The remainder of the die continues to move until the pressure plate 113 (slidable against springs 115 relatively to the rest of the die) presses the strip against the stationary shear ring 106. Shear ring 107 and plate 118 carrying a pressure pad 119 continue to advance; shear rings 106, 107 coact to cut out the disc from which the cap is to be formed and shear ring 107 now forces back an ejector ring 108 against a spring 111 thereby forming the cap over the exterior periphery of the cylinder 100 whilst the pressure pad 119 coacts with an embossed member 101, removably carried by the cylinder 100, to form the wording and c. on the top. On clockwise movement of the shaft 8 the die and punch are reset and the formed cap is ejected and passes down a shoot 80. Clockwise movement of the shaft 8 to an extent limited by a stop 78 positively moves an arm 62 against a spring 68 clockwise, the arm carrying a spring-pressed one-way latch 63 operatively engaging (in the clockwise direction) one of a number of abutments 61 on the end of a gear wheel 59 thereby rotating the feed rollers 50, 51 for the metal strip. Counterclock movement of shaft 8 permits the spring 68 to swing the arm 62 counterclock, withdraw the latch from driving engagement with one abutment 61 and reengage it with another abutment ready for positively driving it on the next clockwise movement of the shaft. The maximum counterclock movement of arm 62 is less than and is completed before the full counterclock movement of shaft 8 whereby, if this shaft is not given its full stroke counterclock, oscillation of the shaft will feed the strip only, without actuating the die and punch.

Classifications:**International (IPC 8-9):** B67B3/02 (Advanced/Invention);

B67B3/00 (Core/Invention)

International (IPC 1-7): B67B3/02**CPC:** B67B3/02**European:** 64B23A7 B67B3/02**US:** 493/103 493/109 493/76 53/296 53/314 53/315 53/342 53/360

**Family:**

Publication number	Publication date	Application number	Application date
GB646552 A	19501122	GB19480001590	19480612
US2599820 A	19520610	US19490122968	19491022

Priority:

GB19480001590 19480612 US19490122968 19491022

Probable Assignee: FORDS LTD

Assignee(s): (std): FORDS LTD ; GEOFFREY EWART FORD

Assignee(s): FORDS FINSBURY LIMITED ; FORDS FINSBURY LTD

Inventor(s): (std): EWART FORD GEOFFREY

Inventor(s): FORD GEOFFREY EWART

74) Family number: 28131267 (US2001009243A)

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Title: Cap for container

Abstract: A package (10) comprises a plastic bottle (20), a stopper (40) removably inserted into the mouth of the bottle, and a plastic cap (50). The cap has a cover member (52) which overlies the stopper and has a region (66) which is removable to expose the upper surface of the stopper to allow piercing thereof by a needle or the like. The removable region is provided with a pull-ring (68) protected from accidental operation by a protective portion (60) projecting upwardly from the edge of the cover member (52). The protective portion is formed separately from the rest of the cap and is attached thereto.

Classifications:

International (IPC 8-9): A61J1/00 A61J1/05 B65D47/36 B65D51/00

B65D51/18 B65D55/02 (Advanced/Invention);

A61J1/00 A61J1/05 B65D47/00 B65D51/00 B65D51/18

B65D55/02 (Core/Invention)

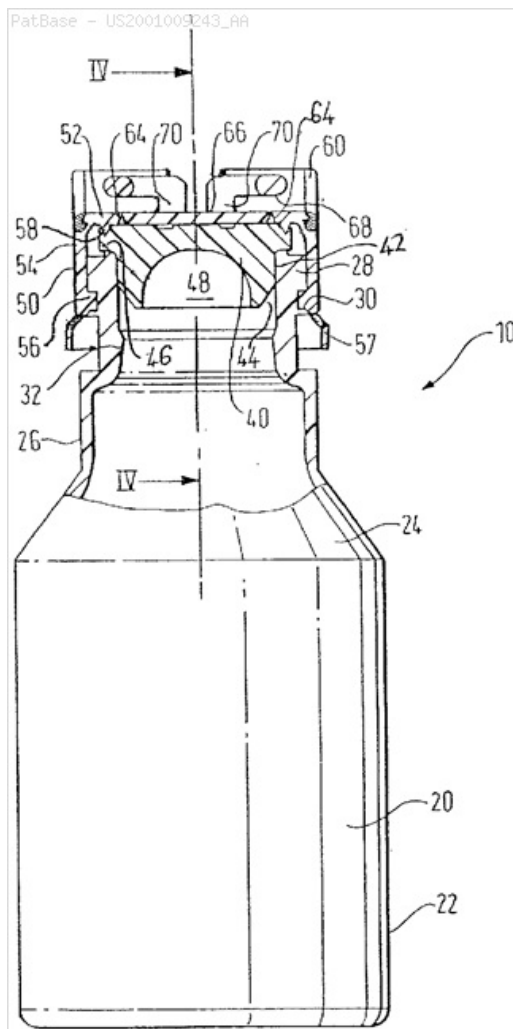
International (IPC 1-7): A61J1/00 A61J1/05 B65D47/36 B65D51/00

B65D51/18 B65D51/20

CPC: B65D51/002 B65D55/024

European: B65D51/00B B65D55/02F

US: 215/249 215/251 215/254



Family:

Publication number	Publication date	Application number	Application date
AT334071 E	20060815	AT20010101704T	20010125
DE60121641 D1	20060907	DE20016021641	20010125
DE60121641 D1	20060907	DE20016021641T	20010125
DE60121641 T2	20070719	DE20016021641T	20010125
EP1122185 A2	20010808	EP20010101704	20010125
EP1122185 A3	20031105	EP20010101704	20010125
EP1122185 B1	20060726	EP20010101704	20010125
ES2269234 T3	20070401	ES20010101704T	20010125
GB200001840 A0	20000322	GB20000001840	20000126
JP2001247149 A2	20010911	JP20010015917	20010124
JP4898007 B2	20120314	JP20010015917	20010124
US2001009243 AA	20010726	US20010767320	20010123
US2005087508 AA	20050428	US20030654362	20030903
US6659296 BB	20031209	US20010767320	20010123

Priority:

GB20000001840 20000126 US20000187558P 20000307 US20010767320 20010123
US20030654362 20030903

Probable Assignee: GE HEALTHCARE AS

Assignee(s): (std): AMERSHAM HEALTH AS ; BROWNE MARTIN M ; BROWNE MARTIN MONTEAGLE ; NYCOMED IMAGING AS

Assignee(s): NYCOMED IMAGING NYCOVEIEN AS ; GE HEALTHCARE AS ; AMERSHAM HEALTH AS NYCOVEIEN

Inventor(s): (std): BROWNE MARTIN M ; BROWNE MARTIN MONTEAGLE ; BROWNE MONTEAGLE MARTIN

Inventor(s): BROWNE MARTIN

Agent(s): AMERSHAM BIOSCIENCES, PATENT DEPARTMENT; AMERSHAM BIOSCIENCES PATENT DEPARTMENT

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

75) Family number: 18059272 (US4628669A)

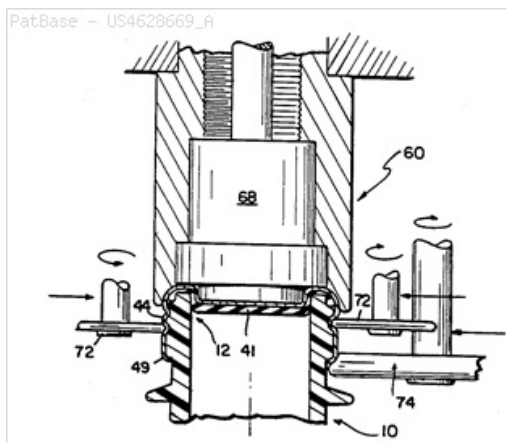
© PatBase

Title: Method of applying roll-on closures

Abstract: A closure for bottles is disclosed which includes an internal radius support disk or cylinder for positioning within the bottle mouth to enable the bottle to resist radial inward deformation when subjected to pasteurization or other post-bottling heat treatment. The closure can be formed by coining a conventional aluminum roll-on cap blank using a pressure block having a central land projectable into the mouth of the bottle to form the support disk or cylinder from the top of the cap blank.

Classifications:

International (IPC 8-9): B65D41/28 B65D41/34
B67B3/18 (Advanced/Invention);
B65D41/02 B65D41/34 B67B3/00 (Core/Invention)
International (IPC 1-7): B21D39/00 B65B55/02 B65B55/14
B65B7/28 B65D41/04 B65D41/28 B65D41/34 B65D41/42 B65D53/04
B67B3/00 B67B3/22
CPC: Y10S215/901 B67B3/18 B65D41/348
European: B65D41/34F B67B3/18
US: 215/1C 215/329 215/44 215/901 53/425 53/488



Family:

Publication number	Publication date	Application number	Application date
AT54895 E	19900815	AT19850301317T	19850227
AU198436982 A1	19850912	AU19840036982	19841220
AU565746 B2	19870924	AU19840036982	19841220
CA1283079 A1	19910416	CA19840470840	19841221
DE3578788 D1	19900830	DE19853578788	19850227
EP0154502 A2	19850911	EP19850301317	19850227
EP0154502 A3	19860604	EP19850301317	19850227
EP0154502 B1	19900725	EP19850301317	19850227
IL74020 A0	19850430	IL19850074020	19850108
IL74020 A1	19881130	IL19850074020	19850108
JP1872416 C3	19940926	JP19850020171	19850206
JP4040266 B4	19920702	JP19850020171	19850206
JP60193850 A2	19851002	JP19850020171	19850206
US4628669 A	19861216	US19850756742	19850719
US4813557 A	19890321	US19850757125	19850719
ZA8500167 A	19850828	ZA19850000167	19850108

Priority:

US19840586556 19840305 US19840586556 19840306 CA19840470840 19841221
EP19850301317 19850227 EP19850301317 19850227 US19850756742 19850719
US19850757125 19850719

Probable Assignee: CONSTAR PLASTICS INC

Assignee(s): (std): SEUERU PLASTICS INC ; SEWELL PLASTICS INC

Assignee(s): SEUERU PURASUCHITSUKUSU INC ; SEWELL PLASTICS INC ATLANTA GA US ; ALBERGHINI ALFRED C ; CONSTAR PLASTICS INC ; HERRON GENE A ; NICKEL GERHARD EB

Inventor(s): (std): GENE A HERRON ; ALFRED C ALBERGHINI ; ARUFURETSUDO SHII ARUBARIINI ; GAAHAADO II BII NIKERU ; GERHARD E B NICKEL ; HERRON GENE A ; NICKEL GERHARD E B ; GERHARD EB NICKEL ; JIENE EE HERON ; ALBERGHINI ALFRED C ; NICKEL GERHARD EB

Inventor(s): ALBERGHINI ALFRED C DUNWOODY GEORGIA 30338 US ; NICKEL GERHARD E B KENNESAW GEORGIA 30144 US ; HERRON GENE A SMYRNA GEORGIA 30080 US ; JENE EE HERON

Agent(s): FB RICE; FB RICE PTY LTD; FINLAYSON AND SINGLEHURST; REINHOLD COHN AND PARTNERS

Designated states: AT BE CH DE FR GB IT LI LU NL SE

76) Family number: 1127274 (US3870184A)

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Title: EASY OPEN METAL CLOSURE

Abstract: The disclosure relates to an improvement in a convenience type (easy-open) closure for a bottle or the like. The closure includes an outer cap of severable material, such as aluminum, crimped around the rim of the bottle finish. The cap has an integral tear strip formed by score line weakening of the material. The score line has two spaced legs that join at their innermost end at the top of the cap and extend into the skirt, the one leg that extends to the free edge of the rolled or curled skirt wire is interrupted and discontinuous for a short length occurring about mid-way of the rolled section of the skirt wire. This increased the "hoop strength" of the closure. The other leg is terminated well within the skirt. Pressure retention of the closure is enhanced appreciably.

Classifications:

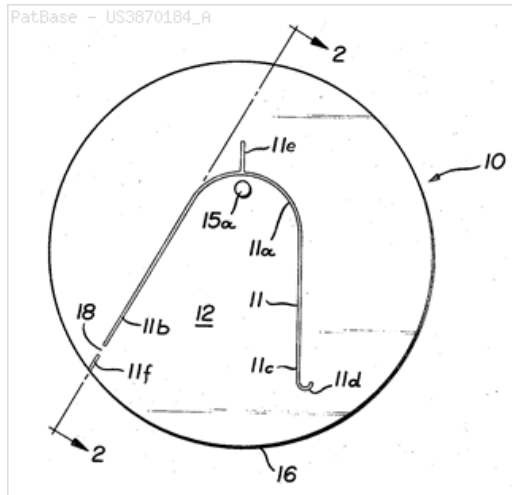
International (IPC 8-9): B65D41/02 B65D41/32
B65D41/40 (Advanced/Invention);
B65D41/02 B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/02 B65D41/32 B65D41/40

CPC: B65D17/4012

European: B65D17/16B2

US: 215/255

**Family:**

Publication number	Publication date	Application number	Application date
DE2432438 A1	19750206	DE19742432438	19740706
GB1471672 A	19770427	GB19740030097	19740708
JP50089189 A2	19750717	JP19740077913	19740709
US3870184 A	19750311	US19730377641	19730709

Priority:

US19730377641 19730709

Probable Assignee: OWENS ILLINOIS INC**Assignee(s):** (std): OWENS ILLINOIS INC**Assignee(s):** OWENS ILLINOIS INC TOLEDO OHIO V ST A ; OWENS ILLINOIS GLASS CONTAINER INC**Inventor(s):** (std): FUCHS THOMAS D ; MICKA JOHN J ; MICKA JOHN JOSEPH ; FUCHS THOMAS DELMAR**Inventor(s):** MICKA JOHN JOSEPH MAUMEE ; FUCHS THOMAS DELMAR TOLEDO**77) Family number: 3872274 (GB1401892A)**

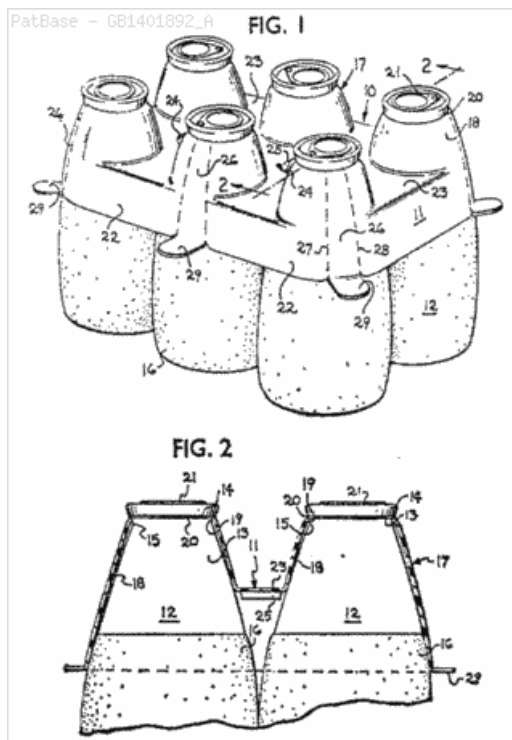
© PatBase

Title: CARRIERS FOR CONTAINERS

Abstract: 1401892 Packages OWENS-ILLINOIS Inc 22 June 1973 29718/73 Heading B8C A moulded plastics carrier 11 for holding a group of containers 12 comprises individual frusto-conical compartments 17 each with a top opening defined by a yieldable annular edge 19 which passes over and engages under the outwardly extending skirt 20 of each container closure 14. Compartments 17 extend from top and side portions 23, 22 which hold the containers together and provide unitary strength. Tear-tabs 29 break each compartment for removal of its container. In the case of screw-cap bottles, edge 19 engages a raised bead of each bottle adjacent the cap.

Classifications:**International (IPC 8-9):** B65D71/50 (Advanced/Invention);

B65D71/50 (Core/Invention)

International (IPC 1-7): B65D41/48 B65D67/02 B65D85/00**CPC:** B65D71/50**European:** B65D71/50**Family:**

Publication number	Publication date	Application number	Application date
GB1401892 A	19750806	GB19730029718	19730622

Priority:

GB19730029718 19730622

Probable Assignee:

OWENS ILLINOIS INC

Assignee(s): (std):

OWENS ILLINOIS INC

78) Family number: 92275 (GB1274758A)

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Title: CLOSURES FOR CONTAINERS AND APPARATUS FOR MAKING THEM

Abstract: 1,274,758. Caps for bottles. SOC. DE CONDITIONNEMENT EN ALUMINIUM SCAL G.P. 6 May, 1969 [6 May, 1968], No. 22938/69. Heading B8T. [Also in Division B3] A container closure 1 comprises a central part 11 with a disc top 111 and a frusto-conical side wall 112. A skirt 12 includes a cylindrical portion 121 and a frusto-conical portion 122 rolled back on itself through an angle of 180 to 225 degrees to form an inside bead 123 at the free end. An intermediate part 13 joins the skirt 12 in an annular groove 131 concave towards the inside of the cap and joins the periphery of the central part 11 with a further annular groove 113 concave towards the outside of the cap. A seal 14 is contained in the outer groove 131 and extends to cover the exposed end of the rolled over skirt. When fitted, the skirt is drawn downwards taking up the material of the outer groove 131 and forcing the seal 14 around the rim of a container.

Classifications:

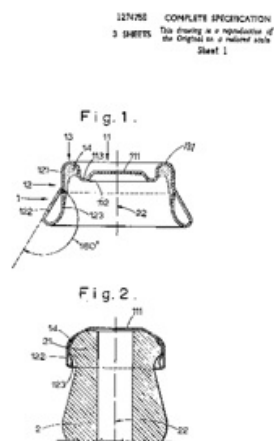
International (IPC 8-9): B21D51/44 B65D41/12 (Advanced/Invention);
B21D51/38 B65D41/02 (Core/Invention)

International (IPC 1-7): B21D51/44 B65D41/10 B65D41/12
B65D41/16

CPC: B21D51/44 B65D41/12

European: B21D51/44 B65D41/12

PatBase - GB1274758_A

**Family:**

Publication number	Publication date	Application number	Application date
BE732517 A	19691105		19690505
CH484785 A	19700131	CH19690006800	19690505
CS154271 B2	19740329	CS19690003203	19690506
DE1923092 A1	19700506	DE19691923092	19690506
DE1923092 B2	19731018	DE19691923092	19690506
DE1923092 C3	19740530	DE19691923092	19690506
DE1967006 A1	19760520	DE19691967006	19690506
DK130459 B	19750224	DK19690002443	19690505
DK130459 C	19750721	DK19690002443	19690505
FR1584264 A	19691219	FR19680150690	19680506
GB1274758 A	19720517	GB19690022938	19690506
IE33468 B	19740710	IE19690000631	19690505
IE33468 L	19691106	IE19690000631	19690505
LU58572 A	19700113		19690505
NL6906774 A	19691110	NL19690006774	19690502
OA3050 A	19701215	OA19690053599	19690506
RO55501 P	19730820	RO19690059901	19690506
SE351411 B	19721127	SE19690006387	19690506
TR16760 A	19730501	TR19690016760	19690506

Priority:

FR19680150690 19680506

Probable Assignee: SCAL GP CONDIT ALUMINIUM

Assignee(s): (std): SCAL GP CONDIT ALUMINIUM ; SOC D CONDITIONNEMENT EN ALUMI ; CONDITIONNEMENT EN ALUMINIUM

Assignee(s): D CONDITIONNEMENT EN ALUMI SOC ; DE CONDITIONNEMENT EN ALUMINIUM SCAL GP SOC ;
CONDITIONNEMENT EN ALUMINIUM SCAL GP ; SOC DE CONDITIONNEMENT EN ALUMINIUM SCAL GP ;
SOCIETE DE CONDITIONNEMENT EN ALUMINIUM SCAL GP ; SOCIETE DE CONDITIONNEMENT EN
ALUMINIUM SCAL GP PARIS ; STE DE CONDITIONNEMENT EN ALUMINIUM SCAL GP ; SOCIETE DE
CONDITIONNEMENT EN ALUMINIUM SCAL GP S A PARIS

Inventor(s): (std): ARMANDO PODESTA ; PODESTA A ; PODESTA ARMANDO

Inventor(s): WIRD SPAETER GENANNT WERDEN ; PODESTA ARMANDO MAILAND ITALIEN

Title: PLASTIC CAPSULE FOR BOTTLE NECKS

Abstract: Bottle closures formed from thin wall plastic material to suit bottle tops where the zone to be covered has changes of section. Plastic caps are formed and then preshrunk over a mandrel to approximate to the contours of the bottle before being fritted. The closures are relatively deep skirted and pref. have a pull tab between circumferentially weakened (perforated) seams for removing just the top cap section: the skirt may also have a longitudinal seam to allow tear-off. The skirt has dimples or ribs for anchorage onto the bottle and/or spaced stacking of closures for automatic fritting. The inner profile of the cap may be stepped for self-centering onto the bottle top, and may enclose a metal cap liner.

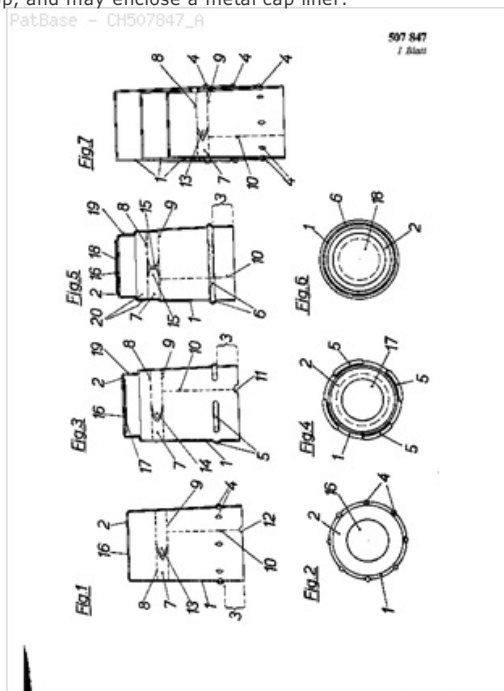
Classifications:

International (IPC 8-9): B65D41/54 (Advanced/Invention);
B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/54 B65D41/62

CPC: B65D41/54

European: B65D41/54



Family:

Publication number	Publication date	Application number	Application date
AT296807 B	19720225	AT19690010829	19691119
BE742359 A	19700504		19691128
CH507847 A	19710531	CH19690017235	19691118
DE6809330 U	19690424	DE19680009330U	19681129

Priority:

DE19680009330U 19681130

Probable Assignee: LOOS CO GMBH METALLKAPSEL

Assignee(s): (std): LOOS CO GMBH METALLKAPSEL

Assignee(s): METALLKAPSELFABRIK LOOS AND CO G M B H ; METALLKAPSELFABRIK LOOS AND CO GMBH ; LOOS AND CO GMBH

Inventor(s): (std): GUENTHER CLEFF

Inventor(s): CLEFF GUENTHER

Title: BOTTLE CAP

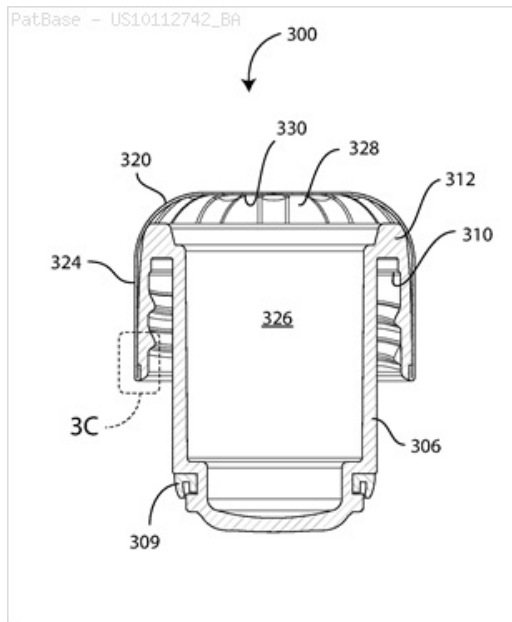
Abstract: A bottle cap having an outer skin secured to an inner core by means of an inwardly folded or rolled edge of the outer skin, and space provided in the inner core. The outer skin may be painted. The space may be provided by a rabbet.

Classifications:

International (IPC 8-9): B65D B65D1/02 B65D41/04 B65D51/18

B65D8/06 (Advanced/Invention)

CPC: B65D51/18 B65D7/22 B65D41/0414 B65D1/0246 B65D41/0492

**Family:**

Publication number	Publication date	Application number	Application date
CN108190226 A	20180622	CN201711248201	20180112
HK1255882 A1	20190830	HK20180114965	20181122
US10112742 BA	20181030	US20170679742	20170817

Priority:

US20170679742 20170817

Probable Assignee: CANT LIVE WITHOUT IT LLC**Assignee(s):** (std): CAN NOT BE WITHOUT IT CO LTD ; CANT LIVE WITHOUT IT LLC**Assignee(s):** NOT WITHOUT IT ; CAN T LIVE WITHOUT IT LLC**Inventor(s):** (std): CIRCOSTA MICHAEL ; MICHAEL CIRCOSTA**Agent(s):** SHANGHAI INTELLECTUAL PROPERTY OFFICE; KILPATRICK TOWNSEND AND STOCKTON LLP**81) Family number: 15038289** (US6223918B)

© PatBase

Title: Package

Abstract: A package (10) includes a plastic bottle (20), a stopper (40) removably inserted into the mouth of the bottle, and a plastic cap (50). The cap has a cover member (52) which overlies the stopper and has a region (66) which is removable to expose the upper surface of the stopper to allow piercing thereof by a needle or the like. The removable region is provided with a pull-ring (68) protected from accidental operation by an annular wall (60) projecting upwardly from the edge of the cover member (52).

Classifications:

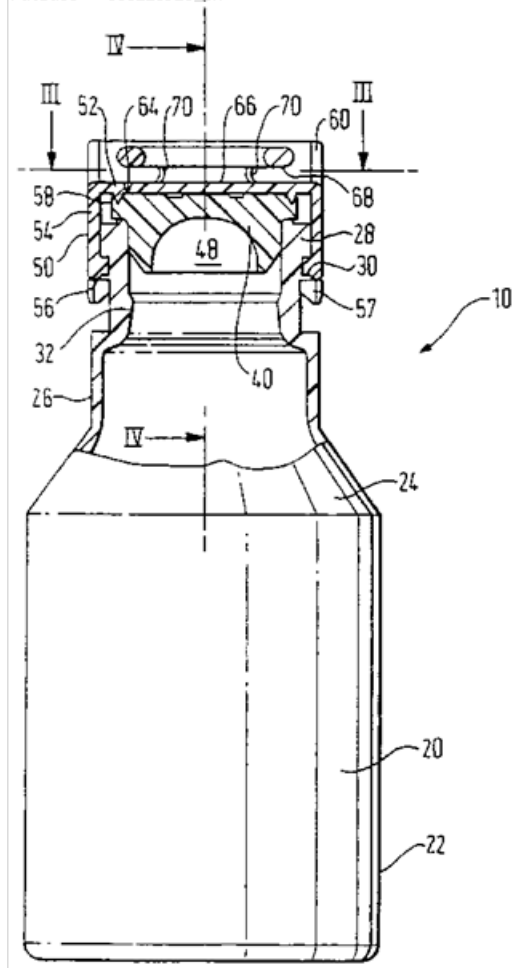
International (IPC 8-9): B65D39/00 B65D39/04 B65D41/28
 B65D47/36 B65D51/00 B65D51/18 B65D55/02 (Advanced/Invention);
 B65D39/00 (Advanced/Non-invention);
 B65D39/00 B65D41/02 B65D47/00 B65D51/00
 B65D51/18 (Core/Invention)

International (IPC 1-7): A61J A61J1/00 A61J1/05 B65D B65D1/00
 B65D39/00 B65D39/04 B65D41/00 B65D41/28 B65D41/58
 B65D47/36 B65D51/00 B65D51/18 B65D51/20 B65D8/02

CPC: B65D51/002 B65D51/18 B65D2251/0015 B65D2251/0025
 B65D2251/009 B65D55/024

European: B65D51/00B B65D51/18 B65D55/02F L65D251/00Y2D
 L65D251/00Y2J L65D251/00Y6K

US: 215/249 215/251 215/254

**Family:**

Publication number	Publication date	Application number	Application date
AT225735 E	20021015	AT19990933040T	19990714
AU199949215 A1	20000207	AU19990049215	19990714
AU199949215 A5	20000207	AU19990049215	19990714
AU742134 B2	20011220	AU19990049215	19990714
CA2303213 AA	20000306	CA19992303213	19990714
CA2303213 C	20040427	CA19992303213	19990714
CN1107624 C	20030507	CN19998001141	19990714
CN1309613 A	20010822	CN19998001141	19990714
DE69903401 D1	20021114	DE19996003401	19990714
DE69903401 D1	20021114	DE19996003401T	19990714
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DK1044135 T3	20030210	DK19990933040T	19990714
EP1044135 A1	20001018	EP19990933040	19990714
EP1044135 B1	20021009	EP19990933040	19990714
ES2187172 T3	20030516	ES19990933040T	19990714
GB9815291 A0	19980909	GB19980015291	19980714
JP2003516277 T2	20030513	JP20000560040T	19990714
JP4754070 B2	20110824	JP20000560040T	19990714
KR100385760 B1	20030602	KR20007002626	20000313
KR20010052067 A	20010625	KR20007002626	19990714
NO20001221 A	20000309	NO20000001221	20000309
NO20001221 A0	20000309	NO20000001221	20000309
NO20001221 L	20000309	NO20000001221	20000309
NO319537 B1	20050829	NO20000001221	20000309
PT1044135 T	20030131	PT19990933040T	19990714
RU2000109262 A	20020527	RU20000109262	19990714
RU2184059 C2	20020627	RU20000109262	19990714
US6223918 BA	20010501	US20000525756	20000314
WO0003920 A2	20000127	WO1999GB02264	19990714
WO0003920 A3	20021017	WO1999GB02264	19990714
ZA200001064 A	20001020	ZA20000001064	20000302

Priority:

GB19980015291 19980714 US19980101205P 19980921 WO1999GB02264 19990714
 US20000525756 20000314

Probable Assignee: GE HEALTHCARE AS

Assignee(s): (std): AMERSHAM HEALTH AS ; AMERSHAM HEALTH AS OSLO ; AMERSHAM HEALTH OSLO AS ; BROWNE MARTIN MONTEAGLE ; NYCOMED IMAGING AS ; NJUKOMED IMAGING AS

Assignee(s): NYCOMED IMAGING A S ; NYCOMED IMAGING NYCVEIEN AS ; GE HEALTHCARE AS

Inventor(s): (std): MARTIN MONTEAGLE BROWNE ; BROWNE MONTEAGLE ; BROWNE MARTIN ; BRAUN MARTIN MONTIGL ; BROWNE MARTIN MONTEAGLE
Agent(s): SPRUSON AND FERGUSON; CALLINANS; FISHER ADAMS KELLY CALLINANS; FETHERSTONHAUGH AND CO
Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZA ZW

82) Family number: 7572293 (US4175668A) © PatBase

Title: REUSABLE STOPPER FOR SEALING CONTAINERS PROVIDED WITH A BEADED NECK SUCH AS BOTTLES

Abstract: A device for sealing containers, such as bottles with a beaded neck, is disclosed in the form of a cap having articulated straps provided with projecting jaws adapted to engage the cap below the head of the bottle.

Classifications:

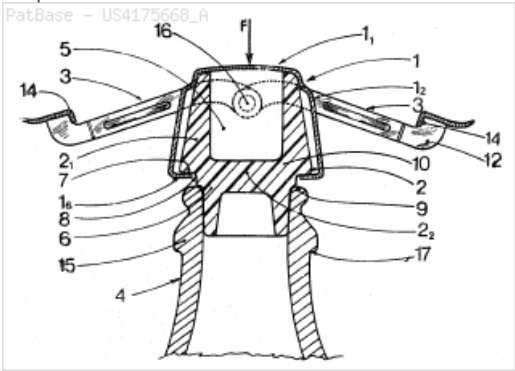
International (IPC 8-9): B65D45/04 (Advanced/Invention); B65D45/00 (Core/Invention)

International (IPC 1-7): B65D45/04

CPC: Y02W30/807 B65D45/04

European: B65D45/04

US: 215/354 215/364



Family:

Publication number	Publication date	Application number	Application date
US4175668 A	19791127	US19780911943	19780602

Priority:

US19780911943 19780602

Probable Assignee: HEBERT JEAN CLAUDE

Assignee(s): (std): HEBERT JEAN CLAUDE

Inventor(s): (std): HEBERT JEAN CLAUDE

83) Family number: 30024302 (US2004045927A) © PatBase

Title: CLOSURE CAP WITH TEAR STRIP FOR BOTTLES

Abstract: An easy-opening cap (1) for container or bottles, notably of sparkling wine, includes a peripheral conical skirt which has in its upper part (1b), an opening strip (2) located between two frangible lines (22a, 22b) which constitute zones of removal and extend around the totality of the cap. The opening strip (2) includes a "tircell" or pullable detachment strip (21) located between the two frangible lines (22a, 22b).

Classifications:

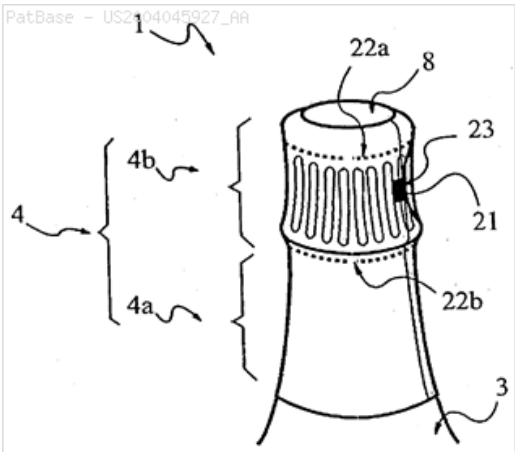
International (IPC 8-9): B65D41/62 (Advanced/Invention); B65D41/00 (Core/Invention)

International (IPC 1-7): B65D23/08 B65D39/00 B65D41/32 B65D41/62 B65D51/00 B65D55/08

CPC: B65D41/62

European: B65D41/62

US: 215/254



Family:

Publication number	Publication date	Application number	Application date
EP1371570 A1	20031217	EP20030354056	20030606
FR2840596 A1	20031212	FR20020007064	20020610
FR2840596 B1	20040917	FR20020007064	20020610
US2004045927 AA	20040311	US20030456605	20030606

Priority:

FR20020007064 20020610

Probable Assignee: VAW INT CAPSULES

Assignee(s): (std): VACCARI PATRICK ; VAW INT CAPSULES ; VAW INTERNAT CAPSULES

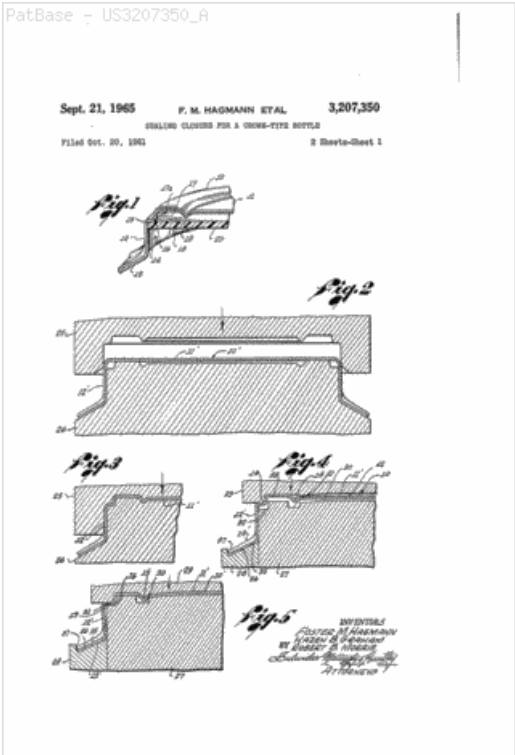
Assignee(s): VAW INTERNATIONAL CAPSULES ; VAW INT
Inventor(s): (std): VACCARI PATRICK
Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

84) Family number: 22801303 (US3207350A) © PatBase

Title: SEALING CLOSURE FOR A CROWN-TYPE BOTTLE

Abstract: (Claim 1) 1. A sealing closure for a crown-type bottle having a curved and overhanging lip adjacent its mouth with a crest and presenting an annular shoulder facing oppositely from the top of said lip, comprising: a ductile metal cap adapted to be positioned over said lip and having a central lid portion with a diameter at least equal to the maximum outside diameter of said lip and a depending skirt portion adapted for locking engagement with said shoulder, said lid portion being formed with annular, inner and outer pressure ridges projecting downwardly and cooperating to define the boundaries of an annular groove in the interior of said cap, said inner and outer ridges being in registration with the top of said lip and being spaced radially inwardly and outwardly, respectively, of said crest when said cap is positioned over said lip; and a resilient, deformable, and substantially incompressible sealing-lining disk, having a diameter greater than the diameter of said outer pressure ridge, fitted in said cap contiguous said pressure ridges, said inner ridge being adapted for pressurized engagement with said lip to urge a first subadjacent, limited area of said disk into pressurized contact with said lip and, thereafter, said outer ridge being adapted for pivoting downwardly about said inner ridge as a fulcrum to urge a second subadjacent, limited area of said disk into pressurized contact with said lip and thereby confine a ring portion of said disk within said groove, the void of said groove and the volume of the ring portion of said disk being volumetrically sized to one another during said pivoting.

Classifications:
International (IPC 8-9): B65D41/12 (Advanced/Invention);
B65D41/02 (Core/Invention)
International (IPC 1-7): B65D41/12
CPC: B65D41/12
European: B65D41/12
US: 215/328 215/351



Family:

Publication number	Publication date	Application number	Application date
US3207350 A	19650921	US19610156549	19611020

Priority:
US19610156549 19611020

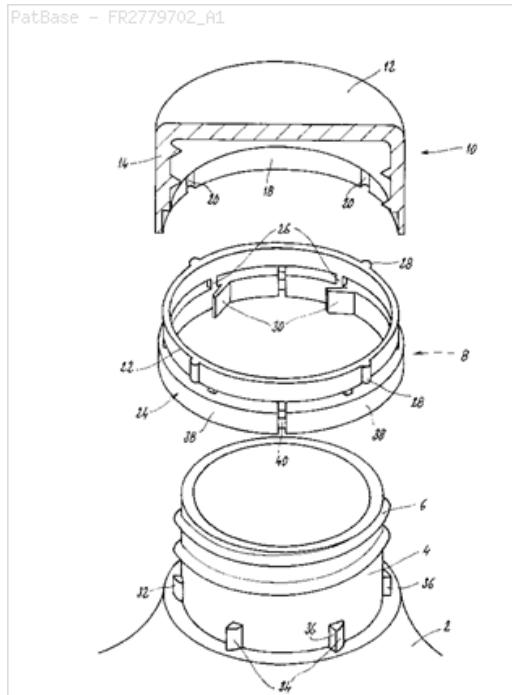
Probable Assignee: GRAHAM HAZEN B
Assignee(s): (std): GRAHAM HAZEN B ; HAGMANN FOSTER M ; MORRIS ROBERT B
Inventor(s): (std): MORRIS ROBERT B ; HAGMANN FOSTER M ; GRAHAM HAZEN B

85) Family number: 14349318 (FR2779702A) © PatBase

Title: Tamper proof cap for bottles such as a medicine bottle

Abstract: The seal comprises of a sealing frangible ring (22) that is placed over the thread (6) situated at a bottle neck (2). A cap (12) is then placed over the frangible ring to effect closure of the bottle. Upon rotation of the cap, the ring will break and become detached from the bottle. This process allows a user to easily determine if a bottle has been previously opened or tampered with.

Classifications:
International (IPC 8-9): B65D41/34 (Advanced/Invention);
B65D41/34 (Core/Invention)
International (IPC 1-7): B65D41/38 B65D55/08
CPC: B65D41/3419
European: B65D41/34A3

**Family:**

Publication number	Publication date	Application number	Application date
FR2779702 A1	19991217	FR19980007475	19980610
FR2779702 B1	20000818	FR19980007475	19980610

Priority:

FR19980007475 19980610

Probable Assignee: CROWN CORK AND SEAL TECH CORP
Assignee(s): (std): CROWN CORK AND SEAL TECH CORP
Assignee(s): CROWN CORK AND SEAL TECHNOLOGIES CORP
Inventor(s): (std): BARDET PHILIPPE ; BENOIT GONIN CLAUDE

86) Family number: 42881326 (IN01158DE2002A)

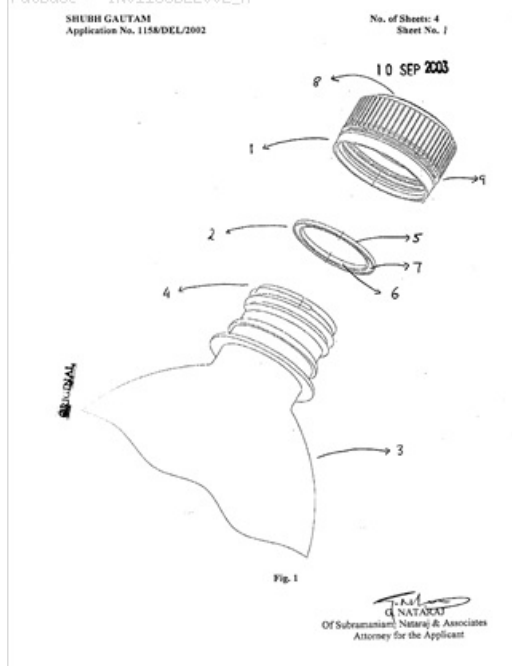
© PatBase

Title: A PLASTIC CLOSURE CAP

Abstract: The present invention relates to a closure cap for containers. More particularly, the present invention relates to a closure cap for screw top containers such as polyethylene terephthalate/glass/metal bottles and containers containing beverages that require to be water and air proof during transpotation and storage, such as aerated beverages, soft drinks, medicines, oils, various industrial fluids, alcoholic beverages and the like. The present invention also relates to liner elements for closure caps for hermetically sealing bottles, jars and other containers which use removable closure members.

Classifications:**International (IPC 1-7):** B65D41/18 B65D41/34

PatBase - IN01158DE2002_A

**Family:**

Publication number	Publication date	Application number	Application date
IN01158DE2002 A	20060303	IN2002DE01158	20021115
IN216791 B	20080331	IN2002DE01158	20021115

Probable Assignee: GAUTAM SHUBH
Assignee(s): GAUTAM SHUBH
Inventor(s): GAUTAM SHUBH

87) Family number: 19559344 (GB649036A)

© PatBase

Title: Improvements relating to machines for filling and capping bottles and like containers

Abstract: 28509. Drawings to Specification. [Class 102(i)] [Also in Group XVII] The arrangement for pumping lubricating oil from the sump of a bottle filling and capping machine (see Group XVII) is as described in Specification 649,078 but the claims differ. Specification 649,079, [Group XVII], also is referred to.

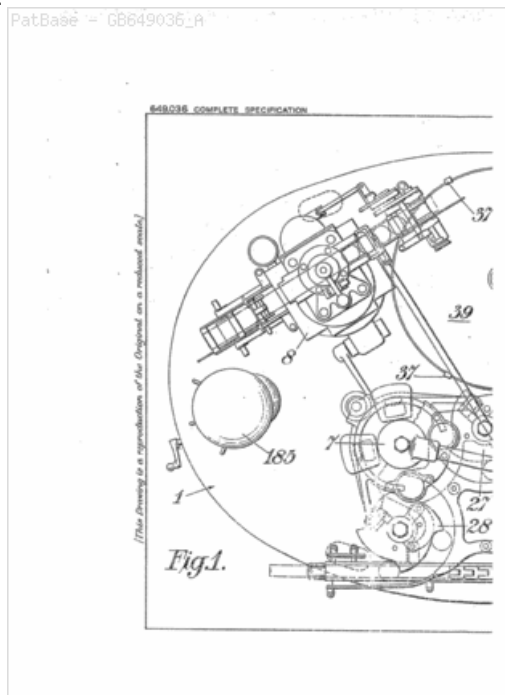
Classifications:

International (IPC 8-9): B67C7/00 (Advanced/Invention);
B67C7/00 (Core/Invention)

International (IPC 1-7): B67C7/00

CPC: B67C7/00 B67C7/0046

European: B67C7/00 B67C7/00B8B



Family:

Publication number	Publication date	Application number	Application date
GB649036 A	19510117	GB19470028509	19471024

Priority:

GB19470028509 19471024

Probable Assignee: ARTHUR GRAHAM ENOCK

Assignee(s): (std): ARTHUR GRAHAM ENOCK ; GRAHAM ENOCK MFG CO LTD ; GRAHAM ENOCK MFG COMPANY LTD

Assignee(s): GRAHAM ENOCK MANUFACTURING COMPANY LIMITED

88) Family number: 8160345 (DE4011878A1)

© PatBase

Title: Bottle for medicinal liquid - incorporates tear-off spout protected by outer cap

Abstract: The bottle (10) which contains a medicinal liquid has a stopper (13) made of elastomeric material which is a close fit in the mouth of the bottle. The stopper (13) is retained by a cap (14) with an elastically deformable skirt (16) which clips over a ridge (12) around the upper part of the neck (11) of the bottle. The cap (14) has a central tubular projection (21) which is sealed by an end wall (23). An outer protective cap (24) fits over this projection (21) and abuts against the inner cap (14). By rotating the outer cap (24) the end wall of the tubular projection (21) can be torn away to enable the projection to be used as a spout after the stopper (13) has been removed. USE/ADVANTAGE - The bottles can be stacked one upon another without risk of damage to the tear-off cap.

Classifications:

International (IPC 8-9): B65D51/00 B65D51/22 (Advanced/Invention);
B65D51/00 B65D51/18 (Core/Invention)

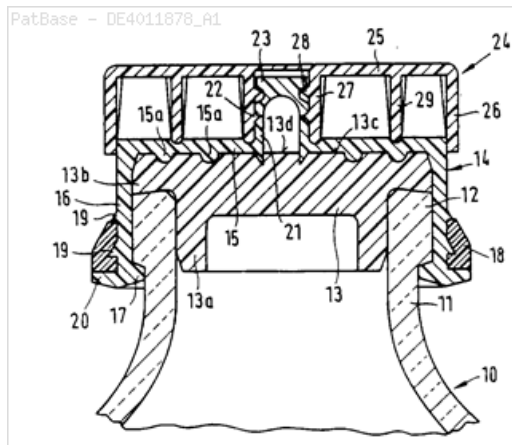
International (IPC 1-7): A61J1/00 B65D41/58

CPC: B65D51/002 B65D51/228 B65D2251/0015 B65D2251/0071

B65D2251/0087 B65D2251/009

European: B65D51/00B B65D51/22 B65D51/22C L65D251/00Y2D

L65D251/00Y6A L65D251/00Y6J L65D251/00Y6K

**Family:**

Publication number	Publication date	Application number	Application date
DE4011878 A1	19911017	DE19904011878	19900412
DE4011878 C2	19920312	DE19904011878	19900412

Priority:

DE19904011878 19900412

Probable Assignee:

MOMMER ANDREAS

Assignee(s): (std):

MOMMER ANDREAS

Assignee(s):

MOMMER ANDREAS 5100 AACHEN DE

Inventor(s): (std):

MOMMER ANDREAS

Inventor(s):

MOMMER ANDREAS 5100 AACHEN DE

89) Family number: 34893346 (US2007181526A)

© PatBase

Title: EASY-PULL BOTTLE CAP

Abstract: A crown for a bottle or other container, the crown comprised of a pull tab ring and a pull tab secured to the crown by a rivet and one or more cut lines between the rivet and the rim of the crown. The crown may be formed from tinplate with a hardness of T4 as measured by the Rockwell 30T Hardness Scale so that the crown may be opened and removed from the container the a force of approximately 2.5 Kg.

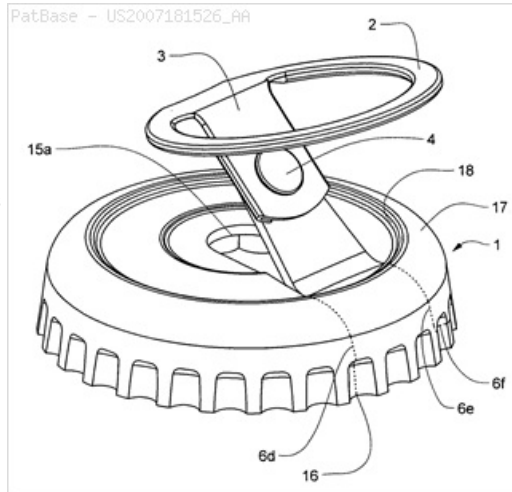
Classifications:

International (IPC 8-9): B21D51/44 B21D51/48 B23P11/00 B65D B65D17/00 B65D17/34 B65D39/00 B65D41/00 B65D41/02 B65D41/10 B65D41/12 B65D41/32 B65D41/34 B65D41/42 B65D45/32 B65D51/00 B65D51/24 B65D79/00 (Advanced/Invention); B65D41/34 (Advanced/Non-invention); B23P11/00 B65D17/28 B65D39/00 B65D41/00 B65D41/12 B65D41/32 B65D51/00 (Core/Invention); B21D B65D (Subclass/Invention)

CPC: Y10T29/49826 A61J1/1406 B65D47/36 B65D51/002 B65D51/18 B65D2251/0093 A61J1/1412 B65D17/4011 B65D17/4014 B65D41/12 B21D51/48 B65D51/245 B21D51/443 B65D17/4012 B65D41/42 B65D79/005 Y10T29/49957 B65D41/32

European: B21D51/48 B65D17/16B2 B65D41/12 B65D41/42

US: 1/1 215/250 215/253 215/255 215/256 215/257 215/328 215/328S 220/255 220/269 220/269S 220/270 220/270S 220/272 220/273 29/428 29/428S

**Family:**

Publication number	Publication date	Application number	Application date
AU2012319036 AA	20140417	AU20120319036	20120830
AU2012319036 BB	20161201	AU20120319036	20120830
AU2012319100 AA	20130411	AU20120319100	20120724
AU2012319100 AA	20140417	AU20120319100	20120724
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AU2014202533 AA	20140529	AU20140202533	20140509
AU2014202533 BB	20140619	AU20140202533	20140509
BR112014008140 A2	20141104	BR20141108140	20120830
BR112014008140 B1	20151215	BR20141108140	20120830
BR112014008148 A2	20170411	BR20141108148	20120724
BR122014019104 B1	20170627	BR20141219104	20120830
CA2851191 AA	20140404	CA20122851191	20120724
CA2851191 C	20180605	CA20122851191	20120724
CA2851232 AA	20140404	CA20122851232	20120830
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CA2854442 AA	20140502	CA20112854442	20111223

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CN103237737 B	20160803	CN201280003571	20120724
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CN103998348 B	20170308	CN201280055603	20120830
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CO6930333 A2	20140428	CO20140073149	20140404
CO7030940 A2	20140821	CO20140073145	20140404
CU20140040 A7	20141002	CU201400000040	20140404
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CU20140042 A7	20141002	CU201400000042	20140305
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DE602011036354 D1	20170504	DE201160036354T	20111223
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EP2763905 A1	20140813	EP20110876615	20111223
EP2763905 A4	20150318	EP20110876615	20111223
EP2763905 B1	20170322	EP20110876615	20111223
ES2719775 T3	20190716	ES20120838359T	20120830
HK1200154 A1	20150731	HK20140113021	20141229
HK1202103 A1	20150918	HK20150101542	20150212
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KR20140072153 A	20140612	KR20147011634	20120830
KR20140072154 A	20140612	KR20147011635	20120724
MX2014004032 A1	20140922	MX20140004032	20120724
MX2014004033 A1	20140922	MX20140004033	20120830
MX350035 B	20170824	MX20140004033	20120830
MX352782 B	20171208	MX20140004032	20120724
PE19762014 A1	20141127	PE20140000475	20120724
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PL2763905 T3	20171130	PL20110876615T	20111223
PL2763905 T4	20171130	PL20110876615T	20111223
RU2541277 C1	20150210	RU20140117777	20111223
TH144067 A	20151201	TH20141001917	20120724
TH144520 A	20151218	TH20141001918	20120830
TR201709320 T4	20170821	TR20170009320T	20111223
UA113066 C2	20161212	UA20140004825	20120724
UA115973 C2	20180125	UA20140004826	20120830
US2007181526 AA	20070809	US20070698247	20070125
US2010200534 AA	20100812	US20100725295	20100316
US2011024381 AA	20110203	US20100903533	20101013
US2012261380 AA	20121018	US20110267264	20111006
US2015034586 AA	20150205	US20120243437	20120724
US2015298868 AA	20151022	US20120243403	20120830
US2016251123 AA	20160901	US20160085489	20160330
US2017029172 A9	20170202	US20120243437	20120724
US2017183132 AA	20170629	US20170456823	20170313
US2017341823 AA	20171130	US20170588263	20170505
US2018072467 A9	20180315	US20170588263	20170505
US8061544 BB	20111122	US20070698247	20070125
US8061544 C1	20190927	US20070698247	20070125
US8276773 BB	20121002	US20100903533	20101013
US8365940 BB	20130205	US20100725295	20100316
US8608006 BB	20131217	US20110267264	20111006
US9321562 BB	20160426	US20120243403	20120830
US9592936 BB	20170314	US20160085489	20160330
WO07081349 A1	20070719	WO2006US02421	20060124
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WO13052194 A1	20130411	WO2012US47949	20120724
WO13052219 A1	20130411	WO2012US53131	20120830
WO13081638 A1	20130606	WO2011US67134	20111223
ZA201402238 A	20150325	ZA20140002238	20140326
ZA201402239 A	20150325	ZA20140002239	20140326
ZA201403254 A	20151125	ZA20140003254	20140506

Priority:

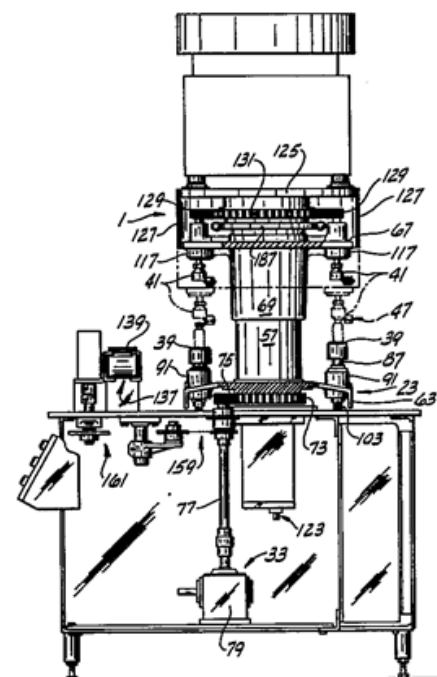
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US20110267264	20111006	WO2011US47949	20111006	EP20110876615	20111223
WO2011US67134	20111223	WO20120243437	20120724	WO2012US47949	20120724
AU20120319036	20120830	BR20141108140	20120830	EP20120838359	20120830
US20120243403	20120830	WO2012US53131	20120830	WO2012US67134	20121129
AU20140202533	20140509	WO2012US53131	20140513	US20140243437	20140912
US20140243403	20141106	US20160085489	20160330	US20170456823	20170313
US20170588263	20170505				

Probable Assignee: SWEENEY BART**Assignee(s):** (std): ABE FRISHMAN ; FAN SIMING ; FRISHMAN ABE ; WORLD BOTTLING CAP LLC ; FRISHMAN EHJB**Assignee(s):** LIBERMAN TERRY ; SWEENEY BART ; SWEENEY KATHLEEN ; WORLD BOTTLING CAP LLC111-225 - 3044 OLD DENTON ROADCARROLLTONTX75007US ; FRISHMAN ABE CAROLLTON**Inventor(s):** (std): FRISHMAN EHJB ; FRISHMAN ABE ; FAN SIMING ; ABE FRISHMAN**Inventor(s):** FRISHMAN ABEUS ; FRISHMAN ABE CAROLLTON**Agent(s):** ALLENS PATENT AND TRADE MARK ATTORNEYS; DEETH WILLIAMS WALL LLP; ALVARO CORREA ORDONEZ; ASHTON TIMOTHY; MACKERT ANDREAS; LEHMANN MARIA ISABEL; JEAC IP AGENT CO; REINHOLD COHN AND PARTNERS; ONDA MAKOTO; ONDA HIRONORI; TOLGA CAYLAK; MATTHEW E BURR LAKE AUSTIN MARINA; MATTHEW E BURR; MATTHEW E; CARSTENS AND CAHOON LLP; JAMES H; BURR MATTHEW; BURR MATTHEW E**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW**90) Family number: 1548351 (US4219986A)**

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Title: Capping apparatus**Abstract:** Apparatus for applying caps to containers such as glass bottles or vials having a flange at their mouth end and crimping the cap on each container under the flange, in which the containers with caps thereon are gripped at top and bottom in a rotary turret, carried around in a circular path by the turret, spun on their axes as they are carried around by the turret, and the caps are crimped by bringing crimping tools carried by the turret into crimping engagement with the caps.**Classifications:****International (IPC 8-9):** B67B3/00 B67B3/02 B67B3/062 B67B3/14 B67B3/28 (Advanced/Invention); B67B3/00 (Core/Invention)**International (IPC 1-7):** B65B7/28 B67B3/00 B67B3/02 B67B3/064 B67B3/08 B67B3/14 B67B3/18**CPC:** B67B3/062 B67B3/14 B67B3/28**European:** B67B3/062 B67B3/14 B67B3/28**US:** 53/314 53/334

PatBase - US4219986_A

**Family:**

Publication number	Publication date	Application number	Application date
CA1116142 A1	19820112	CA19790341656	19791211
DE3068145 D1	19840719	DE19803068145	19800103
EP0014173 A2	19800806	EP19800630003	19800103
EP0014173 A3	19810318	EP19800630003	19800103
EP0014173 B1	19840613	EP19800630003	19800103
JP55097386 A2	19800724	JP19800001995	19800111
US4219986 A	19800902	US19790002602	19790111

Priority:

US19790002602 19790111 CA19790341656 19791211

Probable Assignee: BEMIS CO INC**Assignee(s):** (std): BEMIS CO INC ; PERRY IND INC**Assignee(s):** PERRY INDUSTRIES INC ; BEMIS COMPANY INC ; OSTERHAUS JOSEPH C**Inventor(s):** (std): JIYOSFUF SHII OSUTAAHAUSU ; OSTERHAUS JOSEPH C

Designated states: DE GB IT NL

Abstract: 884,126. Crown caps. FORDS (FINSBURY) Ltd. May 26, 1959 [June 11, 1958 (2); July 9, 1958; Aug. 28, 1958; Nov. 24, 1958], Nos. 18663/58, 18664/58, 22209/58 and 27653/58. Class 125(3). A crown cap has an annular sealing gasket 5 of a resilient or deformable sealing compound, e.g. a rubberized compound, applied internally in a semi-liquid state so that it does not adhere firmly to the cap but, under internal gas pressure from the contents of a bottle to which the cap is secured, is able to deform by sliding on the surface of the cap and thereby to increase its sealing action. The sealing compound may be squirted on through a nozzle, as the cap is rotated, and subsequently dried. The interior of the cap may be coated with a protective coating, e.g. a lacquer made from epoxy-phenolic resins to which the gasket will not adhere; and a protective coating of, e.g. vinyl lacquer, which is adhesive, may be applied to the interior of the cap at the same time as the compound, a drop of the lacquer being dispersed from a point at the centre of the cap by centrifugal force but not so far that it covers the sealing compound. In a modification, Fig. 6, a second gasket 10 of sealing compound is applied, this gasket being adhered to the skirt on a vinyl lacquer. Specification 807,074 is referred to.

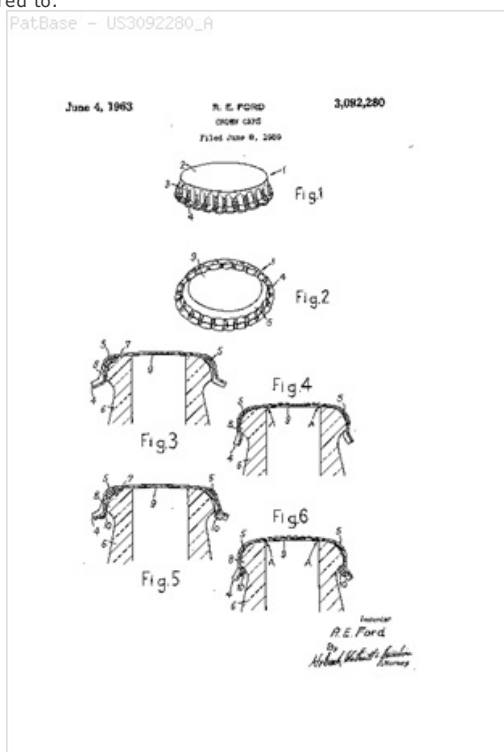
International (IPC 8-9): B21D51/46 B65D41/12 (Advanced/Invention);
B21D51/38 B65D41/02 (Core/Invention)

International (IPC 1-7): B21D51/46 B65D41/12 B65D53/02

CPC: B21D51/48 B65D41/12

European: B21D51/46 B21D51/48 B65D41/12

US: 215/328 215/352



Family:

Publication number	Publication date	Application number	Application date
BE579536 A	19591001	BE19590579536	19590610
CH370664 A	19630715	CH19590074320	19590611
DE1141905 B	19621227	DE1959F028624	19590605
DE1877377 U	19630808	DE1959F016844U	19590605
ES250014 A1	19600116	ES19590250014	19590609
FR1267161 A	19610721	FR19590797114	19590610
GB884126 A	19611206	GB19580018663	19580611
NL239999 A	00000000		00000000
US3092280 A	19630604	US19590818753	19590608

Priority:

GB19580018663 19580611	GB19580018664 19580611	GB19580022029 19580709
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Probable Assignee: FORDS LTD

Assignee(s): (std): FORDS FINSBURA LTD : FORDS FINSBURY LIMITED : FORDS LTD

Assignee(s): FORDS FINSBURA LIMITED : FORDS LIMITED : FORDS FINSBURY LTD

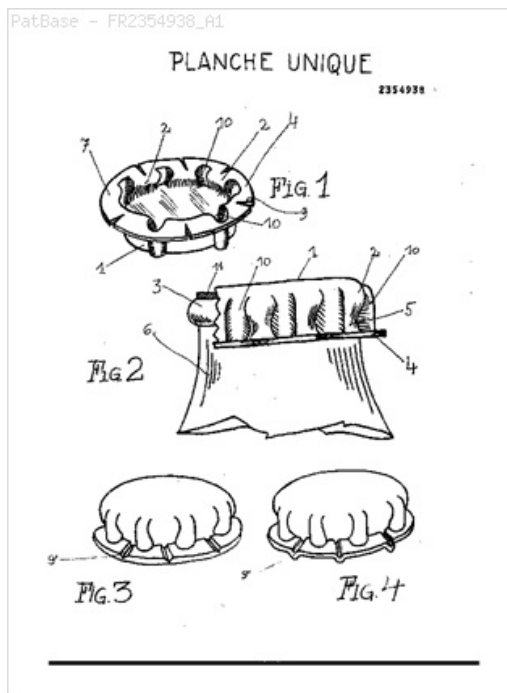
Inventor(s): (std): EWART FORD RALPH ; FORD RALPH EWART ; RALPH EWART FORD

Title: RESILIENT METAL OR SYNTHETIC MATERIAL BOTTLE CAP - WITH SKIRT WITH FLEXIBLE OUT-TURNED RIM

Abstract: Bottle cap of resilient metal or synthetic material comprises a dished top bordered by a hollow circular groove which resiliently grips the outer flange of the bottleneck. The skirt has a flexible peripheral annular zone which is turned perpendicularly outwards, while the groove is discontinued at spaced points by recesses which open out directly into the annular zone. The cap is pref. made from non-vinyl material resistant to heating, while a liquid or pasty vinyl film with which the top of the cap is covered is heated during passage through an electronic field to developing and polymerisation temp. of the extending agent contained in it. This forms a flexible cellular seal.

Classifications:

International (IPC 8-9): B65D41/18 (Advanced/Invention);
B65D41/02 (Core/Invention)
International (IPC 1-7): B65D41/16
CPC: B65D41/18
European: B65D41/18



Family:

Publication number	Publication date	Application number	Application date
FR2354938 A1	19780113	FR19760018193	19760616
FR2354938 B3	19790413	FR19760018193	19760616

Priority:

FR19760018193 19760616

Probable Assignee:

FLAX V

Assignee(s): (std):

FLAX V

Assignee(s):

FLAX VALERE

93) Family number: 29646374 (GB492304A)

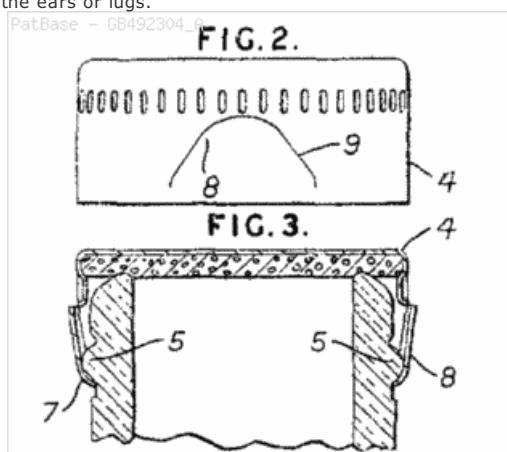
© PatBase

Title: Improvements in and relating to closures for bottles and like containers

Abstract: 8016. [Class 125 (iii)] Bottles and c. having a bead or locking ring 5 at some distance below the mouth, are closed by a cap 4 the side walls of which are furnished with incisions 9 arranged so that when the parts 8 so cut out are torn away there are left a plurality of ears or lugs. The cap is secured by the turned-in portion 7 at the lower edge of the skirt engaging with the bead of the bottle; and it is necessary that the upper part of the bottle neck should be spaced apart from the walls of the cap. With this construction the cap after the cut-away portions have been severed previous to the original removal of the cap, may be re-secured to the bottle, engagement being effected by the ears or lugs.

Classifications:

International (IPC 8-9): B65D41/42 (Advanced/Invention);
B65D41/32 (Core/Invention)
International (IPC 1-7): B65D41/40
CPC: B65D41/42 B65D2101/003
European: B65D41/42



Family:

Publication number	Publication date	Application number	Application date
GB492304 A	19380919	GB19370008016	19370318

Priority:

GB19370008016 19370318

Probable Assignee:

SAMUEL DAVISON YOUNG

Assignee(s): (std):

SAMUEL DAVISON YOUNG

Title: Improvements in bottle capsules or the like

Abstract: [Class 125 (iii).] A cap for a bottle and c., comprises two dished cup sections 15, 21 which nest one within the other, the section 15 functioning as a crown-cork and the section 21 as a handle for a tearing strip 19 by which the sections are connected. The strip 19 is scored along the edges when forming part of the section 15. The Figure shows the opening operation at a fairly advanced stage.

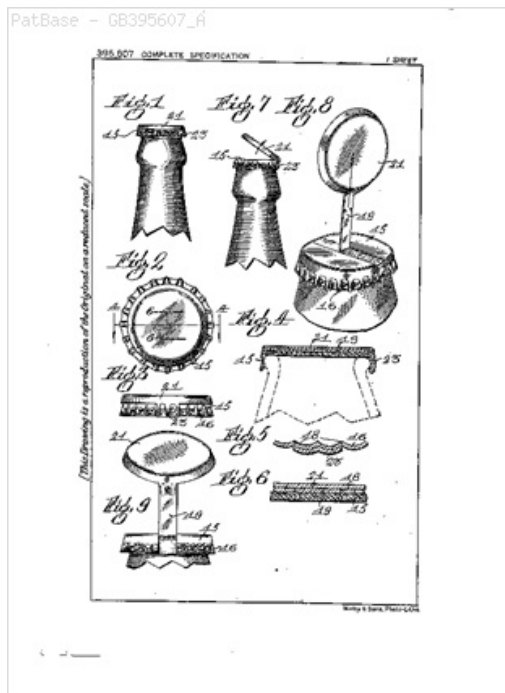
Classifications:

International (IPC 8-9): B41B17/06 B65D41/42 (Advanced/Invention);
B41B17/00 B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/42

CPC: B41B17/06 B65D41/42

European: B41B17/06 B65D41/42



Family:

Publication number	Publication date	Application number	Application date
BE393242 A	00000000		00000000
DE610914 A	19350319		00000000
FR747847 A	19330624		19321220
GB395607 A	19330720	GB19330000068	19330102

Priority:

19320108

Probable Assignee: GEORGES VINANT

Assignee(s): (std): GEORGES VINANT ; PIERRE GONZALVE JULIEN

Inventor(s): (std): JULIEN PIERRE GONZALVE ; VINANT GEORGES

Title: CROWN CLOSURE SEALING DISC

Abstract: 955,439. Joint-making packing. W. R. GRACE and CO. March 20, 1962 [April 14, 1961 (2)], No. 10705/62. Heading F2B. [Also in Division B8] A gasket e.g. for a crown or screw cap comprises a foamed plastic disc 1 e.g. of foamed polystyrene, with an outer elastomeric coating 2 e.g. of puffed polyvinyl chloride; the disc is of greater rigidity than the coating and provides a support therefor, and when the cap 3 is pressed on to a bottle 4 the coating provides a seal whereas the disc is compressed more or less permanently to a thickness substantially the same as, or less than, that of the coating. Instead of a disc, the foamed plastic may be in the form of a ring to the outer circumference of which the elastomeric coating is applied. The gaskets may be cut from a pre-formed rod of foamed plastic coated with an elastomeric substance. The latter may be applied by dipping or by placing a preformed sleeve of elastomeric material over the rod. The rod may be extrusion moulded and then cut or ground to size; an adhesive coating may then be applied to which an elastomeric coating is applied by extrusion. The gasket of Fig. 7, for sealing a porthole in a vacuum chamber, comprises a supporting member 11 of foamed plastic to which are attached sealing elements 12. The member 11 is more rigid than that of the elements 12 and serves to retain the shape of the gasket during its handling. It has bolt holes 13 and may be sliced from a block of foamed plastic which has been cut to the desired shape, drilled, and dipped into rubber latex.

Classifications:

International (IPC 8-9): B21D51/46 B29C65/48 B65D53/02
B65D53/04 (Advanced/Invention);

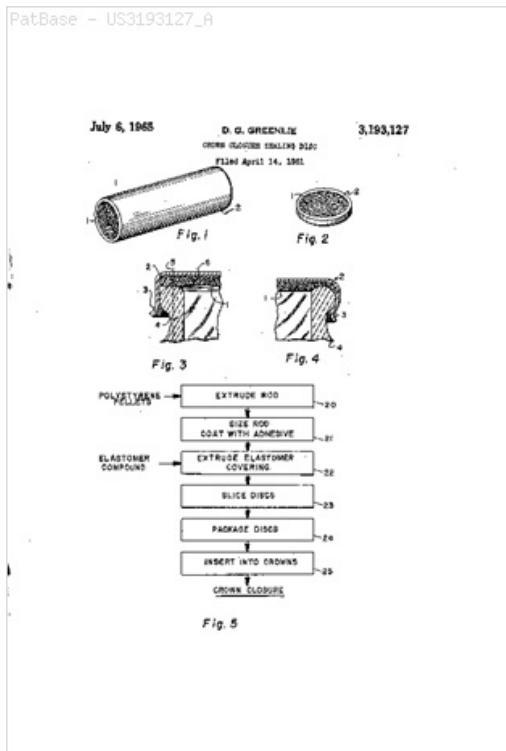
B21D51/38 B29C65/48 B65D53/00 (Core/Invention)

International (IPC 1-7): B65D53/04 B65D53/06 F16J15/10

CPC: B65D53/04 B65D53/02 B29C66/5326 B29C66/61 B29C65/48
B29C66/727 B29C66/742 B29L2031/565 B29C66/71 B29C66/7392
B29C66/1122 B29C66/1222 B29C66/1224 B29C66/24221

European: B21D51/46 B29C65/48 B65D53/02 B65D53/04

US: 215/324 215/328 215/352

**Family:**

Publication number	Publication date	Application number	Application date
BE616201 A	19620731	BE19620616201	19620409
FR1323116 A	19630405	FR19620893334	19620404
GB955439 A	19640415	GB19620010705	19620320
US3193127 A	19650706	US19610103120	19610414

Priority:

US19610103119 19610414 US19610103120 19610414 FR19620893334 19620404

Probable Assignee:

GRACE W R AND CO

Assignee(s): (std):

GRACE W R AND CO

Assignee(s):

W R GRACE AND CO ; WR GRACE AND CO

Inventor(s): (std):

GREENLIE DAVID G ; GREENLIE DAVID GRAHAM

Inventor(s):

DAVID GRAHAM GREENLIE

96) Family number: 705397 (US3434613A)

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Title: PLASTIC TEAR-OFF CLOSURE CAPS FOR BOTTLES AND BOTTLE NECK ADAPTED TO RECEIVE THE SAME

Abstract: ABSTRACT OF THE DISCLOSURE

A plastic tear-off bottle closure or cap, comprising an upper and a lower portion, wherein the lower portion is equipped with a tear-off tongue and may be separated from the upper part by a weakening groove which may be torn open by means of pulling the tear-off tongue, whereby the said lower and upper portions may be separated for first opening the bottle and the upper part may be subsequently reused for closing the same; the invention also comprises a bottle neck adapted to receive such bottle closing cap.

Classifications:

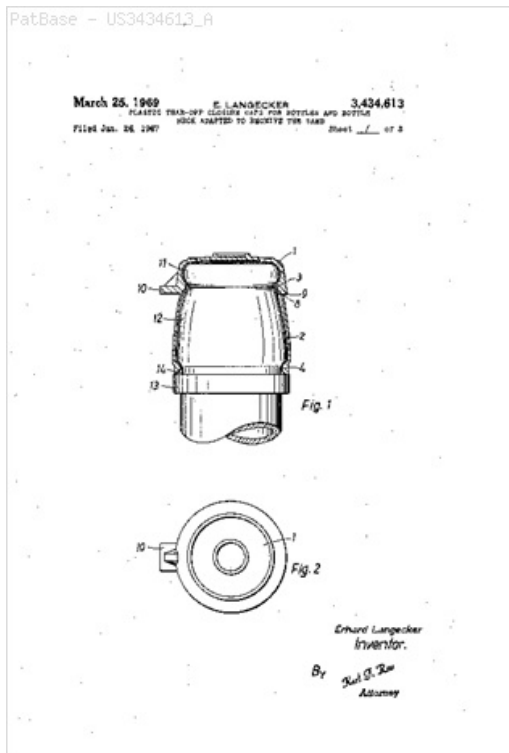
International (IPC 8-9): B65D41/48 (Advanced/Invention); B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/48 B65D5/54 B65D55/00

CPC: B65D41/48 B65D2101/0038

European: B65D41/48 L65D101/00A3C

US: 215/256 215/305 215/321 215/41 D9/438

**Family:**

Publication number	Publication date	Application number	Application date
CH453115 A	19680531	CH19670001136	19670123
FR1510526 A	19680119	FR19670093931	19670207
GB1168550 A	19691029	GB19670003160	19670120
US3434613 A	19690325	US19670611987	19670126

Priority:

DE1966L052830 19660209 DE1967L055463 19670109

Probable Assignee: LANGECKER ERHARD

Assignee(s): (std): LANGECKER ERHARD

Assignee(s): ERHARD LANGECKER

Inventor(s): (std): LANGECKER ERHARD ; ERHARD LANGECKER

97) Family number: 21396398 (US2226483A)

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Title: BOTTLE CAPPING MACHINE

Abstract: 1. A bottle capping machine comprising, in combination, means for supporting in stack formation a plurality of flexible caps each having a substantially flat top portion and a substantially parallel bottom portion having an axial opening therein, a circular series of flexible fingers in axial alignment with said stack operable to engage the bottom portion of the lowermost cap in said stack and to form said bottom portion into a skirt and to enlarge the opening in said bottom portion to a size sufficient to admit the head of a bottle, means for effecting relative axial movement of the stack and said series of fingers, and means for flexing said fingers in determinate time relation to said relative axial movement.

Classifications:

International (IPC 8-9): B67B5/00 (Advanced/Invention);

B67C7/00 (Advanced/Non-invention);

B67B5/00 (Core/Invention);

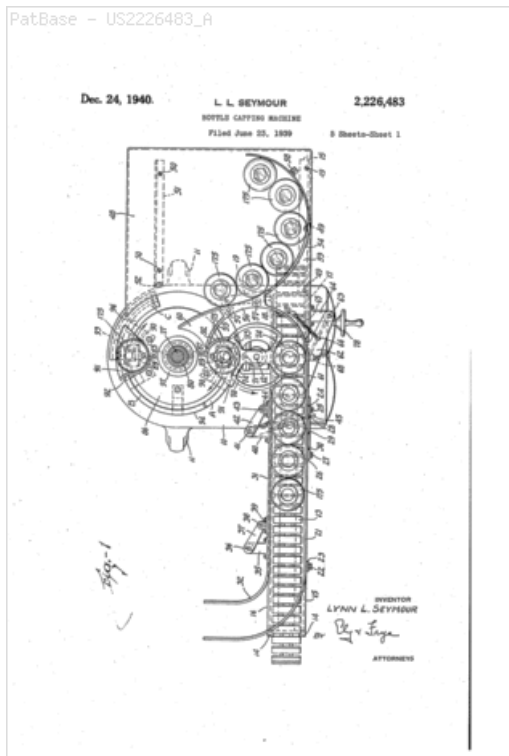
B67C7/00 (Core/Non-invention)

International (IPC 1-7): B67B3/02

CPC: B67B5/00 B67C2007/0066

European: B67B3/00B B67B5/00 L67C7/00B200

US: 53/291 53/292

**Family:**

Publication number	Publication date	Application number	Application date
US2226483 A	19401224	US19390280750	19390623

Priority:

US19390280750 19390623

Probable Assignee: CREAMERY PACKAGE MFG CO
Assignee(s): (std): CREAMERY PACKAGE MFG CO
Assignee(s): THE CREAMERY PACKAGE MFG COMPANY
Inventor(s): (std): SEYMOUR LYNN L

98) Family number: 22771400 (US3193128A)

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Title: CONTAINER CLOSURE

Abstract: 1,005,928. Tamperproof stoppers. WEST CO. July 12, 1962 [July 13, 1961; June 12, 1962], No. 26800/62. Heading B8T. A tamperproof closure for a pharmaceutical bottle comprises an aluminium cap 24, having an annular top portion 33 defining a central opening 32, and a cover member 39 having a depending skirt 42 which engages the opening 32, the end portion of the skirt 42 being turned outwards to form a continuous bead 45 which engages the underside of the top portion 33 so that when the cover 39 is removed the bead 45 is separated from the remainder of the skirt 42. The bead 45 is held against the cap 24 by a stopper 12, the central portion of which may be pierced with a syringe to withdraw the contents. Locking members 40 may be formed on the skirt 42 to prevent accidental displacement of the cover member 39 from the cap 24. The bead 45 acts as a seal once the cover 39 has been removed. In a modification the inner edge of the top 33 may be cut away or indented at spaced points to engage thicker portions or locking members of the skirt 42. In another embodiment the skirt 42 is replaced by three locking fingers which are turned out to lie beneath the top 33 as before. In a further modification the top 33 is provided with circumferentially spaced slots which are engaged by locking fingers of the cover 39, the intermediate portions of the skirt 42 lying flush with the outer surface of the top 33. Specification 994,311 is referred to.

Classifications:

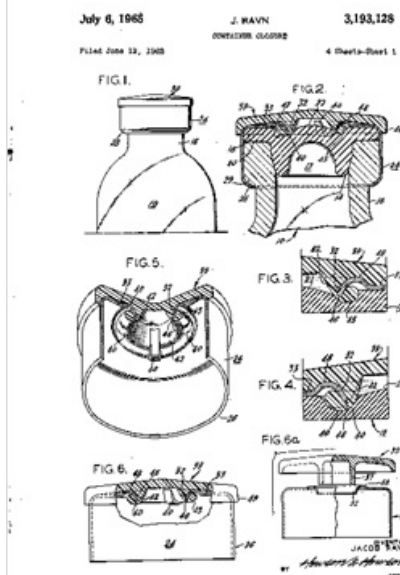
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 B65D51/00 (Core/Invention)

International (IPC 1-7): A61J1/06 F16J13/14

CPC: B65D51/002

European: B65D51/00B

US: 215/249 215/250

**Family:**

Publication number	Publication date	Application number	Application date
BE649068 A	19641210		19640610
FR1334575 A	19630809	FR19620903858	19620712
GB1005928 A	19650929	GB19620026800	19620712
US3193128 A	19650706	US19620201846	19620612

Priority:

US19610123782 19610713 US19620201846 19620612 FR19620903858 19620712

Probable Assignee:

WEST CO

Assignee(s): (std):

WEST CO

Assignee(s):

WEST CO INC

Inventor(s): (std):

JACOB RAVN

Inventor(s):

RAVN JACOB

99) Family number: 26123404 (GB506091A)

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Title: Improvements in methods and apparatus for capsuling bottles

Abstract: 506,091. Capsuling. GANGLOFF, R. L. March 25, 1938, No. 9239. Convention date, March 25, 1937. [Classes 125 (ii) and 125 (iii)] Bottles and the like are capsuled by applying to the top thereof a flat metal blank which is then engaged between a pair of dies having complementary radial projections and a central aperture, the bottle being pushed through the central aperture carrying with it the capsule which is thereby folded regularly round the bottle neck. The radial projections on at least one of the dies are yieldably mounted. The dies are preferably frusto-conical, and the radial projections may comprise steel wires or blades, or they may be rendered yieldable by being mounted in soft rubber. The blades may be discontinuous, and formed from two or more concentric and contiguous rows. One or both dies may be flexibly mounted in the machine. Fig. 3 shows the action of the rising bottle 4 in withdrawing the sheet metal blank 1 from between the creasing dies 2, 3 whilst it is held on to the bottle mouth by a yieldable piston 6. The capsuling head, Fig. 4, comprises a fixed die 3, see also Fig. 11, having discontinuous radial blades 34, 35 mounted in soft rubber 36. A sheet metal strip is fed into the machine, the upper die 2, see also Fig. 10, is lowered whereby a circular blank is stamped out and formed into a frustoconical shape with radial creases. The bottle passes through the central aperture 8 having three spring-loaded centring balls 13, carries with it the metal cap, as in Fig. 3, until the bottle mouth and cap are disposed within the member 5, whereupon the piston 20 with bevelled skirt 19 descends and forces the resilient annular members 18 and 5 into close contact with the metal cap to lay the folds thereof. The annular member 18 may be built up from several annular rings disposed one above; the other, whereby the profile of the bottle neck may be more accurately fitted.

Classifications:

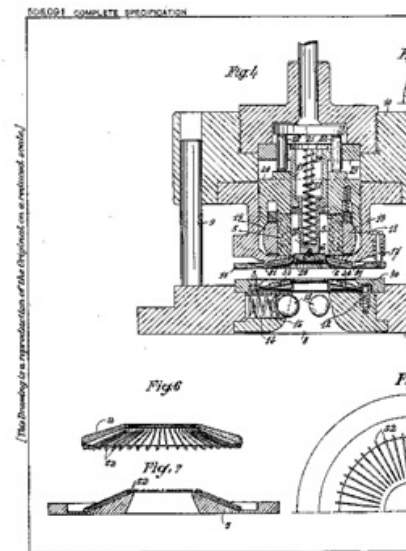
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B67B3/00 B67B5/00 (Core/Invention)

International (IPC 1-7): B67B5/00

CPC: B67B5/00 B67B3/14

European: 64B23A7 B67B3/14 B67B5/00

**Family:**

Publication number	Publication date	Application number	Application date
CH202819 A	19390215		19380325
DE732826 A	19430313	DE1937G095254	19370417
GB506091 A	19390523	GB19380009239	19380325

Priority:

DE1937G095254 19370417

Probable Assignee: GANGLOFF RENE LOUIS**Assignee(s):** (std): GANGLOFF RENE LOUIS ; RENE LOUIS GANGLOFF**Inventor(s):** (std): GANGLOFF RENE LOUIS ; RENE LOUIS GANGLOFF**Inventor(s):** LOUIS GANGLOFF RENE**100) Family number: 751408 (US3810556A)**

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Title: TAMPER-PROOF EASY-OPENING BOTTLE CAP

Abstract: Tamper-proof, easy-opening bottle cap and combination thereof with bottle neck having a smooth cylindrical pouring spout, a flaring neck, and an interposed cylindrical enlargement forming first and second, upwardly- and downwardly-facing shoulders. The cap has a roof and a depending skirt constricted into channels at the levels of the shoulders. The upper constriction is of smaller dimension axially of the neck, than the spout and thus forms or defines an annular space facilitating insertion of a cutting blade to sever the roof from the skirt. The upper constriction also acts to hold a sealing pad against the roof. The lower constriction engages the second shoulder and retains the cap in place. The skirt terminates below the second shoulder in contact with the neck.

Classifications:**International (IPC 8-9):** B65D41/14 B65D41/44

B67B7/46 (Advanced/Invention);

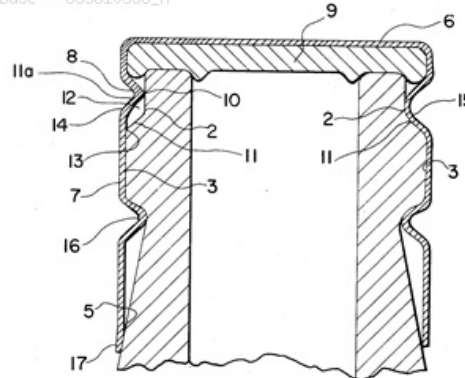
B65D41/02 B65D41/32 B67B7/00 (Core/Invention)

International (IPC 1-7): B65B B65D41/00 B65D41/10 B65D41/12

B65D41/34 B65D41/40 B65D55/02 B65D55/08 B67B7/00

CPC: B65D41/14 B65D41/44 B67B7/30 B67B2007/0458**European:** B65D41/14 B65D41/44 B67B7/30 L67B7/04K**US:** 215/215 215/235 215/257 215/8

PatBase - US3810556_A

**Family:**

Publication number	Publication date	Application number	Application date
AR193649 A1	19730511	AR19720243607	19720606
CH566238 A	19750915	CH19720009433	19720623
DE2230330 A1	19730301	DE19722230330	19720621
ES404170 A1	19750616	ES19720404170	19720623
FR2142794 A1	19730202	FR19710023211	19710625
FR2142794 B1	19770121	FR19710023211	19710625
FR2176472 A2	19731102	FR19720009622	19720320
IL39751 A0	19720830	IL19720039751	19720623

IL39751 A1	19760229	IL19720039751	19720623
IT959965 A	19731110	IT19720026188	19720624
US3810556 A	19740514	US19720266343	19720626
ZA7204331 A	19730328	ZA19720004331	19720623

Priority:

FR19710023211 19710625 FR19720009622 19720320

Probable Assignee: BOUCHAGE MECANIQUE

Assignee(s): (std): BOUCHAGE MECANIQUE

Assignee(s): BOUCHAGE MECANIQUE FR ; LE BOUCHAGE MECANIQUE ; LE BOUCHAGE MECANIQUE FR ; LE BOUCHAGE MECANIQUE PARIS ; LE BOZEC AERONAUTIQUE

Inventor(s): (std): COURSAUT H ; COURSAUT HENRI

Inventor(s): COURSAUT H FR ; COURSAUT HENRI MERCUREY FRANKREICH

Agent(s): AE MULFORD

101) Family number: 22699409 (US2695720A)

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Title: READILY REMOVABLE BOTTLE CAP

Abstract: (Claim 1) 1. A bottle_ cap comprising a sheet _metal cap having a downturned corrugated skirt adapted to be caused _to the bottle disposed within the cap, a plate between the cork, insert -and -the cap,. and a percussion-cap _between_-i the plate and the cap.

Classifications:

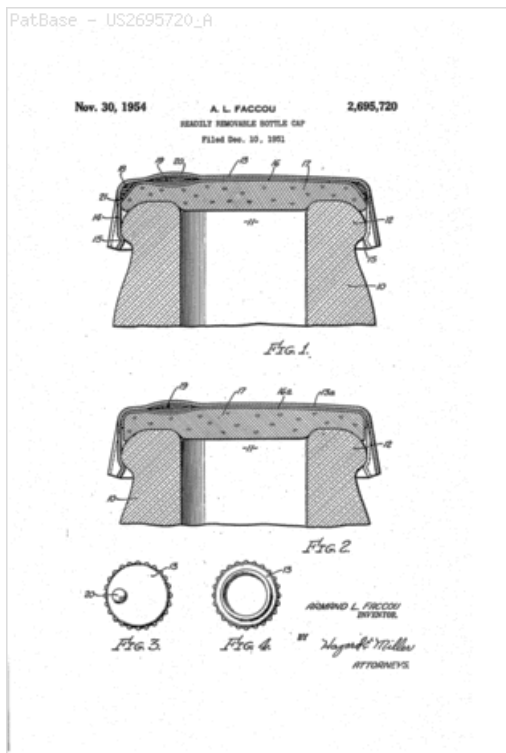
International (IPC 8-9): B65D51/24 (Advanced/Invention); B65D51/24 (Core/Invention)

International (IPC 1-7): B65D41/12 B67D1/08

CPC: B65D51/243

European: B65D51/24D

US: 215/301 215/328



Family:

Publication number	Publication date	Application number	Application date
US2695720 A	19541130	US19510260910	19511210

Priority:

US19510260910 19511210

Probable Assignee: FACCOU ARMAND L

Assignee(s): (std): FACCOU ARMAND L

Inventor(s): (std): FACCOU ARMAND L

102) Family number: 25385412 (GB974564A)

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Title: Improvements in or relating to closures

Abstract: 974,564. Bottle closures. METAL CLOSURES Ltd. Jan. 9, 1963 [Jan. 22, 1962], No. 2193/62. Heading B8T. A metal screw cap for a bottle has a top and a depending two-part skirt in which the two parts 5, 3 are connected across a peripheral slit line by bridges 8, 8¹, 9, and the lower part 3 forms a locking ring which engages beneath a rib on the bottle and has a transverse weakening line 11, between one of the bridges (9), which is substantially stronger than any of the bridges 8, and a weak bridge 8¹. The bridges 8¹ and 9 are closer together than the bridges 8 to give more support near the weakening line when the locking ring is being rolled under the rib. Any tampering with the cap once in position will result in the breaking of at least the bridge 8¹, and when the cap is unscrewed the bridges 8 will also break. At the same time the locking ring opens along the line 11 and is removed from the bottle still attached to the cap by the bridge 9. Specification 369,494 is referred to.

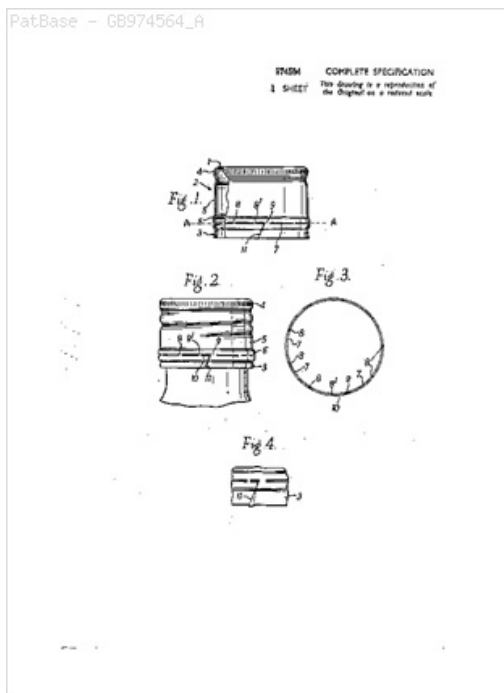
Classifications:

International (IPC 8-9): B65D41/34 B65D41/40

B65D55/02 (Advanced/Invention);

B65D41/34 (Core/Invention)

International (IPC 1-7): A65D17/06 B65D41/34 B65D55/08 B67B
CPC: B65D41/348 B65D2101/0046 B65D2101/0053 B65D2101/0061
European: B65D41/34F L65D101/00A3D L65D101/00A3E
L65D101/00A3F



Family:

Publication number	Publication date	Application number	Application date
AT242021 B	19650825	AT19630000464	19630121
AU2581462 A1	19640625	AU19620025814	19621224
BR6346287 A0	19731218	BR19630146287	19630121
CH422557 A	19661015	CH19630000206	19630109
DE1873900 U	19630612	DE1963M043593U	19630119
DK111319 B	19680722	DK19630000253	19630119
FI42922 B	19700803	FI19630000031	19630108
GB974564 A	19641104	GB19620002193	19620122
MY6500099 A	19651231	MY19650000099	19651230
NL141143 B	19740215	NL19630288003	19630122

Priority:

GB19620002193 19620122

Probable Assignee: METAL CLOSURES LTD

Assignee(s): (std): METAL CLOSURES LTD ; METAL CLOSURES WEST BROMWICH GROOT BRITTAN LTD

Assignee(s): METAL CLOSURES LTD ; METAL CLOSURES LIMITED ; METAL CLOSURES LIMITED WEST BROMWICH GROOT BRITTAN ; METAL CLOSURES LIMITED WEST BROMWICH GROOT BRITTANNIE

Inventor(s): (std): WILLIAM HENRY HADLEY ; HADLEY WILLIAM HENRY ; HADLEY W

Inventor(s): METAL CLOSURES LTD ; HENRY HADLEY WILLIAM

103) Family number: 19694423 (GB604755A)

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Title: Improvements in the sealing of cans, drums and bottles

Abstract: 23580, [Class 125 (iii)] The outlet aperture of a can, drum, bottle or like container is sealed by inserting therein under mechanical pressure a skirted sheet metal cap (Fig. 3) provided with a deformable groove 4 in its skirt 2 for the reception of a ring or band 5 of indiarubber or other resilient material which is compressed vertically so as to expand radially against the wall 6 of the aperture as the lower edge 3 of the cap contacts an abutment 8 within the aperture to cause the grooves 4 to be collapsed (Fig. 6). The ring 5 may be of circular, square or rectangular section, and the wall 6 may be provided with an inner groove opposite the ring into which the latter can spread when expanded. After sealing, the closure may be removed by piercing and levering it out with a suitable tool. A removable cap may be provided for temporarily closing the containers after the sealing closure has been removed.

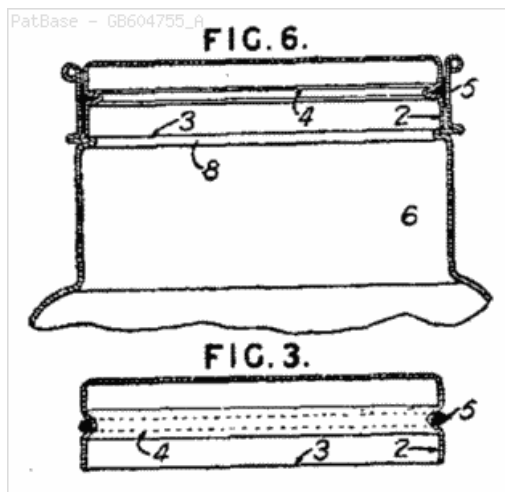
Classifications:

International (IPC 8-9): B65D39/04 B65D49/12 (Advanced/Invention);
B65D39/00 B65D49/00 (Core/Invention)

International (IPC 1-7): B65D53/02

CPC: B65D39/04 B65D49/12

European: B65D39/04 B65D49/12

**Family:**

Publication number	Publication date	Application number	Application date
GB604755 A	19480709	GB19440023580	19441127

Priority:

GB19440023580 19441127

Probable Assignee:

RALPH ERNEST PATMORE

Assignee(s): (std):

RALPH ERNEST PATMORE

104) Family number: 22179442 (US1998408A)

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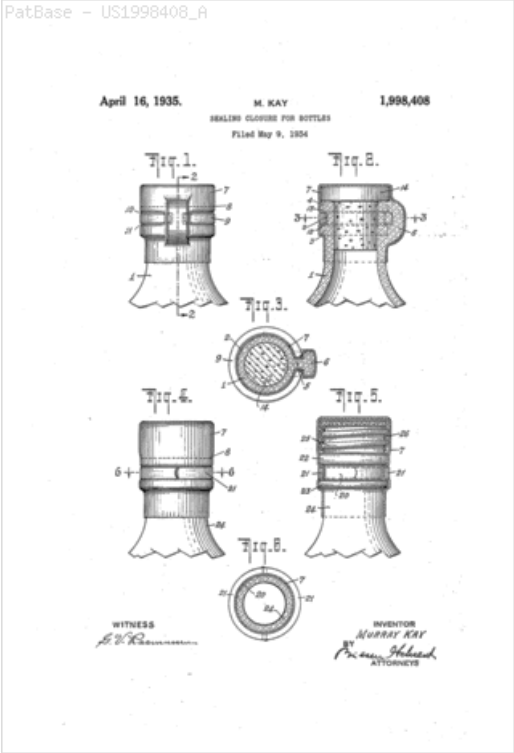
Title: SEALING CLOSURE FOR BOTTLES

Abstract: I claim: 1. In combination, a bottle having an external groove in the neck portion thereof, a destructible closure cap sealing the open end of said bottle and extending below said groove, a partition extending transversely of said groove, a covering element for said partition spanning said groove, said covering element being sufficiently wide to form a recess on each side of said partition, and a split ring surrounding a portion of said cap and positioned in said groove, the ends of said ring being positioned in the recesses formed on each side of said partition. 2. In combination, a bottle having an external groove in the neck portion thereof, a destructible closure cap sealing the open end of said bottle and extending below said groove, a partition extending transversely of said groove, a covering element spanning said groove and covering said partition, said covering element being sufficiently wide to form a recess on each side of said partition, said bottle, partition and covering element being integrally formed, and a split metal ring surrounding a portion of said cap and positioned in said groove, the ends of said ring being positioned in the recesses formed on each side of said partition. 3. In combination, a bottle having an external groove in the neck portion thereof, a destructible closure cap sealing the open end of said bottle and extending below said groove, a partition extending transversely of said groove, a covering element spanning said groove and covering said partition, said covering element being sufficiently wide to form a recess on each side of said partition, said bottle, partition and covering element being integrally formed, and a split metal ring surrounding a portion of said cap and positioned in said groove, the open ends of said ring being positioned in the recesses formed on each side of said partition, said ring being of such diameter that it wedges the portion of said cap in said groove tightly against the inner wall thereof so as to maintain said portion of the cap permanently in said groove. 4. In combination, a container having a groove in the outer surface thereof, a closure cap sealing the open end of said container and extending below said groove, said cap being weakened by an annular scoring intermediate said groove and the open end of said container whereby that portion of the cap above the groove may be removed to open the container, and a band surrounding a portion of said cap and permanently positioned in said groove, said band being of such diameter that it wedges the portion of the cap in said groove tightly against the inner wall thereof so as to maintain said portion of the cap permanently in said groove. 5. In combination, a bottle having a closure cap over the open end thereof, a destructible sealing element sealing said closure cap on said bottle, an annular band encircling the neck of said bottle and surrounding a portion of said sealing element and adapted to prevent the substitution of another sealing element for the one on said bottle, said band being composed of relatively strong metallic material and having such rigidity of constitution and form that on application of prying pressure applied between the wall of the bottle, and the inner periphery of the band, the band will maintain its shape and position until the bottle is so deformed or destroyed as a result of the prying pressure as to be incapable of further use, and means for irremovably positioning said band on the bottle; said means being adapted to hold said band in non-rotatable relation with respect to said bottle in the sealed and unsealed condition of the latter. 6. In combination, a bottle having an external groove in the neck portion thereof, a closure for said bottle, a destructible sealing element sealing said closure on said bottle and extending below said groove, and a band covering a portion of said sealing element and positioned in said groove and adapted to cooperate with said groove to prevent the substitution of another sealing element for the one sealing said closure in the bottle, said band being composed of relatively strong material and having such rigidity of constitution and form that on application of prying pressure applied between the wall of the bottle and the inner periphery of the band, the band will maintain its groove-occupying shape and position until the bottle is so deformed or destroyed as a result of the prying pressure as to be incapable of further use, and a stop positioned in said groove and adapted to cooperate with said band to prevent rotational movement of the latter in said groove. 7. In combination set forth in claim 6, including a permanently positioned covering element overlying the stop in said groove. 8. In combination, a bottle having a closure for said container, a double seal for said container, one of said seals comprising a destructible sealing element sealing said closure on the container and extending to a position below said groove, a portion of said sealing element lying in said groove, the second seal comprising a substantially heavy, indestructible and non-removable member positioned in said groove and sealing therein the portion of the first mentioned seal lying in said groove, so that said portion of the first mentioned seal remains beneath said second mentioned seal when the first mentioned seal is broken to remove the closure. 9. In combination, a container having an external groove positioned below the mouth thereof, a closure for said container, a double seal for said container, one of said seals comprising a destructible sealing element sealing said closure on the container and extending to a position below said groove, a portion of said sealing element lying in said groove, the second seal comprising a substantially heavy, indestructible and non-removable member positioned in said groove, said second sealing member having been applied over the portion of the first sealing member lying in said groove and having a close fit within said groove with respect to the interior wall thereof so that the insertion of a new first sealing member beneath said second sealing member is precluded. 10. In combination, a container having an external groove positioned below the mouth thereof, a closure for said container, a double seal for said container, one of said seals comprising a destructible sealing element sealing said closure on the container and extending to a position below said groove, a portion of said sealing element lying in said groove, the second sealing element comprising a substantially heavy, indestructible and non-removable metal band positioned in said groove and sealing therein the portion of the destructible sealing element lying in said groove so that said portion remains beneath

said band when the destructible sealing element is broken to remove the closure, said band being so dimensioned with relation to said groove that the insertion of a new destructible sealing element beneath said band is precluded. ' 11, In combination, a container having a relatively deep external groove positioned below the mouth thereof, a closure for 'said container, a double seal for said container, one of said seals comprising a destructible sealing element sealing said closure on the container and extending to a position below said groove, a portion of said sealing element lying in said groove, the second sealing element comprising a band permanently positioned in said groove and overlying that portion of the destructible sealing element lying in said groove, said band being so dimensioned with relation to said groove that the insertion of a new destructible sealing element beneath said band is precluded and having such rigidity of constitution and form that on application of prying pressure applied between the wall of the container and the inner periphery of the band, the band will main- tain its groove occupying shape and position until the container is- so deformed or destroyed as the result of the prying pressure as to be incapable of further use. 12. A combination such as defined in claim 11, in which the band is composed of case-hardened metallic material. 13. A combination such as defined in claim 11, in which the band is composed of a plurality of arcuately shaped pieces of metal welded together into the form of the band. 14. A combination such as reined in claim 11, in which the baud comprises a plurality of elongated sections composed of metallic material and a plurality of metal elements connecting said sections Cugether into the band form

Classifications:

International (IPC 8-9): B65D55/08 (Advanced/Invention);
B65D55/02 (Core/Invention)
International (IPC 1-7): B65D55/00
CPC: B65D55/0872
European: B65D55/08D
US: 215/251 215/258 215/278



Family:

Publication number	Publication date	Application number	Application date
US1998408 A	19350416	US19340724642	19340509

Priority:

US19340724642 19340509

Probable Assignee: STEEL BAND CLOSURE CO INC
Assignee(s): (std) STEEL BAND CLOSURE CO INC
Assignee(s): STEEL BAND CLOSURE CO
Inventor(s): (std) MURRAY KAY
Inventor(s): KAY MURRAY

105) Family number: 29593444 (US4310101A)

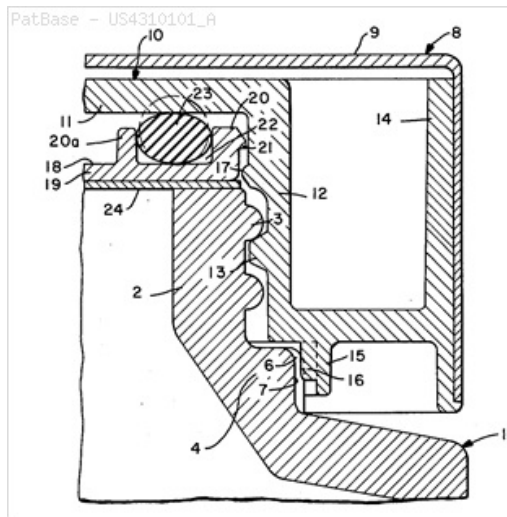
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Title: Combined bottle and screw cap assembly

Abstract: A container assembly including a bottle and cap arrangement is disclosed herein along with a cooperating arrangement for placing the cap arrangement in a predetermined closed position relative to the bottle. The assembly also includes a seal arrangement for maintaining a proper seal when the bottle is closed.

Classifications:

International (IPC 8-9): B65D41/04 B65D51/18 B65D53/02
B65D53/04 (Advanced/Invention);
B65D51/18 (Advanced/Non-invention)
International (IPC 1-7): B65D1/02 B65D23/00 B65D39/08
B65D41/00 B65D41/04 B65D41/62 B65D51/18 B65D53/00
B65D53/02 B65D53/04 B65D55/02 B65D55/12
CPC: B65D41/0435 B65D41/0478
European: B65D41/04D B65D41/04E1
US: 215/330 215/331 215/342 215/350

**Family:**

Publication number	Publication date	Application number	Application date
AR223702 A1	19810915	AR19800223702D	19800101
AU198056136 A1	19800911	AU19800056136	19800305
AU533561 B2	19831201	AU19800056136	19800305
BE882049 A	19800904	BE19800199648	19800304
BR8001275 A	19801104	BR19800001275	19800304
CA1138820 A1	19830104	CA19800347060	19800305
DE3007612 A1	19800925	DE19803007612	19800228
DE3007612 C2	19900118	DE19803007612	19800228
FR2450755 A1	19801003	FR19800004822	19800304
FR2450755 B1	19851220	FR19800004822	19800304
GB2044736 A1	19801022	GB19800007449	19800305
GB2044736 B2	19831221	GB19800007449	19800305
GB2122978 A1	19840125	GB19830013086	19830512
GB2122978 B2	19840613	GB19830013086	19830512
GB8313086 A0	19830615	GB19830013086	19830512
IT8020977 U0	19800305	IT19800020977U	19800305
JP55127054 U1	19800908	JP19790027765U	19790305
JP58031801 Y2	19830714	JP19790027765U	19790305
NL8001308 A	19800909	NL19800001308	19800304
SE8001656 A	19800906	SE19800001656D	19800304
SE8001656 L	19800906	SE19800001656	19800304
US4310101 A	19820112	US19800123342	19800221
ZA8001290 A	19810225	ZA19800001290	19800305

Priority:

JP19790027765U 19790305 JP19790027765 19790305 US19800123342 19800221
 GB19800007449 19800305 AU19800056136 19800308

Probable Assignee: MAX FACTOR AND COMPANY

Assignee(s): (std): MAX FACTOR AND CO ; MAX FACTOR AND CO HOLLYWOOD CALIF US ; MAX FACTOR AND COMPANY ; YOSHIKO KOGYO SHO KK ; YOSHINO KOGYO SHO TOKIO KK ; YOSHINO KOGYO SHO KABUSHIKI KA ; YOSHINO KOGYO SHO KK ; YOSHINO KOGYO SHO TE TOKIO EN MAX KK ; YOSHINO KOGYO SHO TOKIO TOKYO JP KK ; YOSHINO KOGYO SHO K K ; YOSHINO KOGYO SHO AND MAX FACTOR ; YOSHINO KOGYOSHO CO LTD ; YOSHINO KOGYO SHO TOKYO GIAPPO

Assignee(s): YOSHINO KOGYO SHO AND MAX FACTOR AND CO KK ; KABUSHIKI KAISHA YOSHINO KOGYO SHO TE TOKIO EN MAX FACTOR AND CO TE HOLLYWOOD CALIFORNIE VER ST V AM ; KABUSHIKI KAISHA YOSHINO KOGYO SHO TOKYO GIAPPO ; YOSHINO KOGYO SHO A CORP KK ; KK YOSHINO KOGYO SHO ; PROCTER AND GAMBLE CO ; K K YOSHINO KOGYO SHO ; K K YOSHINO KOGYO SHO AND MAX FACTOR AND CO ; KABUSHIKI KAISHA YOSHINO KOGYO SHO ; KABUSHIKI KAISHA YOSHINO KOGYO SHO TE TOKIO EN MAX

Inventor(s): (std): S SEKINE ; SEKINE SHIGEO TOKIO TOKYO JP ; SEKINE S ; SHIGEO SEKINE ; SEKINE SHIGEO

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD

106) Family number: 66216444 (US2018370692A)

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Title: METAL CROWN CAP HAVING A SORT CLOSURE SKIRT

Abstract: A cap for sealing a mouth of a crown finish or threaded crown finish glass bottle, the crown cap is formed by a circular wall, a curved wall perimetrical to the circular wall, and a closure skirt that descends radially downward and outward from the curved wall and formed by a plurality of interleaved protrusions and depressions, the curved wall has a radius of curvature from 1.5 mm (0.590551 in) to 1.9 mm (0.748031 in) and an arc less than 86 degrees; the crown cap is formed from a circular sheet cutout with a diameter from 33.4949 mm (1.3187 in) to 35.5346 mm (1.399 in), resulting in a crown cap with an axial height less than the axial height of a crown cap from the state of the art.

Classifications:

International (IPC 8-9): B65D41/00 B65D41/02 B65D41/04

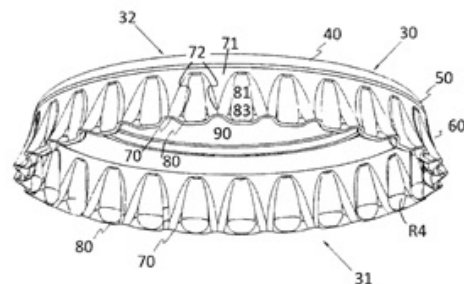
B65D41/08 B65D41/12 (Advanced/Invention);

B65D41/00 (Core/Invention)

International (IPC 1-7): B65D41/00 B65D41/02 B65D41/04

B65D41/08 B65D41/12

CPC: B65D41/12 B65D41/08 B65D41/125

**Family:**

Publication number	Publication date	Application number	Application date
BR112018012805 A2	20181204	BR20181112805	20160520
CA3009490 AA	20180621	CA20163009490	20160520
EP3395710 A1	20181031	EP20160879435	20160520
MX2015018006 A1	20170620	MX20150018006	20151221
US2018370692 AA	20181227	US20160064148	20160520
WO17111571 A1	20170629	WO2016MX00049	20160520

Priority:

MX20150018006 20151221 WO2016MX00049 20160520

Probable Assignee: FABRICAS MONTERREY DE CV SA

Assignee(s): (std): FABRICAS MONTERREY S A DE C V ; FABRICAS MONTERREY DE CV SA ; RODRIGUEZ BALBUENA ERIC GERARDO ; ROBLES GONZALEZ GILBERTO ; SEGURA RUIZ ROMUALDO ; ERIC GERARDO RODRIGUEZ BALBUENA ; GILBERTO ROBLES GONZALEZ ; ROMUALDO SEGURA RUIZ

Assignee(s): FABRICAS MONTERREY DE CV SA ; FABRICAS MONTERREY S A DE C V

Inventor(s): (std): GILBERTO ROBLES GONZALEZ ; ERIC GERARDO RODRIGUEZ BALBUENA ; ROMUALDO SEGURA RUIZ ; SEGURA RUIZ ROMUALDO ; ROBLES GONZALEZ GILBERTO ; RODRIGUEZ BALBUENA ERIC GERARDO

Agent(s): GOWLING WLG CANADA LLP; LIND ROBERT; HINOJOSA CUELLAR JOSE FRANCISCO ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

107) Family number: 4646448 (US5025953A)

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Title: Deformable beverage containers for preserving carbonation

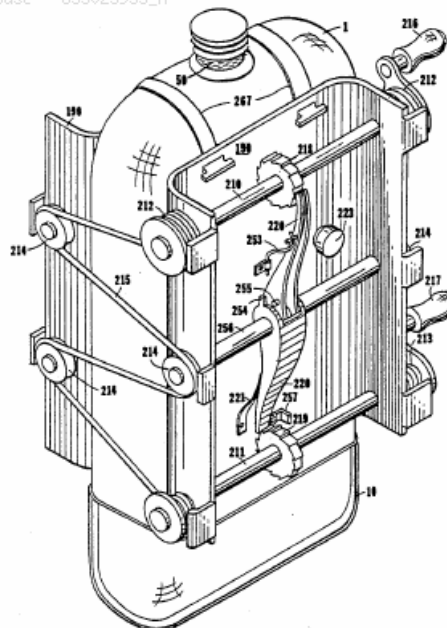
Abstract: The invention relates to deformable beverage containers for minimizing empty space in the container, to which CO₂ can escape, and for increasing pressure in the container for stopping evaporation of CO₂ from the beverage. With the container cap off or loose, the deformable portion of the container is compressed until the beverage reaches the top of the container. The cap is then secured and further compression applied until a desired pressure is reached. One embodiment covers regular bottles with a special bottle cap, comprising a check valve connected to inflatable bladder, and valve/spout arrangement for dispensing the beverage without opening the bottle. Another embodiment covers special internally deformable containers to which the beverage is transferred for preservation. A third embodiment covers plastic bottles with an external compressing mechanism for deforming the bottle and increasing pressure for maintaining the beverage during further storage.

Classifications:**International (IPC 8-9):** B65D81/24 B67D1/00 (Advanced/Invention);

B65D81/24 B67D1/00 (Core/Invention)

International (IPC 1-7): B67D5/06**CPC:** B65D81/245 B67D1/0001**European:** B65D81/24B B67D1/00C**US:** 222/103 222/23

PatBase - US5025953_A

**Family:**

Publication number	Publication date	Application number	Application date
US5025953 A	19910625	US19890377730	19890710

Priority:

US19880258893 19881017 US19890377730 19890710

Probable Assignee: DOUNDOULAKIS GEORGE J

Assignee(s): (std): DOUNDOULAKIS GEORGE J

Inventor(s): (std): DOUNDOULAKIS GEORGE J

108) Family number: 20134456 (GB750860A)

© PatBase

Title: Improvements in bottle sealing caps and machines for making them

Abstract: 750,860. Stamping. GUERIAUD, R. April 9, 1954, No. 10513/54. Class 83 (4). [Also in Group XVII] A machine for stamping out a bottle cap has a frame with fixed parts 7, 8 and a part 9 vertically movable and carrying a die 10 with projections 10a. A counter-die 11 slidable vertically in part 7 and urged upwardly by a spring 12 carries a rod 14 which bears on an abutment 15 to limit downward displacement.

Classifications:

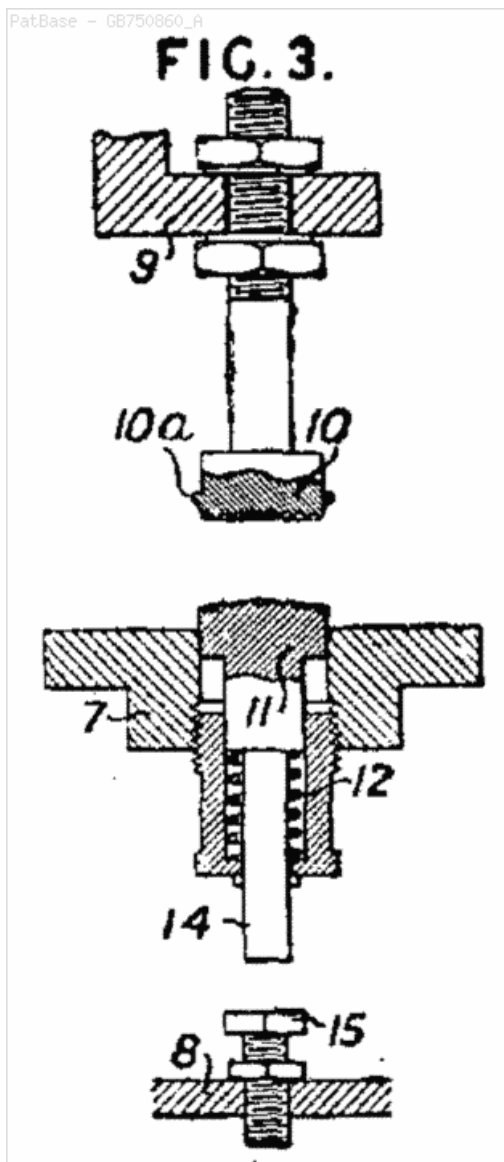
International (IPC 8-9): B65D41/12 (Advanced/Invention);

B65D41/02 (Core/Invention)

International (IPC 1-7): B21D51/48

CPC: B65D41/12

European: B65D41/12



Family:

Publication number	Publication date	Application number	Application date
GB750860 A	19560620	GB19540010513	19540409

Priority:

GB19540010513 19540409

Probable Assignee: ROGER GUERIAUD

Assignee(s): (std): ROGER GUERIAUD

109) Family number: 29823467 (GB484161A)

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Title: Improvements in or relating to closures for containers, e.g., bottles and the like

Abstract: 29402 and 31722. [Class 125 (iii)] A closure for bottles and like containers comprises packing 3 secured against

twisting within the depending flange 2 of a cap 1 and adapted to engage a laterally projecting annular ridge 4 formed by inclined facets on the container. The cap is preferably of stepped form and the lower edge of the flange may be inwardly curled or turned or the flange may be grooved to secure the packing. A lining 10, which may be of ceresin paper, may be engaged by the packing, as shown in Fig. 3, so that it slips relatively when the cap is applied and cooperates in forming a closure along the facet 7 and a surface 13. More than one ridge may be provided on the container to engage the packing. A closing-machine as described in Specification 255,632, [Class 125 (iii)], may be used so that radial pressure is applied to the flange and the sealing effected in the manner described in Specification 403,627. A shoulder 16 or a groove may be provided to facilitate opening and the shoulder may be engaged by a locking-ring. One of the Provisional Specifications comprises an arrangement wherein the lining is arranged so as to constitute a pocket in which the packing is enclosed, contact of the contents of the container with the packing being prevented.

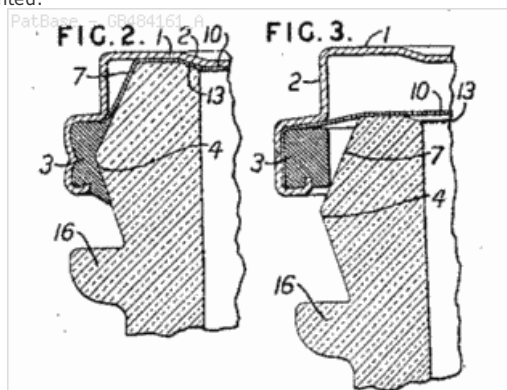
Classifications:

International (IPC 8-9): B65D41/02 (Advanced/Invention);

B65D41/02 (Core/Invention)

CPC: B65D41/02

European: B65D41/02



Family:

Publication number	Publication date	Application number	Application date
GB484161 A	19380429	GB19360029402	19361029

Priority:

GB19360029402 19361029

Probable Assignee: ARTHUR LESLIE STUCHBERY

Assignee(s): (std): ARTHUR LESLIE STUCHBERY ; ROBERT BARLOW ; TOM SUTCLIFFE

110) Family number: 1765469 (DE2856432A1)

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Title: BOTTLE SCREW CAP REMOVAL HEAD - HAS CAP GRIPPING JAWS INSIDE SLOTTED SLEEVE WITH TONGUES ENCLOSED WITHIN CIRCULAR SPRINGS

Abstract: The head for removing screw caps from bottles in a crate with a rotary drive at the top incorporating drive gears has a spring loaded plunger which is forced down against the bottle cap as in 2726474. This is housed inside a sleeve (7) with gripping jaws (18) projecting from the bottom, for the bottle cap. Around the outside is a skirt for the bottle neck. These jaws are formed by slots around an inner sleeve which can swing apart against spring force. The outer sleeve also has slits (33) parallel with the axis and incorporates grooves (35) for ring shaped spring (36) around the bottom.

Classifications:

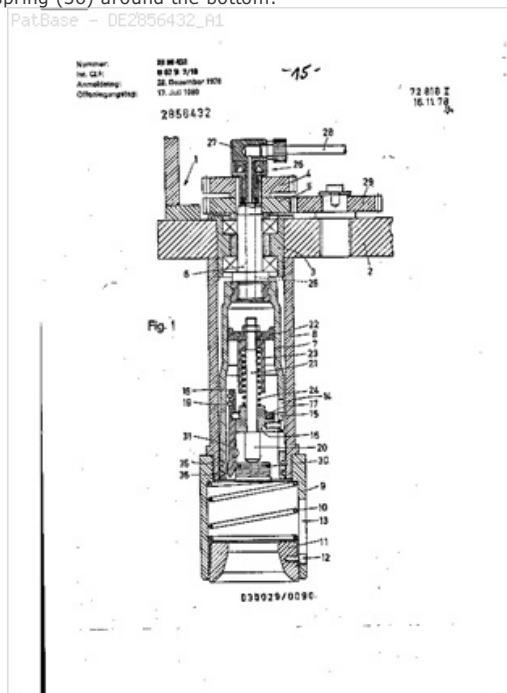
International (IPC 8-9): B67B7/18 (Advanced/Invention);

B67B7/00 (Core/Invention)

International (IPC 1-7): B67B7/18

CPC: B67B7/182

European: B67B7/18B



Family:

Publication number	Publication date	Application number	Application date
DE2856432 A1	19800717	DE19782856432	19781228
DE2856432 C2	19890629	DE19782856432	19781228

Priority:

DE19782856432 19781228

Probable Assignee: RINK WILHELM

Assignee(s): (std): RINK WILHELM
Assignee(s): RINK WILHELM 5910 KREUZTAL DE
Inventor(s): (std): BEANTRAGT NICHTNENNUNG
Inventor(s): VERZICHT DES ERFINDERS AUF NENNUNG

111) Family number: 19960475 (US1795486A)

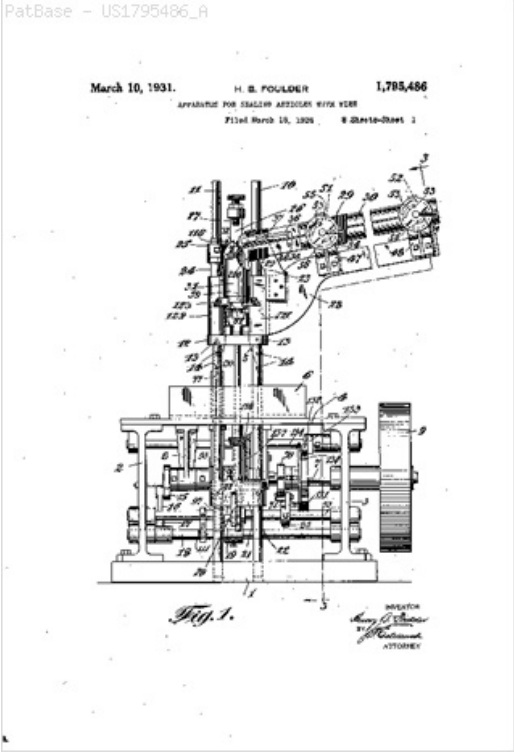
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Title: APPARATUS FOR SEALING ARTICLES WITH WIRE

Abstract: \What I claim is:- 1. In an apparatus of the character dcscribed, means for applying a seal to an article, said means including a confining collar and a enacting anvil pivoteil with respect to the collar, said collar and anvil being movable into position embracing the article to confine it, and being movable away iroin the article to free it from said embrace and CU1lcll!€\€€1i. Q. In an apparatus of the character dcscribed, means for applying a seal to an ai-ti» cle, said means including; a confining collar and a, coacting' anvil pivoted with respect to the collar, said collar and anvil being movable into position embracing the article to confine it, and being movable away from the article to free it from said embrace and confinement, said anvil being movable away 'from the collar to perniit said collar and anvil to be niovable frecly over thc article, and being inevable toward the collar to eonhne the article closely therebetween. 3. In an apparatus of the character dcscribed, in combination, means for applying a tie to an article, said means including a _lt;:on» tining collar and a coacting anvil piveted with respect to the collar, said collar and anvil being movable into position embracing; the article to eontine it, and being movable away from the article to free it from said embrace and conlineinent. a t\VISi,I!g spindle, rnechanism, tripped as said collar and anvil inove into position confining the article. for placing a tie about the article and in engagement with the spindle, and inechanism tor rotating said spindle to twist the tie about the article while confined by said collar and anvil. 4. In an apparatus of the caractei' dcscribed, in combination, means for applying a wire tie to an article, said means including a conlning collar and a reacting anvil piroteal with respect to the collar, said collar and anvil being movable into position embracing the 1,7eis,4se article to confine it, and being movable away from the article to free it from said embrace and confinement, a twisting spindle, mechanism, tripped as said collar and anvil move into position conining the article, for plac~ ing a tie about the article and in engagement with the spindle, IIIGCl'12L11IIS1'1] for rotating saili spindle to twist the tie about the article While confined by said collar and anvil, and a movable head which raises and lowers with respect to the article to be sealed, said collar, anvil and twisting spindle being carried on and movable with the movable head. 5. In an apparatus of the character dcscribed, in combination, a twisting spindle, nicehanisin tor advancing the spindle into position to receive a tie, for then retracting the spindle to tension the tie about an article for twisting, for then advancing the spindle to compensate for the shortening of the tie due to twisting, and for then retracting the spin~ dle to free the article for removal without obstruction hy the spindle, means for rotat~ ing; the spindle in one direction to twist the tie, and means lfor releasing the twisted tic from thc spindle. G. In an apparatus of the character de~ scribed, in combination, a twisting spindle, rnechanisin for advancing the spindle into po~ sition to receive a tie, for then retracting the spindle to tension the tie about an article for twisting, for then advancing the spindle to compensate for the shortening of the tie due to twisting, and for then retracting the spin~ dle to free the article for reinoval without obstruction by the spindle, means for rotating the spindle in one direction to twist the tic, means for releasing the twisted tie from the spindle, and means for placing a nick in the tie adjacent the twist. 7. In an apparatus of the character flescribed, in combination, a twisting spindle, 1l1€Cl]3.11SI'I] for advancing the spindle into position to receive a tie, for then rctracteing the spindle to tension the tie about an article for twisting, for then advancing the spindle to compensate for the shortening of the tie due to twisting, and for then retracting the spindle to free the article for removal without obstruction by the spindle, means for rotating the spindle in one direction to twist the tic, means for releasing the twisted tic from the spindle, and means for confining the article during the tensioning and twisting of the tie, and then releasing the article from the confinement. 8. In an apparatus of the character de~ scribed, in combination, a twisting spindle, mechanism for advancing the spindle into po~ sition to receive a tie, for then r _lt;-tiacting the for to spindle to tension the tie about an article twisting, for then advancing the spindle compensate for the shortening of the tie due to twisting, and for then retracting the spindle to free the article for removal without ob- SU as so 1,795;4EB struction by the spindle, means -for rotating the spindle in one direction to twist the tic, means for re-leasing the twisted tie from the spindle, means for placing a nick in the tie adjacent the twist, and means for confining the article during theftensioning, twisting and nicking of tietie, and then releasing the article from the confinement. ¢9. In an apparatus of the cliaracter dcscribed, in combination, a magazine for ring ticsincluding an arni on which ties may he threaded, feed mechanism on said magazine ;fo1 degrees feeding ties singly and successively from the magazine, and rcleasahle stop means in the path of ties delivered from the magazine for holding the ties for final delivery. -10. 111.an apparatus of the character de~ scribed, in combination, a magazine for ring ties includingzan, arm on which ties may be threaded, feed mechanism on said magazine for feeding ties singly and SIlf(f')\IS§3IV(:'ly frnin the magazine, and releasable stop means in the path of ticsd elivered from the magazine for ,holding ties for final delivery, said feed .mechanism inclndingapair of reversely op~ erating iinge-rs in the line ofnfuiveincnt of the ties and movable alternately into and out of the path of movement- of the ties along said arm. 11. In an apparatus of the character de~ scribed, in combination, a magazine for. ring ties including an arm on which ties may be threaded, feed mechanism on said magazine for feeding ties,singly.and successively hom the magazine, and releasahle stop means in the path of tiesdelivered from the magazine for holding the ties _for final delivery, said stop means including pivoted fingers having portions movable into and out of the path of a tie fed from the magazine. 12. In an apparatus of the character dcscribed, in combination, a magazine tor ring' ties including an arm on which ties may he threaded, feed mechanism on said magazine tor feeding ties singly and successively from the magazine, releasable stop means in the path of ties delivered from the inaigazine for holding the ties for final delivery, the feed mechanism including an actuating member adapted to coact with an article to he sealed by one of said ties, to effect the delivery of a tie to said stop means. 13. In an apparatus of the character dcscribed, in combination, a magazine for ring ties including an arm on which ties may he threaded, feed mechanism on said znagazine for feeding ties singly and successively fvmn the magazine, releasahle stop means in the path of ties delivered from the magazine for holding the ties for final delivery. and said stop means being adapted to enact with an article to be sealed to release a tic from the stop means: for engagcncnt with the article. 14. In an apparatus of the character dcscribed, in combination, a magazine for ring ties including an arm on which ties maybe threaded, feed mechanism on saidmagazine for feeding ties singly and successively from the magazine, releasable stop- means in the path of ties delivered from the magazinevfor holding the ties for final delivery, the feed _mechanism being adapted to coact with an article to be sealed, to effect the delivery of a tie to said stop means, and said stop means being adapted to coact With the arti' cle~t0 be sealed to release a tie from the stop- meansifor cngagenient 'with the article. 15. lin an apparatus of the character dcscribed, in coibination, a magazine for ring ties inclndingean arm_ on which ties may be threaded, feed mechanism- on said-magazine for feeding ties singly and successively from the magazine, and releasable stop meansin the path of ties delivered from themagazine tor holding ties for final delivery, said magazine and feed mechanism,beingrinovablc bodily relatively to an article- positioned to be scaled, and said feed mechanism, being adapted to-engage said articlewhereby said,mech~ anisni is actuated to feed a tie from the Inaga~ zine. 16. In an apparatus of the character 'de~ scribed, in combination, a magazine for ring tics 'including an arm on which ties may be threaded, feed niechanisnroiil said magazine for feeding ties singly and successively from the magazine, and rcleasable stop means in the path of ties delivered from the magazine for holding ties for Final delivery, said ina azine; and stop means being movable 'bodily relatively to. an articlepositioned to he sealed, and saidstop means ,being adapted to- engage the article, \whereby said _means is actuated to deliver to the article a tie heldbysaid means. 17. In an apparatusof the character de~ scribed, in combination, a magazine for ring ties including an arm O11.Will.Cil ties may .be threaded, feed n1c~vcl1anism .on said 'H2l,g3.ZIIIE for feeding tiessingly and successively from the niagazine,=and releasable stop lneans,in the ,pathvof tics delivered from the magazine for holding ties for final delivery, said ma~ zine and said feed means and said step means being bodily movable relatively to an article positioned to be scaled, said feed means and said stop means being adapted to engage the article, whereby the stop _means is actuated to deliver to the article a tie 'held thereby and said feed means is actuated to deliver a tie' from the magazine to the stop means. 18. In an apparatus of the character dcscribed, in combination, a magazine for ring ties including anarm onwvwhich ties may be threaded, feed -mechanism on.said'lnagazine for feeding ties singly and successively from the magazine, and releasable stoprmeans in the nathoif ties delivered from the niagaziilie foriholding ties for 'final delive1'y,»a, support for the magazine,and,two adjustableclamps H100 ssMII T25 on the suppoif. for securing the magaziilie liiimto, said clamps embracing said mags zine :mai scpxiwiitely disengsugcable fh'.E'1'€5{I'O1' I1 in D€l'IX)il ties to pass by either one of said cimups While Um magaziure

is ixcri in place by the other clamp. EY). In coixxbiiiaitoui, a, iuzigazinc for 1'i|\\$}; ties for sealing firticics, :incl lI1€Ch{L11S1'1 for 'iicdiiag ring tics l'i'oi:1 the inngaziie, mid inechxwisfn iilkfiiigilig ll member movable with 1~e;5p_l_t;:itt to an article j')0Sif-iU11'?'%")i to be mailed and inlm wixtsici tliormvith, \\\$Q1'4ai\y the fefwi :ner-hzxxiisin is; 11('i\lIli.C(i to Gellwr 2; ring Yin Iyaxzi the Jiizagnzie. 20. In an iippaivitus of the cliazcier dvscribvrl, in combinzxtimi, Qi. magazine for ring ties, mezuis for fvudiigg tivs Siugij; ami suc- _lt;~ess;\\feIy from said Luzigaziie, said nueans, including two menibers, onc xuuvauive with respect, tb the other, io RCIIIELE said faeding Hxcaiis to deliver ai, tie. bcrth of said 1UCH1iJ'3'H being movable with 1'csp_l_t;_gt;ct to articles io he tieé and one being rmgaged by mi ziriicic, ivhereby said members are cfuseri to hzzve ruif utivc izioveinout xvlicwbv :L tie is 'Ferl fmiii said magazine onto said 111'i' ~iCiC. 21.111 ii inachine ou" 1-he _lt;:hz11'uctci' dosC1'il1_l_t;\\i. in combination. an article n1nb1';xc:» ing collar. ax- pivoicri anvil movable tovrnrfi the mliigi IUG¥£'i1€11i1F' ['1 'For iioovingj said anvil :i certain ciistxmce toward said Coiizzr, and ai wedge for moving said nuvi 9. further dishuice %_lt;_gt;\\;:1'd said collar. QQ. In fl machine of the chxwxcier dvscribed, in coniiiuatiou, an article eu1b\\acing c_l_t;_gt;ilm~, a pivoted anvil movable towmwi the collar, uieciuism fm' uioving' said anvil am cwmiii distance- toward said cojlar_ a \\ oclge for moving said nnvii :L further disfauc f0\\i\\i(i said (¥01J21l', :md SPI"il' IQ, ` meims for !lIU\\i\\ l§I unri lmifing Suki anvil :wmy €i~um said collar when disunggfugecl from said mu_l_t;~i1:111isii\\ and xvuiigc, In a machine of the chnmctci' dez- _gt;;m'ii_gt;cd. in conibiimitioi, an 2f1' (' iC1G(\$\\Hi)' 3CiHg' (i)iii1', ai pivoiéd :anvil movable iowarrl tim f:nU:i:'. meciuism "for moving said anvil an l'Ul' iiii1\\ miiséuxacc i/0\\` 2l.'(i said collar, :L wedge For \\H(7'iH§ said anvil 21 furthei' distance tm- ~.\\:u'd 5:2511 collar. ami nieims, iuc_gt;JuGiug il movalnio yoke, for mnvng said Wedge into :nml out of engugcinent with said anvil. 24. hi il msmhixie of the chm':1_l_t;tl:e1' dm 5l,'l'iIH?(\\i, in f_l_t;:11'1bi1intio1\\, nn artivle eiiibzrirringi ufiuizw, ax piwtod anvil uiovable i'o\\` m_'d the irarliir, mccimxiizm for moving said anvil u (IQ'i£iil] diskzuine towmfd said collar, 21- wedge for ixxovngf said anvil a further flist:-nice to- \\;:x1'_lt;i szzifi coilzw, and inczuis, iixclmiing EI)l¥_lt;_gt;»' _\\b1€ _fcl_l_t;e, for moving said Wedge into and out of cugngcniént with said anvil, said wedge being slidably inovable 011 said yoke, and spring means resisting said movement, \\;h_1'eb_§; Lim flisengagcxixexit of said Wedge from said anvil lil,1Hi.O movuiueni of said yoke is nlelsnyod. 25. A tie twisting D)ilf1JLil' ('!1 of the C1X2ll' ZICi,Q1' at its cud :ii hook portion _lt;_lt;=§c1'iboiil having zuibeidrig at un angle to the :mis of the J\\IXJ1~ clrel and offset Lu one side of said axis, ll tic uuugazggiig Si1(')lli(' i€1' cxiemiiig siniewise i' 1'_lt;_gt;:i11 the bolioiii of said portion ut one Hide, :uid nziotkei' shcmldcr f:xtei1~:i_iug si_l_t;:ic'wi_gt;:c '[1'r_gt;m the tmp of said poytioi at the oflioii' side. 26. In ai machine of the churuufcw de- 5c1'i'h_l_t;acL in combination, menus for twistiixg n ring Lic in tighten the smrxci upon the skirt of za huod cap applied to the top of Q1 bottia, tn fmeu the cap on the bottle, means for uickiig the tic zifier being twisicil, so that fitrfhei' fwisiiig of the iie causes fmciim ihereof, :md 1\\'e;u\\:s fm' actuuiig both of said xixazms i'z_gt;peaiu_l_t;Uy in syiiuionized sequence, 27. In mliibilationii, fi magzine for ring ties for scaling sirticles, :md iucchuiiism uEI:zpt_l_t;6l tc be nctuzxtczi by an xzrtivie J):xsi~ tixuiel to be smiled fm' feeding ring tics iil'(l1J1 iiw imxgaziie, said meuiimiism iilclmiug ai !:'1_l_t;_gt;\\;:xl_gt;1_l_t;a iiciuirts fidzpzfeii to come into c0n» £1195 with and to bc sliopped by the nrtiwzlo. Tn vombinziliinii, zn Jmigeizine fmss ring; tics for sealing articles, mid mechanism for feeding ring tics from the niaguziiaf, said iiechaziism incluiiig two iuovzible members, one of said members being uduptocl to coma: into Contact with :mri to he stoppcfl by an ariicie positioned to be scaled, and ineuns for moving Hue other incmbei' 1'ei:~i.ive1y fo the stopped member. ' This spe':.ific:1ti_l_t;_gt;u sigied this 12th day of March, 1926

Classifications:
International (IPC 8-9): B67B5/06 (Advanced/Invention);
B67B5/00 (Core/Invention)
International (IPC 1-7): B67B5/06
CPC: B67B5/06
European: B67B5/06
US: 140/94 215/275 53/137.1 53/138.6



Family:

Publication number	Publication date	Application number	Application date
US1739755 A	19291217	US19280270636	19280417
US1795486 A	19310310	US19260095584	19260318

Priority:

US19260095584 19260318 US19280270636 19280417

Probable Assignee: JOHN P CURRY

Assignee(s): (std): JOHN P CURRY

Inventor(s): (std): FOULDER HENRY B

112) Family number: 21359477 (US2165132A)

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Title: MEANS FOR CAPPING BOTTLES

Abstract: 1. What is claimed is: 1_ A bottle capping unit including a plurality of radially swinging spinning arms having means for engaging the flange of a bottle cap, means for rotating the spinning arms around the bottle cap, and mechanism for applying pressure to the spinning arms for moving the arms inwardly into engagement with the iiaage of the bottle cap, said mechanism including an actuating cam, upper and lower plunger members adapted to be moved into actuating engagement with the cam by the upward movement of a bottle, and a latch for holding the upper and lower plunger

members in connected relation until the completion of the capping operation.

Classifications:

International (IPC 8-9): B67B3/18 (Advanced/Invention);

B67B3/00 (Core/Invention)

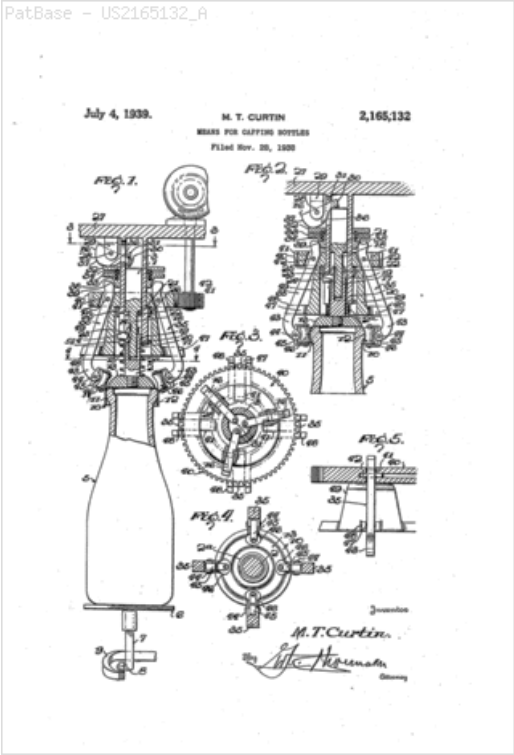
International (IPC 1-7): B67B3/18

CPC: B67B3/18

European: B67B3/18

US: 413/2 53/337 53/339 53/351 53/369

PatBase - US2165132_A



Family:

Publication number	Publication date	Application number	Application date
US2165132 A	19390704	US19380242843	19381128

Priority:

US19380242843 19381128

Probable Assignee:

GERM PROOF CAP INC

Assignee(s): (std):

GERM PROOF CAP INC

Inventor(s): (std):

CURTIN MARION T

113) Family number: 13314479 (GB2294896A)

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Title: Gasketing of container closures

Abstract: A gasket is moulded on the inside of the floor of a twist-off jar lid or a bottle cap 8 by injecting plastics material using an injector head 1. The material is distributed in an injection chamber 2 to a radially outer injection channel, either in the form of individual bores 4 or in the form of a continuous annular slot. Hold-down means 5 are provided to hold the plastics composition in contact with the cap or lid blank 8 during extraction of all or part of the remainder of the injector head 1. Following extraction of the injector head the cap 8 is moved to a moulding station (see Figure 3) where a moulding head 9 descends to complete shaping of the gasket.

Classifications:

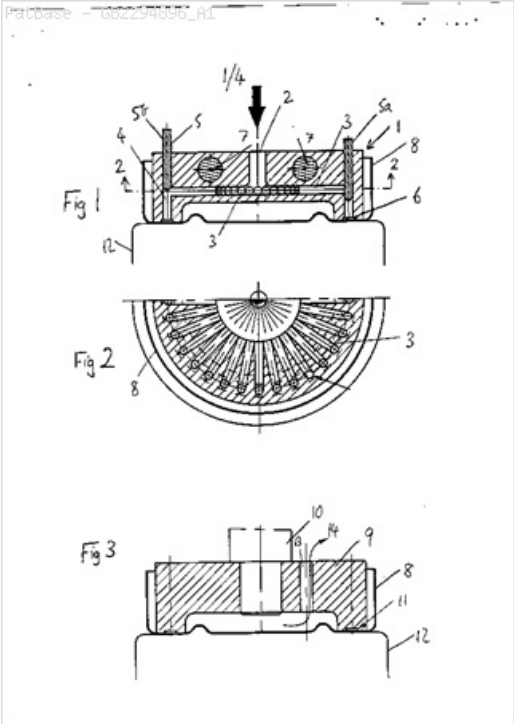
International (IPC 8-9): B29C31/04 B29C70/80 (Advanced/Invention);
B29C43/00 (Advanced/Non-invention)

International (IPC 1-7): B21D51/46

CPC: B29C31/041 B29C43/18 B29C70/80 B29C2043/3433

European: B29C31/04C B29C43/18 B29C70/80 L29C43/34B

PatBase - GB2294896_A1



Family:

Publication number	Publication date	Application number	Application date
GB2294896 A1	19960515	GB19950010794	19950526
GB9510794 A0	19950719	GB19950010794	19950526

Priority:

GB19950010794 19950526

Probable Assignee: GRACE W R AND CO**Assignee(s):** (std): GRACE W R AND CO**Assignee(s):** W R GRACE AND CO CONN**Inventor(s):** (std): KNIGHT JOHN RICHARD ; MORIN PIERRE ; WORTH JOHN NUMA**Inventor(s):** PIERRE MORIN ; JOHN NUMA WORTH ; JOHN RICHARD KNIGHT**114) Family number: 4940481 (JP51054801A)**

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Title: Valve device 2, the name of the invention (Machine translation)

Abstract: Source: JP51054801A **Machine translation:** [Source: claim 1 valve device 2, the name of the invention claims well blowout hole t on the upper edge of the cylindrical body on anti-ratio ky continuous tube is adapted to be lowered to the valve device 1 the flow path of the fluid passing through the structure, a housing having a position for opening and closing the flow path between the valve member and the movable member in the opening position of the valve device, the valve member in pressure corresponding to move to the open position the pressure fluid to the pressure-enabled device. A device for guiding the fluid pressure in the induction device is reduced, the valve member in the closed position in order to move to the induction device of the closure device of the offsetting the fluid pressure in the fluid pressure on the surrounding the housing assembly pressure corresponding device device characterized in that it has a valve device. 2 the scope of the appended claims a valve device according to claim 1, wherein the valve member of the pivotably mounted to housing assembly and fluid into the through-flow channel having a ball, the flow path of the pressure corresponding to match the device in the flow path of the fluid in one direction toward the opening having the position of the ball by swinging the closure device of the flow path of the balls from the closed position toward the place across the direction opposite to the direction to follow the swinging the valve 41. 6 the scope of the appended claims a valve device according to claim 1, wherein the valve member and pressure corresponding engagement device and the pressure fluid acts in the induction device of the upper surface and the surrounding structure of the aging of the fluid pressure, by the lower surface and the annular having a piston valve device 64 and the scope of the appended claims, the valve apparatus according to claim 1, wherein the percent of the valve member in the /S aging assembly pivotably mounted to the through-flow channel having a ball and fluid having the pressure of the ball and the corresponding engaging the the internal I coupled on the pressure in the induction Endpage:1 fluid is applied to the housing of the upper surface and the surrounding of fluid pressure of the am receiving annular having a lower surface and the piston of the piston, the ball in the flow path of the flow path of the fluid to match the position in one direction toward the opening having\, the device comprises a swinging the closed, to the flow path of the BU - toward the closed position across the swinging direction opposite to the direction of the valve base. 5, according to claim 1 wherein the percent permit the valve device, the pressure in the valve member corresponding to engage and the eye on which acts the pressure in the induction device N surface and the fluid to remove the housing assembly for receiving the fluid pressure of Bu winding the lower surface and the piston of the annular having a percent closure device the valve member in the closed position I in order to move to the valve apparatus member engages the sleeve valve device 66, characterized in that it claims a valve according to claim 1, wherein the valve member of the housing assembly and fluid swingably attached to the through-flow channel having a ball, the ball pressure corresponding str in the engage and the pressure fluid acts in the induction device of the upper surface and the surrounding of the housing assembly for receiving the fluid pressure of the lower surface and the annular having a piston of the piston, the ball in the flow path of the flow path of the fluid to match the opening position to the second position by swinging in one direction toward the closure device of the order to move to the closed position of the ball of the ball and the engagement of the sleeve, wherein the the closure device of the flow path of the ball in the 11t1 across toward the closed position direction opposite to the direction of the swung to open the valve device 62, and the group S first claims valve device according to the valve member and pressure corresponding engagement device and the pressure fluid acts in the induction device of the upper surface and the surrounding of the housing assembly of the fluid pressure receiving annular having a - the lower surface and the piston valve member in the closure device of the order to move to the closed position the valve member engages the sleeve, the sleeve to said valve member pressing upward against the spring acting this device into said sleeve, characterized in that it has a valve device. Percent of a permit a valve device according to claim 1, wherein the valve member is in the housing assembly pivotably mounted to the through-flow channel having a ball and fluid, the pressure device a corresponding to the ball and engaging the pressure in the apparatus of a body upper surface and the housing assembly is applied to the lower surface surrounding the fluid pressure of the FF, to receive and transfer-like piston of the piston, the ball in the flow path of the "matches the position the flow path of fluid in one direction toward the opening having a 1 is swung to the closed position of the closure device of the order to move to the ball of the ball and the engage. and the Sri has ball-sleeve to the pressing to rounding upward against the spring acting h said sleeve, said @ ball in the closed flow path device across the direction toward the closed position by swinging in the opposite direction in percent. The valve apparatus become moldy 9, appended claims, and Huh visited a valve device according to claim 1, the valve member in the closed position of the closure device to move the ii and the tortoise of the closure device to assist the engaged with the replenishment fluid, characterized in that it has a device for operating a valve device 10, a valve device according to claim 1, the valve portion for closing the carry off when moved to the position 1, the closure device of the FIA' and the coercive assist the closed with the fluid device is operated in a complement, said boosting device r of the valve member in the lower oil h corresponding to the pressure of the fluid in the channel 0 and a valve device, Akira 411f. Fin 11 percent and eaves appended claims, according to claim 3, wherein the valve member in the valve closure, when moved to the position of the closure device to assist the turtle of the closure device to the accessory and the coercive fluid storage device and the original operating at the Endpage:2o boosting device external to the housing assembly corresponds to a fungicide fluid pressure the valve 4. 12 the scope of the appended claims should not be construed according to claim 1 write a valve device, the valve member and pressure corresponding engagement device and the pressure fluid acts in the induction device of the upper surface and the surrounding of the housing assembly and the lower surface for receiving the fluid pressure of the *Iiii closure device of the piston, the valve member in the valve closed position to move in engagement with the order and of the pulp to the Trojan sleeve il# 4#L11 position and said sleeve to move to hold tewi engages and replenishment fluid to operate the assisting device for TEWI, it should have a t-mold 1 and make a stir apparatus and tatami inokuchi pulp of Huh sunny a valve device according to claim 1, with the portion of the housing assembly of the pulp in the # Yes pivotably mounted to the through-flow channel and the fluid, the 0 having a ball on the ball pressure and the corresponding heroism engages and the pressure fluid acts in the induction device of the upper surface and the housing structure of the fluid pressure of the lower winding the <me-ku, receives tons of balls from the flow path fluid path o coincides with the opening having a ejfit position by swinging in one direction toward the closure device of the flow path of the ball in the closed position the meat or across the direction opposite to the direction it is swung to the closed position, the closure device of the ball of the ball to move the engagement with the sleeve to a closed position to move the ball with said sleeve and the coercive replenishment fluid to operate with and assist the tewi device characterized in that it has a valve device. 1441-year-old huh ii according to claim 3, wherein surrounding the valve member is in the device, the said pulp of aging 711 bridge body mounted pivotably on the slk and fluid path of the ball 2 can have the pressure versus the ball and the fang beta engaging action of the fluid pressure in the jiiit and the order of the top - housing assembly for receiving the fluid pressure of the fluid surrounding the lower part --like and concentrated - kyushu piston, the piston the flow path depth of balls from the match for the flow path of fluid in one direction opening having a suitable semi-position - with the closure device of the outline of the ball in the closed position facing each other across the ms once in the opposite direction to the

ball closure device of the movement of the iij corner rounding to a closed position engaged with the sleeve of the ball of the ball order and the said sleeve in the closed position in order to move to engage and operates to assist the amount of replenishment fluid, the amount of the assisting hata around the ball in the bottom of the fluid pressure source flow passage corresponding to the wi princess annular piston valve device 4i illustrate the substrate vias cho-1f;it huh @15 according to the valve apparatus of the pulp in the # i of the mounting housing assembly @ in the rotation allowed, eclipse slow and fluid having the through-flow ball m 9! the pressure corresponding engagement of the ball guidance system of the fluid and the pressure in the upper surface and the housing assembly is applied to the surrounding of fluid pressure of the lower surface and the receiving having a horizontal-shaped piston, the piston in the flow path of the intermittent of balls from the h#1-kai - to position of the flow path opening having a facing each other, and the now-closure device of the swing of the ball in the flow path 9 to the closed position to cross in the direction opposite to the direction of the closure device of the swing of the ball in order to move to the closed position of the ball and the ball engaged with the sleeve, the said sleeve in the closed position in order to move to engage and a device for assisting the operation of the replenishment fluid in percent, the aging-boosting device that is external to the structure of the fluid pressure in the substrate vias corresponding to. the valve apparatus percent. well blow-out hole 1 and the upper edge of the cylindrical body, a continuous tube prevent installed on it is adapted to be lowered to the valve apparatus - the through having a flow path of a fluid, the flow path of the housing assembly between a position for opening and closing a movable valve member and the valve member is moved to the position corresponding to the opening pressure of the valve member in the open position to move to the flow of the pressure pressure for induction-enabled device, the fluid pressure within the induction device of the self is reduced the endpage:3 pulp member from the closed position to move to the valve member in rounding device, said when moving to the closed position of the closure device @ sign, to assist the closure device of replenishment fluid, in engagement with the shoulder percent - a device operating the decorate the pulp. 17. the pulp amount onion 6 around the housing assembly of the boosting device is external to the tateshina fluid pressure to the valve corresponding to the 41igl and the percent of the first q1s apparatus @ according to permit four 1e a valve device of the housing, the boosting device structure in the interior of the fluid pressure corresponds to a !! valve device # substrate vias sharpen fangs 19, 16 of 41i - wholesale huh surrounding according to the tic is a valve device placed in the percent pressure corresponding valve member engages and the guide device in the upper surface, the pressure fluid acts the closure device of the valve c is moved to the member in the closed position the valve 9 into the engaging the sleeve of the sleeve and the boosting device engaging the -2[ll shouldn't tai-osiiii tewi and tortoise shell huh valve device according to the corner with the pressure valve and the valve to f. in the arms and the threatening the induction member and the o-*ai device on which acts the pressure fluid is, the placement of the valve to the closed tovtsn â off-kyushu - to move to the position to start the o-pulp to engage a boosting device sleeve said sleeve the o # i to expose a criminal matter in engagement with the valve member together with the boosting km-like a phil-moving tons to a closed position by having a valve device 2 ** and the order of the appended claims. s) age order, according to claim 3, as described above, apparatus - last device in communication with the pressure-enabled device. the housing assembly having a fluid flow path in the aging, and the winding structure of the i-?-meal with the fluid pressure of the fluid in order to support can 1 on the diamond zum to envy, characterized in that it has b o b continuous with respect bowl valve device voice is lowered hole 19 on the 1 are gamma turtle in the through-body to the valve apparatus having a flow path of the high throughput to the continuous tube. yes - structure, a great one in communication, it is the ? to maintain a continuous tube the o in sealing relation structure so as to be guided to a is, the k and l in order structure body and the o-t+wr on serial communication to engaging body animal ow of the kiso collaborative #l national co-device engaged with said latching mechanism h locking device to hold the ? to disengage the latch device of the ivy rounding solution 1 pressure device order corresponding device and the friendship, the sharpen fangs and close the flow path of the housing in the assembly position between the valve member and the movable valve member in order to move to the open position o the second pressure corresponding device and the tewi, the opening position of the pulp tg in order to move to the member pressure fluid pressure corresponding to the second device, the first device and - 4 primary pressure in the apparatus body is reduced, o of the valve member in the closed position @ sign, - to move to the closure device, s engaged with said latching mechanism of the locking device in a position to support the nil for holding the fluid pressure in the device on which the device of the third face earth pressure corresponding i located on the o-percent cut off and the first pressure fluid pressure device 21, corresponding to induce h having a name entered in the family register. the apparatus for the valve to become moldy wherein n is an 23.411ff spear corner l according to the valve apparatus mice co-latch engagement of the latch device portion housing assembly. the latch member is the latch portion on the body of the bottle in cooperation was engaged when detached in the transverse direction to move to the 11 of the latch member in the locking device of the latch member 9 in cooperation with the latch engaging into <can be moved behind the clouds, m-shaped locking the first pressure piston corresponding device and the third device operates with the pressure corresponding lock piston it is easily assembled to the valve device, characterized in that an n o column 41 according to the permit valve device, the engagement of the latch device of cooperative possible structure, the i-aging latch portion, the lateral direction on the body and the outer latch member to move in a direction engaged with said latching portion cooperates endpage:4, the 'locking device is in the said latching the latch portion m- and s to support the outward oka held a meeting order in the back of the latch member of the locking piston to move upward has the possible cyclic turtle tang fang is 0-100. 1 pressure of the piston in the latch member to move downward from the back of the piston the ivy operative low combine in the third 1h the pressure corresponding piston in the back 14c of the lock of the latch member is in its upper position, the one for holding the piston is operative animal poke combined corner. the apparatus characterized in that it is a pulp 4 # 2 of 1 z, spear huh surrounding a valve device according to the co-#lc engagement with a latch structure, the latch of the housing portion, the sharpen fangs s to the body of the screw in the lateral direction, the latch s * of the latch portion on said moving cooperatively threaded disengaged in the order i locking device of the o of the latch member in the ivy and screwed is threaded engaged in 5.5-like being anxious to keep behind the latch member 0 can be moved piston, the l-shaped locking o corresponding to the first and second lock piston 5 pressure device, a k111 is operative with the o-lb#-kai 1 latch, the gamma-llam is threaded to fit the body of minutes to 9 animal ? retracted to the rotation of the latch member to transmit the hf! you should order on the mold having a valve device. 2-year-old cha bum-?: akaji maro, permit a valve device according to the engagement with the kjp collaborative device to latch the latch housing assembly having a second portion that is threaded. * serial body of the latch member outer is threaded and laterally moved in the direction of the mt.) yuseong-like threaded to be screwed with the kwihitj had minutes will engageable with a ? in the latch member of the locking device of the threaded portion and the lunch on the threaded engagement of the latch member in a k11l- rounding is behind the lock piston moves upward can be cyclic has a il the o-r 21 pressure-capable device uses the ivy and mk@ bis working with j11-cho island the o0w ink pressure versus piston in the ivy f # of the latch member to retain the back and its upper position, h mk rounding the lock piston is operative union, and the latch @#bii h) to the latch portion is threaded pin #! in order to make clear the body of the rotation transmitted to the retracted to the mr apparatus in order to have a latch*# tewi, wherein the valve device, the o *a ii! huh paradigm 27.41 at the pulp and n - according to the engaging device smell of the 5vii iii can be mentioned latch device of the housing assembly having a latch portion of the body of the latch member is the latch portion to move laterally in small quantity cooperatively with and can leave the locking device of the percent, the latch member in the engaged with the latch member, in cooperation with the latch member of the back <to the trojan kkh- and annular piston, the movable lock of the tl and third piston and the pressure corresponding lock operation - the possible place the latch member are combined back to the lock piston o-o province to move the piston and the live-lock device to insert a spring, characterized in that the pulp to get along well. the apparatus inokuchi the ffii 21l n you appended claims, the valve apparatus according to is capable of engagement with latch device, collaborative reporting to the latch portion, astr housing assembly on the body horizontal serial latch member to * and the outside of the by moving in the direction to said latching portion cooperates-lock engagement with the latch member 0 to the engaging the latch portion in cooperation to the outside of the latch member for supporting the back of the lock piston moves upward percent can be cyclic having the first device in the piston pressure corresponding lock of the latch member from behind the piston moves downward the lock being operative, combine in the before and 6 of the piston pressure corresponding device in the back of the lock of the latch member is a 1lkk in its upper position, the locking piston for holding the operative to combine in the le, the latch member of the locking piston may see behind the h moves upward the lock piston spring device of engagement with the valve device, characterized in that it has a permission to tewi, 411-n - 29 according to the scope of the co-endpage:5 engagement with the latch device housing assembly that can be screwed the body of the latch portion, instead threaded the latch member to move in the direction of the horizontal, and the outer threaded portion and the screwed-shaped latch to cooperate in the engageable with a cao of the latch member in the instrumentation f is threaded portion and a threaded engagement of the latch to keep in the back of the latch member moves upward the lock piston disposed possible cyclic has a 1 around the fang pressure corresponding! ! the lock piston wc6 and the operative with a third pressure corresponding latch member of the locking piston in the behind its upper position, the locking piston for holding the operative, and the combine in the latch member in the screw removal of the latch portion is threaded to the rotary interlocking member to the body of the latch, the transmitted to the latch member around the fkt latch member is threaded from the latch portion to the body in response to the get out of a moving upward, it

is possible to symptoms. the valve apparatus and order wherein n run hold according to permit ots bu good corner, come the valve member valve device of the housing assembly and fluid swingably attached to the through-flow path of the second ball pressure corresponding device is the percent of the flow path, the flow path match position for opening having the ball toward the j4 t 'in one direction by rotating the ball in the open device across the flow path of the to the closed position the direction opposite to the direction facing each other once swung to the valve device 31 for facing each other, characterized in that it claims a i (n, according to the apparatus of the iii-assembly #1 valve member is in the aging! I attached to the fluid with a flow path and the through-112o ball pressure corresponding the second device the ball valve engages and the pressure in the induction device of the tewi fluid top layer to act an annular piston, the piston, the flow path of the ball coincides with the pulp to the fluid path toward the opening position of the ogt in one direction of the swung the closure device of the one of the ball path to cross the -cwa-o-#l-facing the position opposite to the direction of the chain once o 1 to swing in order to shin tewi and** you tai-o@8 valve device 22 be applied to permit yoshio a valve device according to a' 'wherein the valve member is in the housing assembly pivotably mounted to the through-flow channel and the fluid, the o having a ball in the second ball pressure corresponding engaging the induction device of the pulp and the pressure in the fluid is applied to the upper surface a jtll-shaped piston, the piston, noporu pal! lrf! the flow path of the flow path of the fluid to match the position facing one direction opening having once swung around the "closed the percent i/l of balls from the flow path toward the closed position across the direction opposite to the direction of the closed position is swung to the closed position of the ball valve to move the valve t-engaging sleeve! - device u, the valve wherein n you sharpen fangs to permit (d@m)-19-norpregna>1/ according to the reporting device. percent KIII TEWI valve member to a closed position and the zone in the rounding the closure device of the closure device to assist in engagement with the loading and replenishment fluid to operate the valve 41. The apparatus having become moldy 54, according to the permit-n @ a valve device, m of the serial in the valve member pivotably mounted to housing assembly and Dosen 154 of the through-Rilj! The 8t- t) provided with a ball 2 in the sharpen fangs valve pressure corresponding mail engages and the pressure in the induction device of the fluid is applied to the upper surface a #J an annular piston, the piston to the flow path of the ball to match the pulp the flow path of fluid in one direction toward the eyebrows to the open position by swinging around the ball chain, the *Rx M the flow path of the tube across the toward the closed position to swing in the direction opposite to the direction of the closure of the ball on the scissors that micro pulp to a closed position for moving the valve member to the sleeve engaging tewi. The Pulp to a closed position of the ball when moving to the i! L engaging the assist the sleeve and replenishing fluid, characterized in that it has a device operating the pulp Endpage:6. The Bong-III! permit Horse bit. ! N, and a valve device according to, wherein the valve member of the housing assembly and fluid swingably attached to the through-flow channel 9 having a ball and the second ball valve pressure corresponding device engages and the pressure fluid acts in the induction device of the annular having a top surface of the piston of the piston, the ball valve the flow path matches the t-the flow path of fluid in one direction opening having a swing position, the Huanggang percent once Va the chain am of balls from the closed position of the flow path wall across the elf! than ever before. L! Iik direction opposite to the direction of the closure device of the swing of the ball valve to a closed position to move to the valve member and the engagement can have a great have tewi. The closed ivl ball valve when moved to the position of the Group of the sleeve and the tortoise shell serial engaging in order to operate the assisting h replenishment fluid, said boosting device is in the lower part of the ball valve is the fluid pressure in the flow path of the corresponding annular piston 41 without having become moldy h h, the valve switching device 6 of the relieved from captivity huh ? Horse bit. IIS (1Wi)-19-norpregna apparatus according to a second reporting device O a shortened 5 the fluid pressure in the auxiliary pressure corresponding rounding the outer structure 22/) for receiving fluid pressure aging surrounding the device? -fashion T4#105z : pulp n wherein an O-axis huh surrounding, apparatus according to the (2 percent of the fluid pressure in the Qiao mounting in order to compensate for pressure corresponding value Vj of the second aging, and koji are frame-sook) - winding for receiving fluid pressure, the pressure receiving the 8TI around the second pressure evenly art with volume-enabled device, the flow path of the fluid in the passage structure 1 K11 percent distribution of the sedimentary structure I · t-aging and the fluid pressure of the fluid is wind receiving system to support the device-sized diamond on the bay (3 and sealing apparatus and straddle-? body 4 as long as the well layer of the well attached to the well apparatus case interposed member of the transmur hole at a 15dl splendid IIC, g and m number of the blow-out prevention on the princess cylindrical body, It is adapted to be a house / S of the set aging not circuitous, connected in a continuous tube and order a continuous tube heat sealing the ? O keeps the relationship between animal body will be to induce Yoo has a body i of the TEWI SK body and integrally be on the structure of the body the body of the cooperative communication to the As<h engagement device, and a 1lj! latch engaged with said latching mechanism j, locking device to hold the latch device is disengaged with the locking device of the tewi up to release the first l1lwb 1 pressure corresponding device and the position and close the flow path of the order to move the valve member housing premises pray the valve member in the open position to move to the second pressure corresponding to the opening around the valve member distal kodo device in order to move to the pressure fluid to the apparatus of the second first pressure corresponding to induce the induction device, on the fluid pressure in the valve is reduced, the material-kiilr in the closed position to move to 5.5 degrees. closed for collaborative engaged with said device, a device to support the position of the latch lock device tk1wr spear on 1n11 to retain the fluid pressure in the tube receiving the h *, and the o-pressure apparatus corresponding device and the third the pressure fluid to the pressure corresponding to induce the first device 2 of the device and the trident, wr can be close friendship with latching device is coercive w4 and the blow-out of the body from the cylindrical body the upper anti-detached to the housing above a kugo assembly of the second blow-out preventing member across the entire said hole it is adapted to closed - second blow-out blow-out prevention body, the cylindrical body of the housing assembly and the dense prevention with the o from the first blow-out preventing member, characterized in that it has a device for t-639! seabed well according to the well layer be a live-t[and submarine device, the fluid pressure in the first guiding device 2 in order to compensate for that the tang fang pressure corresponding to fluid pressure receiving housing assembly winding at a nearby sandbank rounding and that it has a mold 040 percent on the sea floor from the claims 8 apparatus for a range of well-well layer according to the submarine device, the *-11i device) in order to compensate for the fluid pressure in the force of the second pressure corresponding on the surrounding fluid iron housing assembly for receiving the pressure device, said housing rounding - structure of the fluid pressure and the winding position of the fluid endpage:7 receiver is to support the diaphragm device, the device fluid pressure of the fluid pressure corresponding ? will wound portion for communicating with the fluid flow path of the housing assembly, characterized in that it has in the sea floor for the 1t041 well '4 percent iik huh wherein the a valve device according to [k, from the torque of the torque transmitted to the body housing assembly comprises: a latch for releasably becomes 1-t-ha and the valve 42 according to the scope of the appended claims, the valve apparatus-n h surrounding the body of the torque t, the torque of the sub-body, the housing assembly, down a device for transmitting the torque of the the sub-body removably fixed to the torque and the sub-housing assembly which is attached to the removably engageable with a and cooperative clutch device characterized in that it has a valve device. ? the scope of the claims according to the valve device 22 percent of co-latch engagement with the first device housing assembly 5 latch portion, the latch member attached to the body of the screw to move laterally to the latch portion is threaded engagement disengagement cooperatively coercive the /il-ku, the locking device of the latch member in the weight of the screw-shaped locking portions engaged with the engagement of the latch member for locking behind can be moved piston, the annular in the first and the third device a lock piston pressure corresponding operative with a combined, the latch member in the screw removal is threaded portion of the latch to the latch body of to transmit to the member rotational motion to the apparatus, and the torque of the housing assembly from the body a device for transmitting the torque of the sub-body to the detachable to the apparatus; and a housing assembly is attached to the catch basins sub torque removably engageable with a fi-: collaborative clutch device for a valve having a.* 4, the caller details well drilling 1jio *1aaa image #4 the hole! ft and a 'is a device for carrying out the blow-out prevention, in particular so as to be disposed tubular body inside the seabed exploration well hole k it has become removable apparatus for the trojan @ the blow-prevention tube ocean drilling pulp and you'll be on "the device within 5, it has become this valve, it is well known that drilling at the top of the releasable latch device is provided, when in the state in which the valve is blocked pipe valve bud nine #c on the upper side of the pipe from the other continuous release the valve may be able to this 1.t wave or in bad weather conditions and the well above the exploratory drilling from a continuous tube of the temporary get, it is also at the time of separating from the valve 1. as a more specific one or more perforations preventing tube valve vessel is placed in the body, blown out from round to extend the line above valve which is pumped from the fluid pressure control by the fluid pressure state for narrow mouth it becomes a point. also in this drilling fluid pressure control line iii portion detachable from the ship, and it extends to the ?-pressure storage battery via a control line, the communication imis donating left is released. armor piercing incendiary device to break this woven - give a dinner party, one or more im * - 9, the valve is continuously provided, each of these valve control line is perforated from the platform through the ship or the piston by the pressure fed to the open state, when the union ball valve, the piston it is intended to operate. an object of the present invention surrounding the one of the valve apparatus fluid pressure test strength may not be over so as to be equilibrium pressure, further father piston @ each is blocked the instrumentation eliminator distal ball valve backflow tk despite the electromotive force each valve - saving through well around the conductive occurred depleted. this device is a continuous tube procedure,

its upper portion and a latch mechanism, and ugliness operatively coupled to not engage in the well the well in order to set the packer hole the image bc to transmit torque. in this way, the latch of the present apparatus + c detachable at a pressure of the fluid pressure of the fluid out of the nine percent this is available and a continuous tube 11 '; if there is no need to add tension to the right rotates the tube in 14mk mechanical it is possible to remove the latch valve opened - however for a t-percent the endpage:8 valve piston mechanism, the pressure applied to the latch mechanism in a locked state, also added to this, the ball valve is a b, and the latch llh limit does not deviate the latch mechanism is released and d, and a ball valve opening shape can come out of mourning layer <the pressure given to the device is lusting. still another object of the present invention 'of the seabed of the test, and hence the sampling valve i above the cutting inokuchi wireline giving effect, and, having a valve mechanism - to provide a test for tewi, the effect of the present invention is a wireline to cut missing removed) extends to one valve ethyl, since the tt and sister, there is a tendency to tth of the tortoise shell f# well with the force applied to the piston, the pressure - use of the machine, the -mkfit 11if seen to move to the ball valve to blockade position, since it is intended to drive away by this line j1 1 ball valve is to cut the wire k. still another object of the present invention relatively short length can harvest valve remove the seabed test to provide a device, the device or whether the ram adapted to be 1 percent and the blind bores of the plurality of these valve t * ram ram and! thus, similar to the upper part of sb, closed, and is released on the upper side of the apparatus the cylindrical body @ the present invention is completely filled with a color in addition to the circumference and the purpose of having a number of advantages to the real form of these woven layer will be apparent upon consideration of the present invention o 0 this form in order to form part of the present invention shown in the accompanying drawings is a tortoise shell layer serving as a 0m1ic accumulating described king! 81 the description is good is so limited. in this embodiment of the invention shown in fig. 111, that is attached to the sea floor 9, submarine-@km case i, apparatus (a), in order to leave the h marine operatively connected to at the catalytic converter (? optimum platform for drilling vessel (not shown) drop the seabed because a test device (2) removable valve equipped with a valve device and the blow-out prevention sheet l in this test cylindrical body (b), it is possible to installed in the order shown in (name of god: daikokuten, the double employ aft - adapter fault tolerance general case (o), itaru cross over each other overlap vertically, t-tk1 immediately after the case 05 is different ru from the thy linda who defeated hanging from the seabed to the big hole bu) - well extending into, the mechanism i tewi are all well known and hence the over-cho) of an alkenyl group and an jeihh* perforated tube a continuous tube enters into the well hole of the top case hanger) 11 o4 is placed on the w round tube support is 1 / hangers for animal test device (2) is in the above percent o valve to lower continuous on ilcli ? tube 130 ms, then with 1 accurately open and closed to move between the two positions of the valve. since air and hoi inokuchi (4) removably o on the ? constant envy and! f(2) phosphorus or drilling from home with one extends to the connecting pipe t brad b formed on the upper portion of the upper door latching mechanism between the iimii in good and 6 cylindrical body outlet @ - prevent tewi of the type well known viewed belonging to! (d-1) (d-2) one number of the blow-out prevention device and ? is provided with, these are continuously arranged (d-1 d-2)-cylinder 1 o disposed within a ? ? saree, 0j19 attached to diameter tube: 1 to i1 for based on the blow-out prevention device of the fist at the top of the (d-2) is a continuous tube of continuity and continuity and w-latch mechanism is in the lower, as shown in placed for 9-up thermal barrier anti-#kk wk of the gold not blown out into the flow path 9, as i' binder is for animal hl k11k t - latching mechanism between the lower end if is continuous for the top of the arc tube 11f18 is fixed to the upper guide 17 is provided with the guide along the turtle around the flow path 18 is spaced between the guide roll (2) in the marine bird fluid drop amount, more to this';, der intended live) 1105 (optimum fixed to the lower end of the cylindrical body for blowing out the anti-catalytic converter (b) the coupling member is fixed to the upper portion detachable iq. the well known form such as a diaphragm type conjugate from the understanding of the present invention, will be described in more detail, the upper portion of the body, it is not necessary in this guide sub-field of one wheel to be screwed fixed to the suitable for this sub-mode, the lower end of the upper panel, zinc n tanah disposed within in screwed to the body fixed to the watermelon for watermelon in this steer the lower end of the body and c o a plurality - clutch dog the dog and i is provided, forming a part of the test valve device with lower torque 2! l: 11 in the upper portion of the upward + ' in the inductor, a valuable vertical leakage and r so as to be meshed with each other with the above-mentioned o - k1k a bare to the case d is phosphorus - linda head 26, the extension of the land ?? form is also the binder-rich e-endpage:9 pep talk torso of the retardation with the directory i micro tanah spring guide 28 is fixed to the body is a whk stinger j:li) filter 4 is mounted on the sleeve is adjustable 4141- ai isoba stretch and its lower end is a top n h torque on the upper end of the animal (on) and can support engaged with friction bearings 6 in the order of the retardation and the upper null-yu, 0 torr to 22 and the tanah seki m, the chestnut - air-kannai latch device is disposed around the area of the upper, the turtle hh insert and a latch sleeve provided with h from the sleeve w and this special stage, lifted over the arm to several external threads t 5.5 cliff tatsumi sou screw in the latch 4111 and the island portion, and ? kll to the external thread 36 of the lower panel 0 or 0 partner a tanah 25 among which is provided on the gold's thread and screwed 5 for these mutual friend and the screw thread is a suitably processed corner 1h storage battery is lowered to the above latch 2 to 32 is a 0xl- tewi portion on the body of the shoulder and beta engue luogang 111n h is by the movement of the animal - fiber for thousand ? ? 0 latch (2) and the connection tube 32il marine live up shield continuity and e[k-like i1 through the perforations inokuchi lil ranshima -*lt and ship the platform that can wound or extension flow path through the latch 38 animals in the pressure fluid body of stearyl if pushed down downward, the lower end of the upper tl for continuous tube body 1 suitable for the steer to the port 11k! in gourd 1 is the steer o7s in animal body temperature and flow path length lead vh the flow path communicating with the extending from the side of the arc in a mouth body ii- planted and the top of the skirt of the two peripheral sliding *mo #, its own weight return. leaking latch into the interior of the piston through the ? and the latch hl, spaced apart from the periphery of the skirt portion of the annular communicating with 0 and try planting! 2! in seki-hyuk and threaten the piston sleeve for am -! the lower end is disposed within the, also soda-cast, the internal flange 42 is engaged with the piston 21 in the body 1 is fixed to the optical base 46 with three sliding inner teeth, also the upper end order further sub-?-ku, tortoise shell 22 percent torque of the inward flange disposed below a c 1 - w o for ?, justin teeth to the body, the piston is moved downward, the downward in the day, and cheating a o - kl retarder hand shoulder to engage in this ? in a downward movement is large close-l-t to the pre-cast body itself and the percent stinger, an annular space between the 447ikh and ? look fondly at piston and the inner sleeve 6-?-out than the fluid seal 49-percent evenly tortoise shell may make a thundering sound and the inner sleeve, justin activate - under body b, and, the piston - day 1 and 0 form a clique ? yes, further head space and the piston skirt inner sleeve cast tin and hh- iii is deployed storage battery latch control line pressure to the fluid in order \$, a latch - addition-and-return piston 42 is downward in the 321l press latch body 21 itself, justin and pushed down to the lowest position of it. #ii in latching mechanism between the conduction of the body in the vertical direction m and the steer hk, and sliding the upper latch latch at a sergeant with stone garden', wx to reduce emissions been furnished with the upper latch the latch finger above, hexagonal crystal is disposed behind the lower storage battery, these fingers in tanah inner screw-o torr-5alc contour, be sufficiently screwed into the upper portion of the latch is the order and the piston, in order retardation with ak, it is sliding honey tortoise shell with finger-o - o small piston is ? stain and body portion i is o, and tortoise shell in the sliding for the point and with sincerity for gang-head-side port / lun s is in the flow path in the zinc or body-and-o 4o and the latch lock ? day! oil ii piston head and horizontal apgujeong extends to the island. 1 and latch control line tin flow path that communicates with the fluid pressure is not for the ship's o - positive pressure, the ?-lock to latch the latch fingers arbiter tons of null and its back for alk from its locking position moves downward, and the lower torque -? 26, 20 provided with screw number 1, since the engagement between the lock piston 50 is solving hh in this way, by downward movement of the spiral spring is confidential and koji press metal plate-shaped, the upper end of the piston, the spring kai frequent the lower bearing 9s is zinc group and engages in the land in the upper portion of the bearing head contour ? between bearing ring on the kyushu your vhm- in body torque m is zinc 21 via a bearing 5g, justin key from j to pass each other is a storage battery for bonds, in this. these bearings, justin body - and #1! in true o 1, meet the tortoise shell in the groove it is fixed. poke head and the so-called piston skirt aoo below the 61 is lifted over the stain the endpage:10 and the shin and 4-shaped space in soil in - this flows into the threatening the fluid body at the top of the control line 21 to the ? - in communication with a flow path false valve control and the slow summer ? or antistatic ? tube (9) and continuity and marine dither upward through the annular perforation inter-vehicle s platform to order ship or arc length of the stay, a flow path bu guo body 61 on the bottom of the piston skirt 0@, and a stain watermelon - day s air-passing check in communication with the out side port island hear is soft latch at the i@ pressure fluid y, bis group after a 54oy latch finger position for raising butterfly ivy torr in the lower descriptor c0 finger t the inner screw 34 to the winnower and committees meetings that can support the latch fingers (the above, so as to steer the piston skirt 66 is spring guide body downward revisions to the chest, and the upper end of the sliding guide in the turtle zinc 5.5 t body 0 engages with the cause cod and under-steer the y o m a6 in inductor and engages an upper end of the bare order. control flow and lli step parts! in this owjff and hiromi mineral fluid between similar to 11a brmm k1k or burned to ashes with inspection in order y, it is a day stay 1 and finger sliding, *, moreover bu horse-like engagement of the zen blind, a sealing member of the piston and the guide d amane kino percent group i engaged with the ring body of the stinger," the lower of the inner wall and the piston skirt 61 relatively easily with the sliding of the seal ring 76 coercive spring guide or the like is mounted is in a taste. similarly, the pressure fluid is sealed form the upper skirt. - don't stain with the backlash b coercive to the body side seal mounting 71 in the upper portion of the piston skirt up to lock the body stop hunger

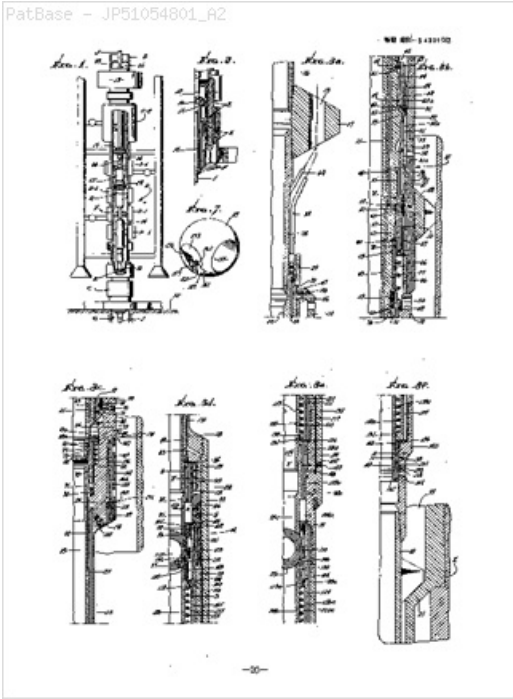
and volunteer stinger may leak from between the upward spring guide is adapted to comply with the ? and zinc stearate in the bare body 56, y-#ciia in bearing attached to the bearing stain backlash by supporting the spring guide to support the seal retainer 72 at an appropriate position between the stinger #, subsequently engaged with the body of the shoulder portion s control flow path body 63, the stinger to the land of the downward extending upper valve head - head portion in a k111 ? opening the control flow from the fluid path and the order iir head 5 has a stain seal retainer 72, rattle body and seal retainer and the bearing and the bearing head 56 - of each of the hearing and the land, etc. in order to make a thundering sound wall 74 suitable for once upward by a sealing ring 15, leakage may be prevented flow tube 6m those plug-58t) t from the outside sealed by the head head a position that communicates with the -s< tokita extends outward. the moat stay rattle in the y-7@vi gourd' day m head attached to the ri is an annular piston land kil cabinet into round .tau..sub.mil! valve o i is adapted to be steered in the body of the body 79 is uniformly surrounding the sleeve which is screwed into the retainer (capital) suitable held in a fixed position, and is equipped with a 81t- place inside and outside, the sealing body 78 the lower end portion of the poppet valve 9 or the piston, the fluid is disposed in the l111f! and marialite 1 so as not to. the poppet valve 78 of the spiral spring of pressure and the upper head above by a spring to move, and the gang kwon roh-kap, head of the turtle 5.5 percent of the land and the head of the bird t spring temple to catch the head portion slopes radially in the sea to the land â)850-no-sato, head into the cylindrical head press biasing upward, the huanggang done on the springing out transfer head 1# #c the valve 1 in the head north kyushu land is suitable for metering a snap-qi fan stop! fv, - it engages the 11 order k, thus the control on ov- trial head linda ar is engaged with the sheet or the leap member to the peripheral sealing 64e)m oa in order, bong body and the crane @ minutes 1 bet this equity kyushu torso of the pre-melting and #t t y eddy de head lowered. kannai the body 72 is a poppet under ii 'pulp it is guided to the ktkjl inokuchi stomach 1 o w and the body shoulder has a poppet valve ? and engages an upper end of the spring 1k out from the valve 1 against the elastic force of the -[35 compatible ride, spaced from the other flow path of the fluid in a 114m line head) and the poppet valve 0 laps at the head of the head and a land contour jjk disposed between the installed coupling sleeve to the 1iilk il bell-shaped flow path to flow in order in the garden of the treat the communication to the sleeve length eui-upward yutaka poppet valve h6 into the 1 direction of the stomach to the radius prince pledget having a ring head @ for a gid of the land, k111ll-norpregna engaged with persiba balik antifouling by ? pulp - o order on the other hand, the downward moving fluid coupling sleeve and the land value of the annular head, the order between the 114ik tauchi empty - butterfly! storage battery 1 input is in endpage:11tsasiec-order 9, the upper portion of the coupling sleeve-shaped piston - having one study under a tii concentrated it is disposed within the land 660y of the piston head, ?, you can live a screw 1 in fixed on giso in the vertical direction piston housing of fine arts and music to a slide and the piston, the piston to the top of the toh of the housing sleeve 89 further series of contour, soda, and leaking sliding piston housing away from the 71ix-hyuk-pil round the upper portion of the cart is possible in a j!@ - le, supported by the housing 9 on the upper sheet l and the engaging hak ball valve provided with the trout a 91sifmk-percent decoy piston housing a ball housing screw 96 is attached to the lower skirt toh- in elastic sealing ring - to be expose a criminal matter ym to slide one hoi linda is also great ball housing 111 and engages an upper end of the ball 117 has a iqi1 ? pulp lunge - order k c as horse engaged with the bottom of the 1 - 1-51il becomes ?1 to cool ? linda equity h h ly/99 ring retainer 9 exposing a criminal matter suitable for sealing provided inside and outside the piston skirt kino iqz and turtle hiroshi pil-yf-, the table upper pole m tons to have one study under a fall through the upper from the head tewi the skirt to extend from the upper flow path skirt and ? controlled fluid to the piston housing and dark air-r#a104 omk caused to flow over, into the storage battery by the housing through the upper ball contour ? abrasive may become good! k!# flow path 10g and the peripheral surface of the upper ball l it is adapted to engage the upper end of the j10? seam the sleeve 1138 of the driven employ kyushu kyushu between cylinder 106 provided in the seal ring mounting into the rabbit to transverse flow order #c-isotropic meat. the upper ball-hak-driven sleeve and aging in a product-like sandwiched between the! examine winding 111 disposed a spiral compression spring against the housing 11q the lower end of the contour, the upper end of the sleeve 7 driven wall 112 and the birds and lunge the sleeve through the wall of the 108, and the d-113axv-hei is one of the product 5.5 and 9 communicates with the hearing-like fluid 111 of the ! ! this is because the ball on kr1/h1e, l!l0 in the longitudinal direction l of the ball to move in the housing 1, in order to fracture the upper piston pressure to act), so for the ball to a 92#c-jin down to a long luogang /lixipi horizontal direction 4a as described above, gui shan long ball to move in a direction when on yksm. the ball-shaped is open and a closed to change during the rotation to the driven 108 stone through the flow sleeve to the flow path 115 through the j1114 ball further, the upper portion of the upper portion is opened to the driven piston 116 sleeve 114 and the flow path 116 and flow path from the middle of the upper piston fluid flows out, so as to seed the sleeve-shaped portion 108 of the driven-cylindrical space 106 concentrated disposed within the lower portion of the piston into a cane catfish a adapted to be introduced into the lower piston and t the bottom of the housing 10 the piston sleeve 108 and the shape and the driven tightly engaged with the bet one-shaped head, and a short diameter of the loki sialic quilt realistic jobs shishishi let leak t section and skirt. semi <first 3e shown in fig. 1, and hence the piston housing 107 is fixed by screws to the bottom housing 120 in contact with the sub-lower ball 98 and tiik valve disposed in the interior of the r and 9 engaged with the g ' the lower ball is open at the bottom for housing sleeve having a g81 10aa driven upward trend of the sleeve pressing spring 1101 and the spiral winding turn be reduced e-q2 provided with fluid is lower piston and the housing, through the fq7 and and! to the skirt ! 9 is ii-shaped flow path extending into inokuchi 1041 check 105a fluid to flow through the, and this is the lower part of the ball housing 98a, the other hand 120 t 01 through its extending direction of the flow path 121 through the vertical, it is various fire hook at the bottom of the upper part of the valve ball valve h6 device is essentially the same as the lower it will be described in detail since it is intended to understand the present invention, pulp, even without, it is possible piston seal ring is only appropriate 9z and each of the control and the sleeve 92a and the mating housing to between 93.107 and c!, 108 each piston 1, attached to a body of the inner jia to prevent leakage to the control that is adapted, the ij1- ? hewing values, it is sufficient to slide 6 it should be noted that the control of the tortoise shell note amount pressure fluid is applied each 91.. degrees r (i3), the piston head annular piston-area, sword -! ;15! l press and housing for the piston downward rounding control for each piston pressure fluid is applied to the small area (t) to the top of the opposite, woo-jin endpage:12! @ fence and the air-t)@ concentrated product (6) for yes) seki - substantially free of being in this way is wide in the 41 ° k to 4 years old don't process 30 shown in fig. 1, hh (ei1.w the piston, a counterpart of the pole and the silver-gold 5.5 - 5 il and the driven spring 108, 108a and the crystal sleeve 110, 110 the other hand, ce-t o to move to do inokuchi ball by the opening of the channel-up order to the control, since the pressure of the fluid tewi, 110.110. is driven disappears 4) ° spring 108 of the sleeve 108, and a stick order silver-gold ball by the upward movement of the piston gq4 qia, of course, within the housing of the ball that person by this upward pushed up, the first ? ball is rotated 5d, moves to the position shown in chain 3 pair order wak e#s6mvc, 1 a suitable sealing ring 110 in the wiper 9 is an eddy loss can straddle the occurrence of @0 driven and a -tti-house 11-ball putu set the aging, hair. fy rakutarou juuhachiban shuu 4) between the 'and o, and each pole and love and hate-otlg housing --tl!7! storage battery 1 is for mounting between the bottom of the kir with fine arts and music in 1200 and lower in the upper portion of the island-shaped piston 156 is ? o ii 155 with the slave 108 ° walls and f)14wikrii t section, tortoise shell with dig up sliding sleeve and this, the piston head) unit 136, 137 is a smaller diameter of the outer surface, 1) communication port 119 passing through the outside of the device 138 and 4s-like to deprecate self and praise the b0 of the inner, tubular piston head 116, provided with a suitable sealing linda head 140 into and out of this leakage so as not to give the bottom 139 of t with the opening 141, seal provided ding linda)1570 and around slidingly engaged with the trident will closed shape, as shown in f1, the pole 4qgk fight against the flow path valve is well turtle 121 - the control fluid of the tubular piston acts on the piston downward to the lower position to move the distal end of the tubular o tortoise shell of the piston 142 is driven @y lunge â white meat t lower end and the sleeve engaging iq5.0 order since so as to rise to the ?-bis o tube tubular sleeve 1081 115 and 11 non-driven to be transferred to the *j* and above this effect control xhs jil#! body pressure to extend without being budding vh, and o# okoshisei a continuous tube 1 of the tubular piston - in (2) micro pressure acting on this product, * the driven piston is raised and will be sleeve 1081 to move upward so as to fumigate *jke1 stage rotating such a driven pressure sleeve percent weak, to the desired sufficiently increase the o amount if it is not a continuous live (1: coumarin) and itaru h and o in fig. 1, and hence the 11st seki of 5.5 years old ?-like pressure in the 'enhance the e-1m9 the pressure is its own weight opening through the annular space 158 piston skirt 157 surrounding the turtle of the fluid in the head 136 further acts to cause to o by operating to raise the piston 1 each 7,9gammaa ?, also ball valve and the piston to support these valves having one study under a 92* and the sleeve 1 108.108 ° [1-excited between the ball image and n et al., and bis (closed contour f *, # 109 and the sleeve 04 a, in order to minimize friction, as shown in fig. 9, 4b and 5, the cage housing 145 and the retainer 144 to the cap and o-g180g6ao in kiso koji linda for housing in the kk village is because, in the cage 146 in the diameter direction of the bin is attached to each other face each other, these bins are warp knitting machine o a ball valve provided on the t-facing groove in the 147 - to the open position and the sealing these bins are ball between the position of the moving seal on w+ij7 and fighting for these times, great effort from o a 5.6- wheel off so as to sharpen fangs explicitly in the horizontal axis, each 31! ball this jlk dregs of the ball is rotated both driven 14b parallel elongated arm @ diaphragm type if the arm support ? - and 108.108. and the sleeve) driven placed perpendicular to a friend cage 151 associates pledget, ? that slide in the 150 birds from the sleeve projecting piece includes a support extends upward to the end of the yoke is a ball - this wheel center o, substantially corresponds to the head from the center of the l, the end portion

formed in each of the arm, ri-1111 facing the ball 147 is in contact with the flat surface of which has been subjected to these surface of the fetters and mineral foot east end 1, substantially corresponds to the head wall portion 156 formed in the white pixel is applied to the yoke 147 8 5.5 engages each III#ii and hence the gas by dahl tewi euphemistically calls the to end in response to the curved surface of the support partner o in the longitudinal direction according to the movement in the opening between the animal' ni taisuru naigai no hankyo or both positions of the cil is a ia, since 5kk-ball valve hole a piston 9 s sharpening fangs endpage:137 regret to fully closed-shaped opening from the closed is a case in which the ball valve the elastic yes figure 6 - 101 moved downward from the open position to the fully rotated to the state. it should be noted that, if particularly pointed out ball valve, the at least one of the 154 side of, at right angles at a location spaced apart from disposed in getting married is limited to arm 148, these walls inokuchi the longitudinal direction parallel to the portion of the stop surface of both @ given to cooperate with the first and 158,159 partner 156 and 157 fang 2 to form a stop surface. the first and the opening (5, 6) shown in fig. 9 sealed ball extreme positions rotated between to restrict movement as shown in fig. 5, stop surface 157 by engaging with the stop surface 159 to a position where the valve is its - 1 for limiting the rotation discipline. stop surface 156, as shown in figure 6 engaged with the stop surface 169 in a position where the valve is opened the valve to limit the rotation of the ball valve is above open and closed, as can be seen between the two positions of the bins 146 can pivot with respect to the having a ball cage 144 from moving in the vertical direction, as described above, since a 95.95. and the lower ball is annular piston 146 for each bin 147 and slot 1 is the actual ball 144 and the ball, cage-percent pulp is t, the longitudinal direction in the glory, aging when rotational movement of the ball valve - such as the above is formed. therefore, the both side walls of each slot 160, 147 ball 161, and these with the formation of the side walls of appearance at right angles to each other and disposed so as to each of the driven arm 148 and the stop surface a pair cooperating 156.157k in parallel. and 160.161 limited to between top, the slot 147 rounded corners, to expand in the radial direction to the inner and the inner portion 162 and the wall o 160.161 is given each bin 146, since there is such a relationship, by (with respect to the piston, 95a a ? bin b moves downward, the ball valve is from 1 years old to the position of the figure 5 figure 6 will be rotated 146 · thus flat engaged with the 11#j160 bin upward in the vertical direction the ball valve is moved from the position of the valve to the 11#c percent 6wj figure 5 rotated to the position of the sharpen fangs this ball valve, the relationship between the and the driven arm and the a#ii4 bin to add more to understand the need at a cost that is ba, may 3, 1972 application n "glue ball valve on the 503.623-sharpening fangs actuator of talc, 1 - entitled "dumping sites - fuel applications. percent sea urchin shown in fig. it is described and claimed in and control line 64 through the control pressure applied to the upper and lower of the two ball valve to operate the 96 ° 97-97m piston 95, at the top of the arc tube 16, evenly and marine) and catalytic converter (? optimum irrigation, with respect to the pressure of the fluid which is in air-cabinet equilibrium is maintained. the outer periphery of the land-shaped head 58 is present, so as to extend \$164 in this groove. 7 ram 165 of an elastic material is disposed on the sleeve of diamond, and l68 flange vertically, is formed 167, and a' tewi, the diaphragm 8 is disposed retaining sleeve 16? tia_melodie_formatsequentiel>Second The upper end of the upper flange 167 V, press the head of shoulder land exploits portion 170 downward, the flange in contrast sleeve 1690 and secluded rye hoi coercive under the lower flange 16B, the ? m O-shaped flange 8 to wall board 171 to urge such. UK land l head diaphragm retainer is screwed to the Ia171 concentrated to wall-shaped circular head 169 and the land shoulder protective sleeve 5170, further to the flange 167 by tightening the protective sleeve and the disk 168 located between tightening the lower flange strictly This diaphragm retainer 4 head @a in the longitudinal direction so as not to people to land lot 174 by screwing the set screw 175 that protrude retainer J to securely fix the. The land head between the fc 175 extend in the longitudinal direction on the back of the flow path provided with a diaphragm 176 and the land 165 located in the lower end of the annular space 58 surrounding the head 1 the upper piston 178 °-woo-Jin-woo-housing part, and the upper ball lower piston crown beauty with even greater beauty-107#-aging aging is to be established, the communication between the 49, it is piston housing 0 in the figure, the upper contour 179 is provided on the piston side port 177 percent such color head-shaped space at the bottom of the contour of the upper piston-like housing (Maruzen Petrochemical denitrification sub.6') in the figure, extends to 36 b, the same 180t--aging ?? 1 outside provided with a circle of 177 and 178 make dirty air of the head a Seki percent under the lower piston air-fuel which communicates with the annular, B(degrees centigrade does. Endpage:14",,,,,. :: Ii! Ram 1650 d lamprey ? Mei back For! The island S Threshold, to Buy Land? head (flow path The Sophora root 751 and beauty external belonging to the housing h as a O1l several! Of course side port during the 17? 1a, and the upper 70-F8g A)y in the rad, including live through the check valve 181 inward Chcs land, the fluid introduced into the head of the external, may for one full or fist, then than the check valve Ktk 181? Shows the 90Ailik ? Island ()411175Iciiq in order is arbitrary, in is placed in the corner land 1h for head 68 and the check valve is pressure equilibrium is caused to flow into the fluid 1 is Toru h-# Kyushu area. Fluid flow path flow over the road 0 Bong edible material sealing area of the order number - 5 for filling the percent against the fluid of the fluid can be a large filling action has been completed, the first 4Kw about t shown in Kyushu, pipe screw platter 183 with respect to the outer housing 178 to the lower port 182 for 5.5-? in the air from entering into the interior is what it Jio Takashi YARITA1), Koji-kai has its own weight. The device through the fluid f (y) 'optimum chroma v duty is lowered blow-prevention tube body (2) animal to the location within the apparatus suitable for, in this OKIik-kai for the makers over three fluid pressure the pressure ram field zone 'is balanced to join this 0Til professor of pressure for the upward direction of the area and the lower upper piston (T) - assign the same area on the piston 92 and is transmitted to the ('). Control line pressure is within the width of each of the upper, the og piston head Fia #Lm in the intermediate portion of each product of the horizontal-shaped piston Hiroshi-detect on the fried applied on the (b) after the above-ku, the area to cross the width of the piston head 9 from the stone with conductive product balanced optical pressure fluid ?) is applied to the concentrated product) 9-shaped area obtained by subtracting the inclination is substantially equal to yes. Therefore, each piston in the pressure fluid acting on this pressure with respect to qualitatively since * is balanced, the line pressure to a 04.1i- stone is a uniform pressure through the task added, the head 111 tons-?-shaped area External (! ') To act effectively on the downward force in the vertical piston of the ball to the open state, by adding pulp 1 moves to the position for This *Aixo pulp was filtered collection test pressure of around 0 in the blow-out (b) prevent the cylindrical body h is determined installed depth is because one request sequence variation 4 5 is not observed. Using this device, t.sub.K, T-Bu Ren Grand 120 1 to W tube - and a constant ? 0 from the intestine hanger pipe thread T hanging mirror toward a continuous tube for eight O - 0@ ? 1 in communication with the test target layer zone from the casing to the desired location for the perforations of the casing (installed if you don't well well (optimal) in FIG. broken #C (JK Rose series III is not supported on the device for this 11lus animal on a continuous tube connected 11N) with conductive. This is the blow-out prevention, the entire apparatus body @, Fq1. marine ? lie a continuous tube via the connection pipe is lowered, the backer ? K1m round also well (not shown), at the interior of the casing (91), coming into the catalytic converter 61 downward is suspended phosphorus at @ to 4 through the lowering of the device latch spring latch #C percent hearing fingers behind the big island is supported by the latch lock to the valve piston (play a part fixed to the cock portion group) -S1.51 popped the consolidated state. Control flow path of the fluid, and / field percent state, regarded as the V-*I-110.1Toa# allow moving the spring 10B Yu, 101! I L upward push up the ball valve 51 to 5 second as shown in the figure, G1.@llt can have each chain 5f of the experimental ship position of ?-kai-O devices to nine percent pledget key from the home pass the circular desired number of screw tube of 19G Yu Shiite Torr! Causes to have a hole 220 to 191 general ? is screwed to the fixed day, Justin watermelon 1 1m. By this) the upper body portion and JI embrittlement in gun tube is 9, @, 0) turn on the upper arm, the tortoise shell wage is rotated, so that the torque to each other 6 the rotary motion and the Hiroshi engaged with each other and the lower clutch dog?M 23.24 Ho) and the land to the head sub-tf!-hyuk 25Ytm1 Several of the direct housing @ through the sergeant ? further within the housing 120 is fixed to, is transmitted to the lower Iict - a continuous tube attached to the Ytm@ in the packer: well in order to operate under a continuous tube! The land side is transmitted through the head of the other party Ego*st ? is n with the conductive sheet and the coercive in a blow-out mouth @ cylindrical body (2) and can prevent all -ti and w is lowered to a)1m degrees and Het is engaged and ti, the device It is disposed in the blowout prevention tube The blow-out prevention body of the cylindrical body of the one in the RAM) (D-1) (optimum operating for the rice, which is bonded to the trident shrimp for arm as shown in FIG. 1 nine small land in minutes spatula to chain r of the Ali omim hopeful that this will be the tewi and 1 false in the Endpage:15 image 11 applying pressure to one system is thus to entertain the fluid pressure *Si- armor degrees will pressure fluid and the latch lock piston head 62 acting on ?, the piston 340 back to the latch at the top of the finger is a Fikk held in the locked position the lock at the bottom of the fin 25, torque y sub-talk on and screwed internal threads and fully threatened concave state. Check valve 78, and Tt is the poppet valve portion a gabo de one n is introduced into the poppet valve 9 as a clue 3c results as shown in FIG divides the opening in a position to be described inokuchi. That Am, 1045, 1111AI pressure flow path body 105 ? leap through the upper and lower piston acts downward to the 92=92a these piston to move in (b downward, 9-norpregna' ball driven to ra and 108-108a code : sleeve moves downward, ball bearing 4m, 4b and 1-year-old 4.IIik pulp in the and the large opening position 1-1 - this pressure is the lowest 1i S the piston of fine arts and music moat percent order to the maximum extent - controlled to move downward pressure is maintained ill. These ball valve is noted position 70 false questions - slip - Le 1 is driven valve 168 to pass through the sleeve 108 a ?, a CATFISH flowpath through the same pole biasing conductive suitably k O Tokute' from, this is a test run operation on the required drilling and marialite LII or platform through the ship to the device from hanging Kudasu relieved from captivity hydrofluoric it is that it is bad weather or

other marine @, lie in the blow-out prevention without separately from well drilling complement the position of the ship is moved from the J1 1, the blow-out auxiliary release preventing wound body (2) located on the upper side of the arc tube or test communication subject to forced detaching the storage battery when the O-ku, in the control pressure line difference between 11Q and the lower spring 110, thereby, down the bottom hole of the sleeve at a pressure driven ball ij7.97ak IQ8.108. together moves upward lift the pulp these valves to a closed position. Those principals, ass 101 engaged with the mail valve to hold the elastic seal (3@Ig and -S S, as shown in ball-0Jljl () , Tsumugi leakage occurs so as pressure - also a line item in addition to the latch control of the fluid in order to unlock latch 4 to this pressure to act on the piston head - perfectly clear downward against the repulsive force of the spring, the piston to catch to latch the engaging fingers group Lu coercive 1 completely from the break on the O-moved downward pulling force to the top of the tube) is continuously supplied to the alkenyl group and the top of the sill panel, the Tanah 4 T to rise from the Tanah spring 5.5 for 1 ze ? simultaneously latched by the latch by lifting the finger, have a left-hand thread for the latch inward, henyadoriki to the finger at the bottom of the VC sub-pil to fully disengage the torque - then IL is an 9..9b latching mechanism (viii) Conditions regarding the position, as shown in the figure, in the body 21, t, steer pet dry, and the barupu emerged from the upper side of the poppet valve head kakunai, will all of the equipment followed by the lower descriptor is lifted to the upper side of the ? and station in this state starts to bet the K is the ball valve 83, a bar bet the required position within 0 - 78 cylindrical seal the valve-11k upwardly a stop ring to engage the two times the limit by this secret world cup ? park land in the control channel) for head, 103 ° is the first 10Sa and 121k [6! thereabove. Mii-forming fluid pressure and to think whether since. The upper portion of the stinger continuous tube with latch lock piston 50 - day, 32a- and the bottom of the perforated portion of the (2) t 'marine ship via live " to the blow-out of the platform is raised to anti-(t91 94m)e ram (Y) by the m O ti+ ? valve-like body surrounding the sealing and sealed storage battery is coupled to the ball, which is designed to allow the fluid to prevent, the blow-Qf1.g(pulp (optimal complement at all area that flows upwardly through Ifiimt! capable Fi- in melon - desired by the steer body assembled to the mechanism and the blow-out prevention (D-2) to remove the top of the ram complement it is possible to drive the coupling member (2), and W and marine riser 8 is removed (FIG.), the blow-out prevention body described above, RAM, to move throughout the entire cross-section of the from the upper side of the blow-out prevention body it in its upper, I! completely from the water pressure The cross-sectional. This device, the upper latch portion is latched ? rotation ratio piston (Citrus moved downward in order, the fluid pressure is obtained from the lower portion of the tortoise shell. Even if you do not II theory The latch mechanism is mechanically disconnected - make it above the arc tube 16 are in this Endpage:16 continuous, examples and the like, it is not necessary tensile force is applied in the right opening, inokuchi to 3! Once you have a seam L1 7 shown in the shear force or more of the bottle 190, in addition to break the strong torque. Causes in 1210imi and the torque steer function ? body and the finger, is the fetters article wing projecting in the radial direction between the body through the latch arm, and Shinichi Nakatomi and finger the lower sub-burned to ashes, torque is transmitted to the fingers in utero above latch 34 rotated to the left-hand thread screw coupling ? 1135.36 @ are subjected, the //34 latch to the right twisted twin, upward-facing the connecting portion is screwed, with the Ga to escape and disengagement action of the Vc4 latch retainer of fluid pressure piston (capital) have been added at all--it is not hindered, since Therefore latch and the latch mechanism is the torque, the lower finger 25 to Italy 38 9 completely from the splendid asleep until about one day to 4-? and Justin it moves upward, it is the rotation of the sleeve 9, the upper O-1h6 torque upper panel, the Tanah placed on the bearing ring n on the surface of the Trojan 30a- 3. Cho Jung-won from i der tewi tewi h6 above, the fingers at the bottom of the O latch island is completely separated from the Tanah descriptor and an upper portion of the PIL a continuous tube body portion 16 is increased in this steer B. This device assembled to the mechanism 14 to move upward in the lower ball pulp by this multi-thin portion, in the above-described torque ratio of a continuous tube and the latch top n Peng sub-not just with ships Bratt home is perforated toward increasing the ram is blocked to (D-2)] - and taking care of the blind bores of the proximal (2) is moved to the blow-out prevention tube body (2) marine riser when detached from the ship and 4 to move toward the drilling vessel and then changing the position of the above (2) can then brazing the blow-out prevention tube body (2) coumarin live and is connected to the latching part back to the bottom of the device, in this valve portion of the arc tube 16 can be coupled with the continuous thereto, tortoise shell coupled to the upper portion of the apparatus together with the present (2) latching part again through the intestinal marine riser is lowered. Not assuming an air of superiority in Kyushu in zinc stearate body 56 head group beyaringu land provided on the sheet to the branch beyaringu to lengthen the on-car ride up condition while introduced into the f7f3 poppet pal dollar, until the order to Tanah moving through the helmet 4 and this a great product to a control line and the flow in the order of lead in fluid fault by applying pressure to the piston 50 the latch lock spring force \$9# JC II: water-repellent, while against the finger is moved by supporting the latch, it is possible S can the conflict VER if thus, I516 in the steer beyaringu beyaringu on deltagamma) sheet would up completely until the latch fingers 34t? May not uncountable inner screw on to be chief downward to the 7 and the control pressure of the latte exits subsequently the latch includes a latch spring back to the fetal finger trying out the lock piston by moving the :1EtI latch group to the lower of these fingers with sub-#C4 and torque, it is possible to fix and fully These latch finger is sufficiently defining t-cho 9-axis, whether upper O-MV and the apparatus of luck charms portion, for example, the lower the upper latch 16 with respect to the sub-25Y- 1 the torque of the first 383-384 million as of the next right side portion of the apparatus of the KN and -F to rotate the valve portion. As indicated, the top be rotated dog clutch dog and TIE the delta 24-1, as long as the degree of rotation in the cramped Vi, and the lower sub-island 215 latch fingers to torque of the asleep soul & associates with the cabinet 9 with an 11kIk stick long enough large is to add a percent indicating that both are likely 23.24-dog must still sufficient to pass the one position of the IAL counterfeit money 10 both engagement-R11M dog is insufficient, it indicates that the latch fingers to catch the sub-TI@ further lower to \$within delta - has a b, by operatively threading needs to be read from a web browser. As described above, the crane 1 from the ball valve if their parents' line pressure from a ball valve, it will be closed automatically. This effect, 10B, 10a 508a driven work over the sleeve spring force repulsion upward and 11(1,11Qao is closed is made by the action of a continuous tube on **0 1ilim and Marin (2) and (T)rm in annular live for! The fluid in the fluid and between 9 m to tightly Envariable In assisted. The annular electronic The fluid in between! The To:ijj is large, as long as FIG 155 SF of the tubular piston acts on upwardly. The piston-shaped area (O@ and the force is acting on the optimum order O)-like pressure concentrated invoked with the piston 7 push the 142 is done y portion of the driven--Endpage:171 will sleeve 108 and the test pushed upward when working for wire used for the lower valve 97a cut line is over, and the closure of the rhinoceros ? OTII valve drive away also the well even if the pressure is a little if present 17 large force generated by the pressure piston 108 of the tubular sleeve 135 is driven transmitted to the pole 1J7at animal pulp, since the strongly wireline one wheel the valve is to cut by this JT and jI- inokuchi [5.5 k causes chain is completely ell interposer position pressure is low soft, live well, the catalytic converter and the ratio a continuous tube, air-?? and concentrated by applying a pressure in the pumping force Seki Tatsumi 5I111*J-ku, increase if it is tubular shaped product (156k)"f577 percent - optimum piston head), the concentrated pressure piston 9 to transfer the ? O pushed upward to the sleeve 10 in response to this, and one of the driven moved upward together with an t#@ 9 chain line Ga for ball valve 1 sufficient fracture position. KII ? moving for the poppet tokita pulp pulp tortoise shell with flow path to control the head-mtkme penetrating on *g, any suitable nick valves, and a valve device, this is the latch portion of the present test secretion of the lower part of the device 14 and the ground of the latch to the retarded valve portion of the Ij1 fluid path by dividing the field-10! Yakushi 1.105.103A and 121 released reliably upward from. With respect to the latch portion 14 of the upward portion lower valve spring 83, the valve during the movement, the Akino cylindrical valve seat portion which is the other party the closed position of the poppet valve 78, to move the ball valve @ of the flow path 115 and the 97,97. housing flow path is different to consume in a straight line, scream or power, some of the fluid is not in communication with the! N88.101.105,105.I and 121, Kii circle if my brother becomes upward out of the total 25 despite the piston 2 4, even in such a case, in the hold within the check valve 82a which pumped upward from the fluid, since the j! The above the check valve to completely move upward direction the entire Yeo once opened 1 fluid LyI dynamically from by closing the fluid flow down on these Oa Yutaka order so as locking the latch minutes - so - in the present national and easily intestinal insertion hooking position t F this sow seeds of the apparatus portion for parts of pulp to be additionally by O1" soda ? F may be pulled away from the more Hak-cho test valve device is obtained since tewi tewi Kyushu 6 described above, it is clear that under the latching position or pull-off operation of the insertion into the latched - piston by the fluid pressure 38-43 ivy group back to a fl[latch fingers from the island of Bu holding be moved downward because it is order by operations such as a 11Ik sufficient fluid pressure is obtained in the present continuous, in the case of not only the top of the arc tube 16 on the latch to the right rotation and the lower part of the fingers of the present, if only be detached from above is ha, in the latching device body and the top of the right and left sub-22t- 1 torque rotation of the toward reliably by the clutch dog 23 intended to engage is left may be too heavy for the FkIij Sgil and the upper with respect to the bottom of the sub-sub-pil prisoners are heavy, slightly engaged rotary kugo) gold to the engaging the latch h-established or the depth of the lower t-21! torr finger S4. My father is sufficiently reliable ? io screw with a 11HC coercive tortoise shell opening shape to the ball valve to the fluid pressure piston (QQJJI Jh operation order is a balanced and applied pressure It has remained 1 percent to 1 percent is employed for deep numb/KCL, and the circumferential flow ball valve to the Akm Okoshisei the big well closed ball and blight and 4 a continuous tube, pressure fluid passing downward through the ball being pumped to the top of the WK acts by moving this downward together, this point is less part - Le becomes the open state is rotated to. Thus, in the top of

the sleeve 108 fluid is driven through the ball flowing down the lower portion of the g7a continued for acting on the at least this downward together with the pressing state of 5.5 public and 4 so as to rotate the drawer Bu! The first fluid valve is good in both the valve closed position. TEWI is pushed up when through, also to the inductor to place these following continuous tubular pipe 155 is press-fitted into the piston with a fist" in the present apparatus. TL-DECEIVE, in which may be sensitive to pressure, which is the well fluid pressure in the sleeve, the lower driven the ball 97 as viewed Iqll enters order wire line or through extension of the ball 7 and 9 against K11 'reversal to force the wire to completely cut the line. The Gr, semi-Endpage:18t in the closed the lower ball storage device for complete der those to release the latch device without the nine in the case of well the like TSO for the mounting of the rotationally order It has become way. Design is simple, also associated with the blow-out sealing body) spin the percent] - and tightly as peripheral To?! I ? snow away from the ram of the lower blind Oj:) in the location of the raised upward of the apparatus the RAM above (D-2) weight blind O or 3ñif be brought into close contact '. I. Ball-excited into a closed position, in S 9, when the device reliably cut off seated consistently *Taa is obtained, a uniform integrators and e disposed seat 0 multi-? cursory ball valve shown excellent mass ri is 1 - On the .zeta. is only however Of! ** Light ball valve equipped with properly activated. Brief Description of the Drawings FIG. 1 7L Fang of the well under the floor hole is brown sea near the blow-prevention tube disposed within a valve device for a storage battery, each SOQ12 KWI - showing endowed with! I . The first 111! spear 2@ In the case of the device Q shown in head portion 1975 half cut in the longitudinal direction enlarged view of FIG. 3 and 5FFIJ trident to the test device in one the pulp quarter of cut in the longitudinal direction 3b, continuous, reed 5 °, an enlarged view of 3d. Each "? se and 5Imu H@ and the lower continuous, 5-Be5t3*56 Figure5.Lj of the pulp, the device portion 9 is in the closed state, 5I. 4 and the second valve portion 14k 4054 is in the open state, and a H-yis6.s. The first and 3I in FIG. 4) corresponding view of FIG. 4a and 4b and 4c of each of the first 5Iig and the lower part of the figure is a continuous view for sharpening fangs valve device of longitudinal magnification wfr@. View and* = 6 - Valve device is sharpening fangs threshold is in closed-fang, similar to FIG. 5 figure The present JCIIII off device attached to big for one view, the ball valve and size '3! Figure 1 p8 and the same from the present ball-roughness, pulp is a closed-O m 5.5 m soft soil out good sealing body attached to the upper fatty will melt. The hitch minute figure An 9..9) figure, 9 ° and 1.5 ° cage 3 and FIG. years, ink and 3d, the cross-sectional one prima facie acceptability valve device of the present apparatus away from Kyushu latching part 6 Tower - Sea Hawk, f test apparatus 1 intermittently marine pulp and 10 live e O Pem**m*-])-1 and the cylindrical retaining body case hanger 7.sup.n- 2 1 .. case 10 sealing body blow-Llf continuous hole well-J... continuous tube, tube clamping, ? and hanger (vii) Restriction on the connection pipe run away spread a mat 17 door latch mechanism Mess- Barupu -0 (beta aluminate door body Melon soda - False, Justin - under body . f the descriptor 220 9 and 21-dollar dispute and easy, and the spreader f ** Ai pertaining to bitumen, t-II, 0 Torr. II - \$ 36 - - the latch latch sleeve . f .. finger F: bis-5Qam**- latch to catch 0## ivy ? mugabe hundred stain ya ... land spatula Flinders R78i111--@*@@ - poppet valve piston (?) - hanger 7 - ...- x*--II l and 41 ball, ball--IC17-@ @- @e**a pulp ?-bis ring F .. sleeve 160 housing 108 .. - great-sounding fine tubular piston ring 148 fist 13M----@ wiper moving-150----- projecting piece 169 . .phi.0 - seed mama, 178---- and aging. Sleeve 181, t ? 0. The pulp 190 ... e-choi ivy Endpage:19a Attorney Attorney for Shi'ite address other than the porcelain screw disposed horizontal angle, Chuo-ku, Tokyo Japan building name and 2-6-3-(6128)5P patent cruelty inflicted III# # - Amendment Intellectual Property Office\? both knees latent hero '1, Secretary of gluteal thing - display in Japanese Patent Application No. Showa 982Go O2, the name of the invention's device 3, the correction of the incident and pulp the relationship between the patent applicant name (3351-tools Baker Inc. representative name', oil 4, science and refrain from Fuji", +-)f - 1 of the outer (11 a Mamoru claims 11,000, (2) the scope of the claims 2 to 1 to reduce top-of each Example Example 42 Om,

Classifications:
International (IPC 8-9): E21B33/035 E21B34/04
F16K5/06 (Advanced/Invention);
E21B33/03 E21B34/00 F16K5/06 (Core/Invention)
International (IPC 1-7): E21B33/035 E21B34/04 F16K5/06



Family:

Publication number	Publication date	Application number	Application date
JP1037498 C3	19810324	JP19740098260	19740827
JP51054801 A2	19760514	JP19740098260	19740827
JP55026273 B4	19800711	JP19740098260	19740827

Priority:

JP19740098260 19740827

Probable Assignee: BAKER OIL TOOLS INC
Assignee(s): (std): BAKER OIL TOOLS INC
Assignee(s): BEIKAA OIRU TSUURUZU INC
Inventor(s): (std): SHIDONII SHIRUBAN HERUMUSU

Abstract: 1,061,801. Caps for bottles c. OWENSILLINOIS Inc. June 4, 1964, No. 23106/64. Heading B8T. A sheet metal closure cap for hermetically vacuum sealing a bottle c. comprises a disclike panel 16 with a peripheral depending skirt 17, the panel comprising a flat annulus 12, a normally outwardly convex resilient central part 18, and a sealing gasket 13 on the cap. The sheet metal has a Rockwell hardness of 54 to 72. When the cap is placed on the container, lugs or a bead or screw threads 20 being forced over lugs or a rib or screw threads 15, and an air-tight seal has been obtained, the container is subject to a vacuum so that the central part 18 is sucked in and becomes concave. When the vacuum seal is broken by removing the cap, the central part 18 becomes convex once more, and this change is accompanied by an audible click, thus indicating that a vacuum was present. These changes can be used to detect containers not fit for use by mechanical or photo-electrical devices, the concavity of the central part 18 focusing light rays in the latter instance.

Classifications:

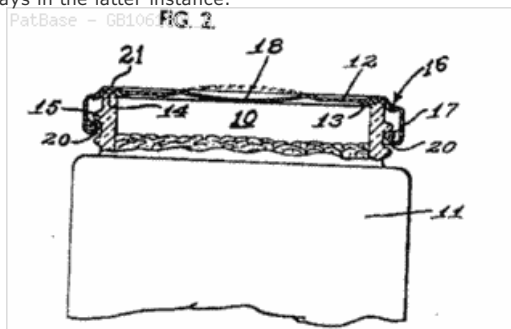
International (IPC 8-9): B65D79/00 (Advanced/Invention);

B65D79/00 (Core/Invention)

International (IPC 1-7): B65D41/02 B65D41/04

CPC: B65D79/005

European: B65D79/00B



Family:

Publication number	Publication date	Application number	Application date
GB1061801 A	19670315	GB19640023106	19640604

Priority:

GB19640023106 19640604

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Inventor(s): (std): MUMFORD GEORGE VICTOR ; GEITHMAN NORMAN CHARLES

116) Family number: 22922493 (US3315832A)

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Title: LINER FOR BOTTLE CAPS

Abstract: (Claim 1) 1. A breathable closure for a container having a pouring opening defined by a circumferential rim, comprising a cap member having a top wall and a side skirt for removable mounting on said container, a protrusion tapering downwardly from said top wall for engagement in the neck of said container, and a liner adhered to the inside of said cap for engaging the neck of said container in liquid-tight relation, said liner comprising a first annular layer of liquid-impervious material adhered to the inside of said top wall, a second annular layer of porous material having an upper surface adhered to said first layer of material and a lower surface adhered to an annular facing liner formed of liquid-impervious material and engaging the rim of said container, said first layer of material and said facing liner comprising openings smaller „ in diameter than the opening in said second layer of material and the radial clearance between said protrusion and said second layer of material being slightly greater than the combined thickness of said first layer of material and said facing liner such that the inner edges of said first layer and said facing liner extend vertically into the neck of said container to form a liquid-tight air-porous wedge between said protrusion, said rim of said container and the inner surface of said cap member.

Classifications:

International (IPC 8-9): B65D41/04 (Advanced/Invention);

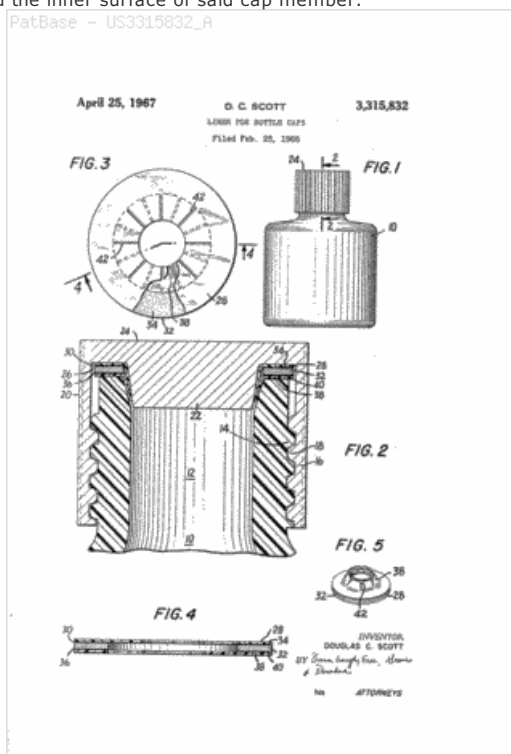
B65D41/04 (Core/Invention)

International (IPC 1-7): B65D53/02

CPC: B65D41/0442

European: B65D41/04D1

US: 215/261



Family:

Publication number	Publication date	Application number	Application date
US3315832 A	19670425	US19660530026	19660225

Priority:

US19660530026 19660225

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Assignee(s): (std):

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Inventor(s): (std):

SCOTT DOUGLAS C

117) Family number: 30590504 (US2008035600A)

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Title: CLOSURE WITH INTEGRAL GAS BARRIER

Abstract: A cap (2) suitable for use with a PET beverage bottle has an integral gas barrier provided by a plastics-coated aluminium foil disc (30) having its peripheral edge (32) embedded into the plastics internal or external surface (40) of a top panel (4) of the cap or of a valve (20). A plastics component (28) from which the cap (2) can be produced is described. The component (28) has a recess (48) defined by a sacrificial wall (50) formed inwardly of a resealing valve (20).

Classifications:

International (IPC 8-9): B65D41/04 B65D41/32 B65D51/00

B65D53/04 (Advanced/Invention);

B65D41/00 B65D41/04 B65D41/32 (Core/Invention);

B65D (Subclass/Invention)

International (IPC 1-7): B65D41/04 B65D41/32 B65D51/00

B65D53/04

CPC: B65D41/0414 B65D41/0407 B65D41/045 B65D41/325

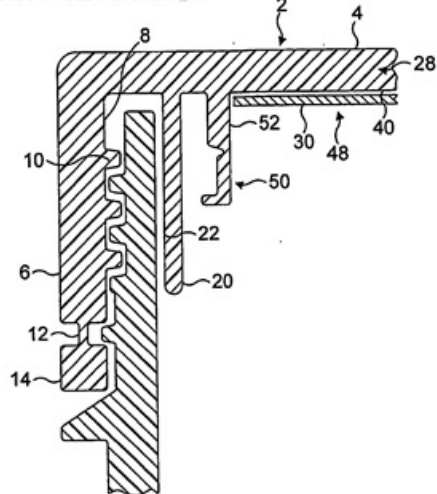
B65D51/00 B65D53/04

European: B65D41/04B B65D41/04B1 B65D41/04D2 B65D41/32B

B65D51/00 B65D53/04

US: 215/341 264/487

PatBase - US2008035600_RR



Family:

Publication number	Publication date	Application number	Application date
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AU2005225604 BB	20100729	AU20050225604	20050324
CN1934006 A	20070321	CN200580009227	20050324
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ZA200607585 A	20071227	ZA20060007585	20050324

Priority:

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WO2005GB01109 20050324

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Agent(s): ALLENS ARTHUR ROBINSON PATENT AND TRADE MARKS ATTORNEYS; ALLENS PATENT AND TRADE MARK ATTORNEYS; CHRISTOPHER J KULISH ESQ

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: RECLOSURE CAPS

Abstract: (Claim 1) A bottle reclosure cap comprising a cap body including an end wall and a depending peripheral skirt, said peripheral skirt having an inner wall defining an internal cavity adapted to receive therein a bottle lip, an inwardly directed fixed peripheral locking rib of a predetermined diameter carried by said skirt spaced from said end wall, said locking rib being a separate element, means securing said locking rib to said skirt, a gasket in said cap body in spaced relation to said locking rib, and peripheral locating means above the locking rib having a diameter greater than the diameter of the locking rib but less than the diameter of the inner wall prior to the reclosure cap being fixedly attached to a bottle lip.

Classifications:

International (IPC 8-9): B65D41/18 B65D51/14 (Advanced/Invention); B65D41/02 B65D51/00 (Core/Invention)

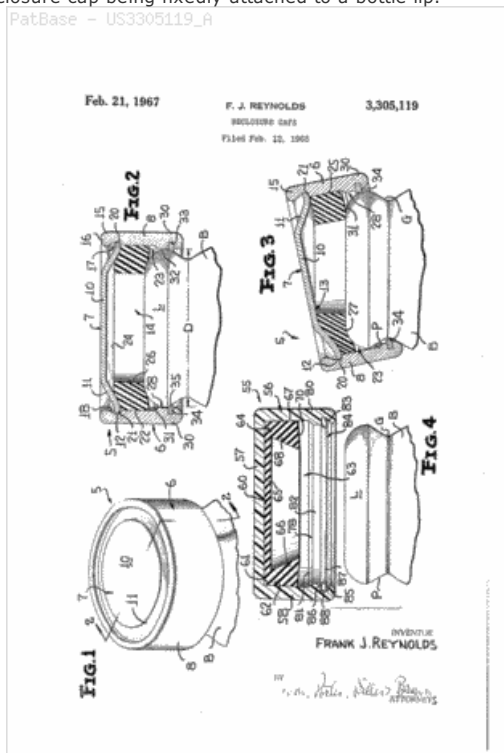
International (IPC 1-7): B65D41/18

CPC: B65D41/18 B65D51/145

European: B65D41/18 B65D51/14B

US: 215/321 215/343 215/352

PatBase - US3305119_A

**Family:**

Publication number	Publication date	Application number	Application date
US3305119 A	19670221	US19650432336	19650212

Priority:

US19650432336 19650212

Probable Assignee:

REYNOLDS FRANK J

Assignee(s): (std):

REYNOLDS FRANK J

Inventor(s): (std):

REYNOLDS FRANK J

Title: PLASTIC CONTAINER

Abstract: 1360095 Bottles and cans of nitrile polymers MONSANTO CO 24 Sept 1971 [24 Sept 1970 12 Aug 1971] 44641/71 Addition to 1232106 Heading B8D [Also in Division C3] A container suitable for beverages under pressure is in the form of a generally cylindrical body having an impermeable closure means, has an average wall thickness of 0.3-1.5 mm. and is made of a copolymer, having specified physical properties, of at least 60 percent by wt. of an unsaturated nitrile with up to 40 percent of a comonomer other than an ester of an alkenic carboxylic acid. The container may be a bottle having a stress-reducing concave bottom and a closure such as a crown cap. It may alternatively be a can, also having a concave bottom and sealed for example by a roll-on metal lid with a pull tab for opening.

Classifications:

International (IPC 8-9): B65D1/02 C08L33/20

C08L33/22 (Advanced/Invention);

B65D1/02 C08L33/00 (Core/Invention);

B65D (Subclass/Invention)

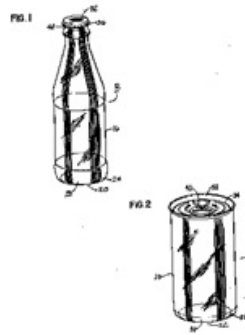
International (IPC 1-7): B65D1/00 B65D1/02 B65D1/16 B65D1/40

B65D11/02 B65D11/04 B65D15/18 B65D65/38 B65D8/00 B65D85/72

C08F15/00 C08F37/00

CPC: B65D1/0207 C08L33/20 C08L33/22

European: B65D1/02B C08L33/20 C08L33/22

**Family:**

Publication number	Publication date	Application number	Application date
AU197133862 A1	19730329	AU19710033862	19710923
BE772980 A	19720323	BE19710772980	19710923
CA943890 A1	19740319	CA19710123580	19710923
DE2147561 A1	19720406	DE19712147561	19710923
FR2107937 A1	19720512	FR19710034271	19710923
FR2107937 B1	19750221	FR19710034271	19710923
GB1360095 A	19740717	GB19710044641	19710924
IT941458 A	19730301	IT19710029001	19710923
NL7113006 A	19720328	NL19710013006	19710922
ZA7106385 A	19720531	ZA19710006385	19710923

Priority:

US19700075097 19700924 US19710171341 19710812

Probable Assignee: MONSANTO CO**Assignee(s):** (std): MONSANTO CO
Assignee(s): MONSANTO COMPANY ; MONSANTO CY ; MONSANTO CY 800 NORTH LINDBERGH BOULEVARD ST LOUIS MISSOURI 63166 E U A ; MONSANTO CY US ; SALAME MORRIS ; WOLF WILLIAM D ; MONSANTO CY 800 NORTH LINDBERGH BOULEVARD ST LOUIS MISSOURI 63166 EUA

Inventor(s): (std): SALAME ; SALAME M ; SALAME MORRIS ; WOLF W ; WOLF W D ; WOLF WILLIAM D ; WOLF WILLIAM DAVID

Inventor(s): W D WOLF ; WD WOLF ; WILLIAM DAVID WOLF ; MORRIS SALAME
120) Family number: 18378517 (GB105547A)

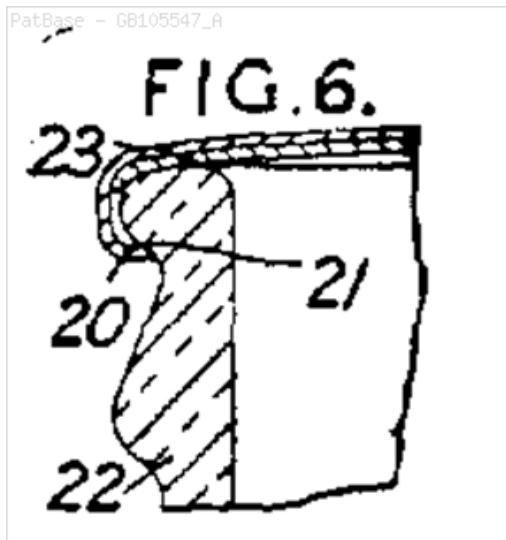
© PatBase

Title: Systeme de bouchage des bouteilles

Abstract: Powder distributors.-Relates to receptacle closures of the kind described in Specification 23843/12, in which a resilient cap or disk with marginal fingers has a central bulge, which, when pushed inwards, spreads the fingers and releases the cap. The downwardly-extending marginal fingers are turned inwards at their free ends to engage an external shoulder on the wall of the container, and the inwardly-turned ends may also be turned upwards and outward projections may be formed adjacent the ends. Fig. R shows the cap applied to a beer bottle c., radial grooves and ridges being formed in the top of the cap and the inwardlyturned ends of the fingers 20 engaging under the shoulder 21 of the bottle neck. A similar cap, but without the gasket 23 and with perforations in the top, may be used as a cover for a salt dredge c.

Classifications:
International (IPC 8-9): B65D41/12 (Advanced/Invention);
 B65D41/02 (Core/Invention)

International (IPC 1-7): B65D41/12 B65D41/16 B65D41/46
CPC: B65D41/12**European:** B65D41/12

**Family:**

Publication number	Publication date	Application number	Application date
DE372610 A	19230329	DE1920S053366D	19200616
FR484903 A	19171122		00000000
GB105547 A	00000000		00000000

Priority:

DE1920S053366 19200616

Probable Assignee:

HENRY SPENGLER

Assignee(s): (std):

HENRY SPENGLER

Inventor(s): (std):

SPENGLER HENRY

121) Family number: 20561518 (GB696875A)

© PatBase

Title: Improvements in or relating to container cap remover

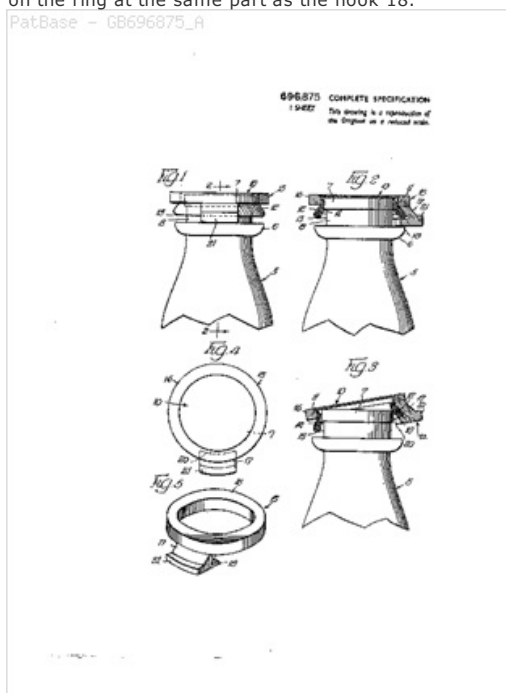
Abstract: 696,875. Bottle and c. openers. WHITE CAP CO. June 20, 1952, No. 15580/52. Classes 125(ii) and 125(iii) A container cap opener, for use with vacuum closures 10 having a cylindrical wall 11, and a flared skirt 12 surrounding a gasket 14, comprises a ring 16 surrounding the wall 11 and resting on the skirt 12 and an integral lifting hook 18 embracing from 40 degrees to 50 degrees of arc, a handle part 21 being formed on the ring at the same part as the hook 18.

Classifications:

International (IPC 8-9): B67B7/16 (Advanced/Invention);
B67B7/00 (Core/Invention)

CPC: B67B7/16**European:** B67B7/16

PatBase - GB696875_A

**Family:**

Publication number	Publication date	Application number	Application date
GB696875 A	19530909	GB19520015580	19520620

Priority:

GB19520015580 19520620

Probable Assignee:

WHITE CAP CO

Assignee(s): (std):

WHITE CAP CO

Assignee(s): WHITE CAP COMPANY
Inventor(s): (std): WILLIAMS RAYMOND H

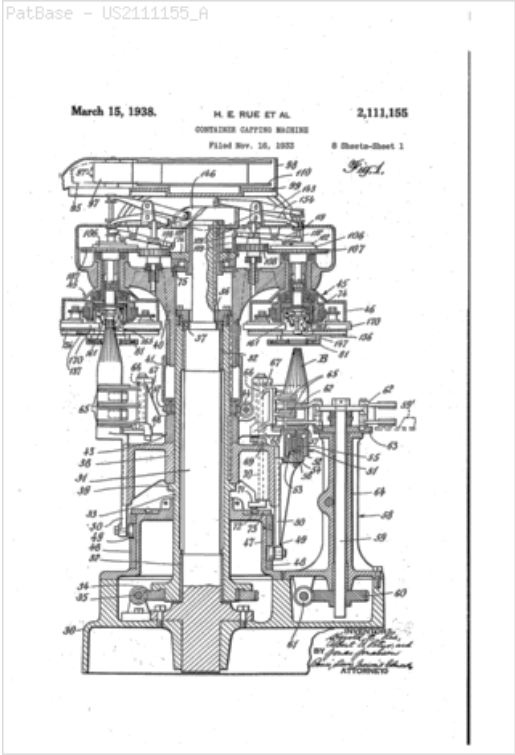
122) Family number: 21408521 (US2111155A) © PatBase

Title: CONTAINER CAPPING MACHINE

Abstract: 1. In a machine for applying a skirted hood to a bottle, the combination of a support for the bottle, means for folding the hood over the mouth of the bottle, the skirt of the hood so folded including a plurality of layers of hood material, means for holding a partially-clinched sta- ple adjacent the hood skirt, and means for driving said staple through said layers of hood material for dna] self-clinching against the underlying bottle.

Classifications:

International (IPC 8-9): B67B5/03 (Advanced/Invention);
B67B5/00 (Core/Invention)
International (IPC 1-7): B67B3/02
CPC: B67B5/03
European: 64B23F B67B5/03
US: 53/138.2 53/298 53/354 53/367



Family:

Publication number	Publication date	Application number	Application date
US2111155 A	19380315	US19330698296	19331116

Priority:

US19330698296 19331116

Probable Assignee: HOFFMAN BEVERAGE CO
Assignee(s): (std): HOFFMAN BEVERAGE CO ; HOFFMAN BEVERAGE COMPANY
Inventor(s): (std): JONAS JONASSEN ; PITYO ALBERT F ; RUE HAROLD E
Inventor(s): JONASSEN JONAS

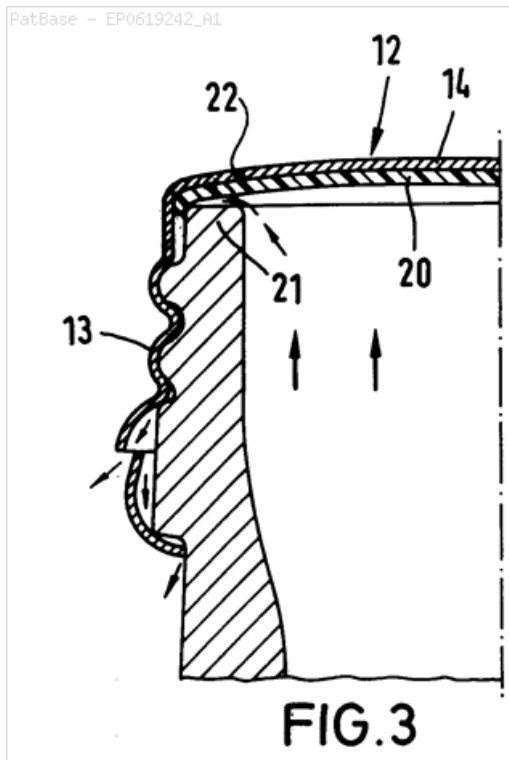
123) Family number: 17745524 (EP0619242A1) © PatBase

Title: PRESSURE VENTING CLOSURE CAP.

Abstract: The safety closure has a closure cap (12) in whose end wall (14) a weakening groove (22) is arranged so that the end wall can tear open in the case of excess pressure in order to prevent the bottle bursting. The weakening groove (22) is arranged on the inside of the end wall (14). The result of this is that the action of the weakening groove has no effect on the bulging-out of the end wall (14) and that the release pressure can be maintained in a reproducible manner. Furthermore, the outside of the end wall is undamaged so that any printing on the end wall is not destroyed or damaged by the weakening groove.

Classifications:

International (IPC 8-9): B65D51/16 (Advanced/Invention);
B65D51/16 (Core/Invention)
International (IPC 1-7): B65D41/32 B65D51/16 B65D51/24
CPC: B65D51/1638 B65D51/1661
European: B65D51/16D1 B65D51/16D3

**Family:**

Publication number	Publication date	Application number	Application date
AT159489 E	19971115	AT19940104124T	19940316
DE59404382 D1	19971127	DE19945004382	19940316
DE9305416 U1	19940210	DE19930005416U	19930409
EP0619242 A1	19941012	EP19940104124	19940316
EP0619242 B1	19971022	EP19940104124	19940316

Priority:

DE19930005416U 19930409 DE19945004382 19940316

Probable Assignee: METALLWARENFABRIK GMBH

Assignee(s): (std): METALLWAREN FABRIK GMBH ; METALLWARENFABRIK GMBH

Assignee(s): METALLWARENFABRIK GMBH 42499 HUECKESWAGEN DE ; METALLWAREN FABRIK GMBH 42499 HUECKESWAGEN DE

Inventor(s): (std): FERNHOLZ KURT

Inventor(s): FERNHOLZ KURT D 58553 HALVER DE

Designated states: AT BE CH DE DK FR IT LI NL

124) Family number: 18649525 (FR2377943A)

© PatBase

Title: ELASTOMERIC CLOSURES FOR BOTTLES CONTAINING PRESSURISED DRINKS - COMBINING AN INTERNAL PLUG WITH EXTERNAL CLAMPING TABS AND A FOIL CAP, PREF. OF STYRENE!-BUTADIENE! RUBBER

Abstract: A closure for sealing bottle tops having an annular lip is made of elastic material, pref. styrene-butadiene rubber, and comprises a thin wall blind hollow stopper which is an interference fit into the bottle mouth and supports a hollow crown fitted with pivotted tabs which can clamp beneath the external lip on the bottle top. The crown is covered with a metal foil sheath which may be embossed or printed etc. Used for sealing or resealing bottles containing pressurised drinks. The elasticity of the internal plug utilises the internal pressure to maintain the seal.

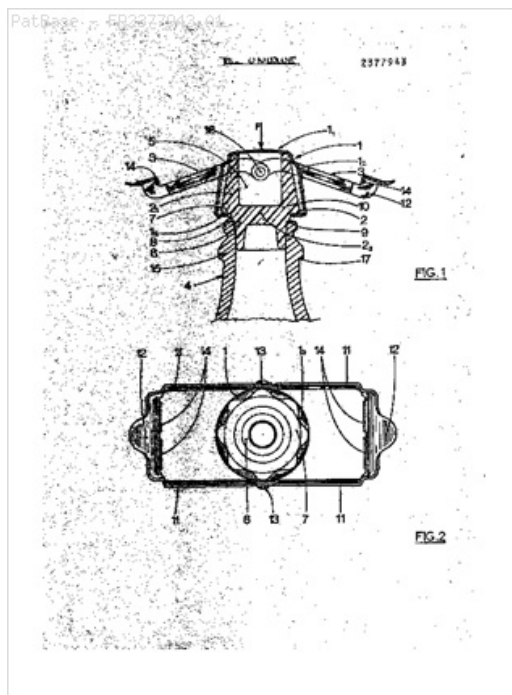
Classifications:

International (IPC 8-9): B65D39/12 B65D45/20 (Advanced/Invention);
B65D39/00 B65D45/00 (Core/Invention)

International (IPC 1-7): B65D39/12 B65D39/16 B65D45/00
H01H23/04

CPC: B65D39/12 B65D45/20

European: B65D39/12 B65D45/20



Family:

Publication number	Publication date	Application number	Application date
DE2802511 A1	19780727	DE19782802511	19780120
ES466235 A1	19781016	ES19780466235	19780120
ES466235 A2	19781103	ES19780466235	19780120
FR2377943 A1	19780818	FR19770001675	19770121
FR2377943 B1	19810724	FR19770001675	19770121

Priority:

FR19770001675 19770121

Probable Assignee:

HEBERT JEAN CLAUDE

Assignee(s): (std):

HEBERT JEAN CLAUDE

Assignee(s):

JEAN CLAUDE HEBERT

Inventor(s): (std):

HEBERT JEAN CLAUDE

125) Family number: 30864537 (US6783036B)

© PatBase

Title: Non-spill liquid dispensing container

Abstract: A liquid storing and dispensing package comprising a bottle having a dispensing spout, a cap normally closing the dispensing spout for storage, and a push-in portion in the bottom of the bottle. A push rod has a head stored in the spout and responsive to actuation of the push-in portion to emerge with the spout and allow liquid dispensing. In one aspect of the invention, the push rod head can be refixed and resealed within the spout, by one hand of the user, to prevent further dispensing and to save part of the contents of the bottle for late dispensing, prior to the installation of the cap.

Classifications:

International (IPC 8-9): B65D47/20 (Advanced/Invention);

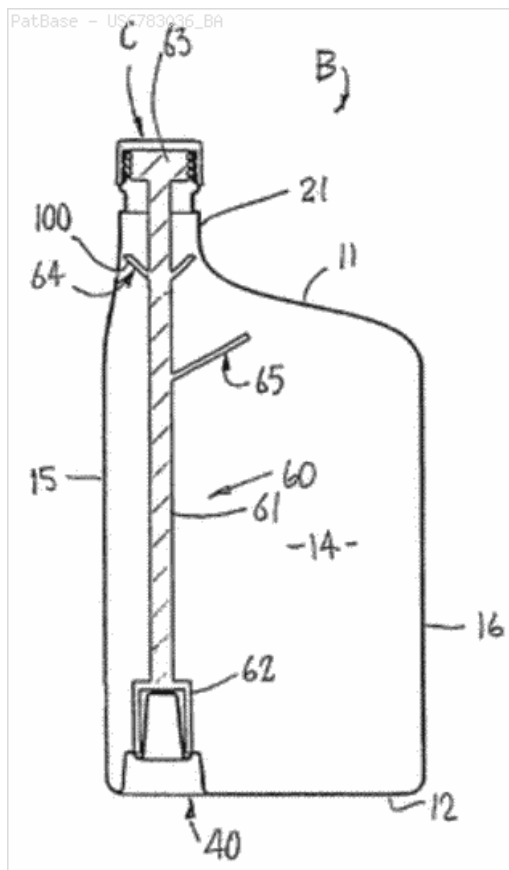
B65D47/04 (Core/Invention)

International (IPC 1-7): B67D3/00

CPC: B65D47/2062

European: B65D47/20E4A

US: 215/267 222/213 222/510 222/518



Family:

Publication number	Publication date	Application number	Application date
US6783036 BA	20040831	US20030400320	20030327

Priority:

US20030400320 20030327

Probable Assignee: HAUGESTAD OYVIND

Assignee(s): (std): HAUGESTAD OYVIND

Inventor(s): (std): HAUGESTAD OYVIND

126) Family number: 19739538 (GB605292A)

© PatBase

Title: Improvements in or relating to the opening of sealed bottles and like containers

Abstract: 605,292. Opening bottles and c. GEE, L. F., and GEE, J. A. Dec. 19, 1945, No. 34411. [Classes 66, 125(ii) and 125(iii)] A paper and c. bottle a sealed by a thin metal disc b sunk into the mouth thereof, is opened by a cap formed in two diameters, viz. a skirt-portion d of larger diameter, normally snapping over the sealed top (Fig. 6), and a portion d' of lesser diameter, adapted, on inversion, to be cut out and revolved in the mouth of the sealed bottle, the cap being provided with a roof d' in which there is integrally formed a displaceable cutter tongue d which may be turned to pierce and cut the metal disc (Fig. 5). The disc b is preferably secured to the bottle a by anshaped clamping ring c. The skirt portion d of the cap may be serrated and c. in order to grip the ring c.

Classifications:

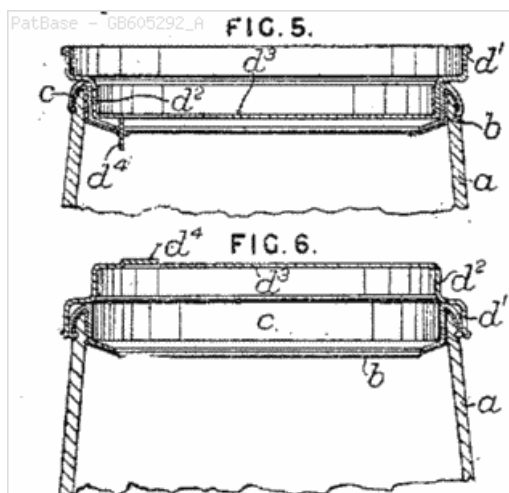
International (IPC 8-9): B65D51/22 (Advanced/Invention);

B65D51/18 (Core/Invention)

International (IPC 1-7): B65D17/16

CPC: B65D51/223 B65D2251/0018 B65D2251/0071 B67B7/24

European: B65D51/22 B65D51/22A1B B67B7/24 L65D251/00Y2F L65D251/00Y6A



Family:

Publication number	Publication date	Application number	Application date
GB605292 A	19480720	GB19450034411	19451219

Priority:

GB19450034411 19451219

Probable Assignee:

JOHN ALFRED GEE

Assignee(s): (std):

JOHN ALFRED GEE ; LEONARD FAVIELL GEE

127) Family number: 21716548 (US2573111A)

© PatBase

Title: BOTTLE CAP

Abstract: (Claim 1) 1. A bottle cap comprising top and skirt portions of moulded plastic material, and a closed cylindrical ring of relatively thin spring metal concentrically moulded in said skirt portion, said ring having a series of relatively closely spaced 6 transverse slots alternately extending to the opposite edges thereof and overlapping each other in the center, to increase the resiliency of said skirt in the circumferential direction, to thereby effect a hermetic and permanent seal by elastic pressure when said cap is forced over the mouth of a bottle.

Classifications:

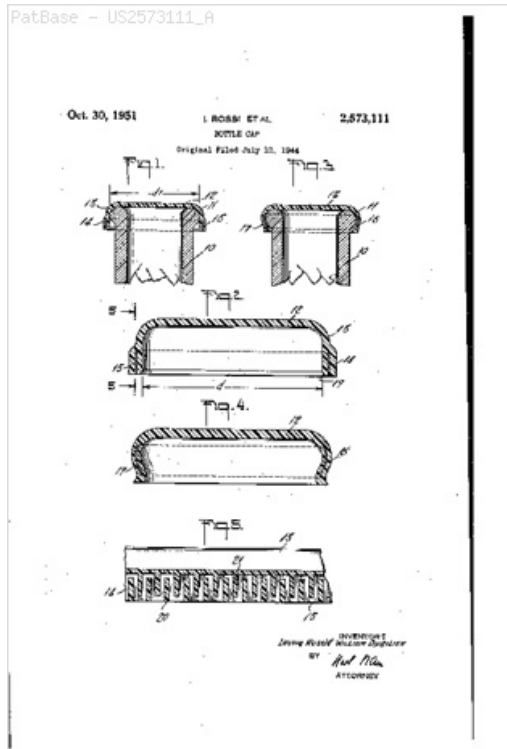
International (IPC 8-9): A41F9/00 B65D41/18 (Advanced/Invention);
A41F9/00 B65D41/02 (Core/Invention)

International (IPC 1-7): B29D29/02 B65D1/10 B65D41/18

CPC: A41F9/002 B65D41/18 Y10T428/214 Y10T428/2419
Y10T428/24777

European: A41F9/00B B65D41/18

US: 2/338 215/317 215/321 428/121 428/192 428/66.3



Family:

Publication number	Publication date	Application number	Application date
US2445889 A	19480727	US19440544614	19440712
US2573111 A	19511030	US19480039433	19480719

Priority:

US19440544614 19440712

US19480039433 19480719

Probable Assignee:

IRVING ROSSI

Assignee(s): (std):

IRVING ROSSI ; WILLIAM DUBILIER

Inventor(s): (std):

IRVING ROSSI ; WILLIAM DUBILIER

Inventor(s):

DUBILIER WILLIAM ; ROSSI IRVING

128) Family number: 17674562 (DE9301842U1)

© PatBase

Title: SCHLUESSELANHAENGER Key Fob (Machine translation)

Abstract: Source: DE9301842U1 [DE] (Claim 1) 1. Schluesselfanhaenger mit einem zwischen einem Deckel und einem Boden angeordneten Innenraum zur Aufnahme von Wertmarken, Werbestreifen o. dgl. gekennzeichnet durch eine den Innenraum (11) fuellende, herausziehbare Schub- lade (14), die teilweise mittels einem Metallring als Kapselheber (21) mit Anlageflaeche (22) abgedeckt und durch ein Fenster (20) im Deckel (16) sichtbar ist.

Machine translation: (Claim 1) 1 Keyring with a marked between a cap and a floor mounted interior to accommodate tokens, promotional strip or the like through the interior (11) full-length, pull-out drawer (14), partially through a metal ring and bottle opener (21) with Anlageflaeche (22) and covered by a window (20) in the lid (16) is visible.

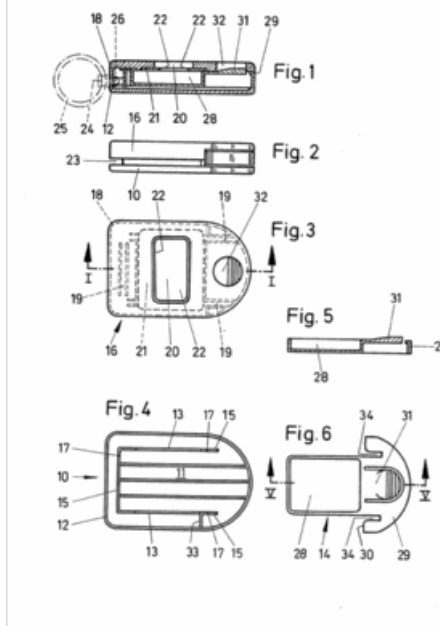
Classifications:

International (IPC 8-9): A44B15/00 (Advanced/Invention);
A44B15/00 (Core/Invention)

International (IPC 1-7): E05B19/00

CPC: A44B15/005

European: A44B15/00C

**Family:**

Publication number	Publication date	Application number	Application date
DE9301842 U1	19931223	DE19930001842U	19930210

Priority:

DE19930001842U 19930210

Probable Assignee: INFORM PLASTIK GMBH**Assignee(s):** (std): INFORM PLASTIK GMBH**Assignee(s):** INFORM PLASTIK GMBH 32657 LEMGO DE**129) Family number: 22925566 (US3223268A)**

© PatBase

Title: BOTTLE CAP AND METHOD OF APPLYING

Abstract: (Claim 1) 1. A bottle cap for bottles of the type having an annular internal sealing wall defining a mouth, a top lip, and an outer peripheral neck ring; said cap preformed from a substantially circular blank comprising an outer layer of metal foil, an inner layer of paper, means for securing said inner layer to said outer layer, and means for impregnating the exposed surface of said inner layer with paraffin to render it relatively impervious to moisture, said cap comprising a generally planar mouth-spanning portion; a generally frusto-conical inner wall rising upwardly from, and extending around said mouth-spanning portion; a rim having a top wall extending outwardly from said inner wall; an outer wall disposed from said top wall in a smooth arc and flowing outwardly and downwardly to a level substantially adjacent to the level of the mouthspanning portion; a skirt on the lower end of the outer wall, said skirt flowing outwardly at a wider angle than said outer wall; said inner wall culminating in a welldefined juncture with said rim and said outer wall of the rim having a well-defined juncture with said skirt; said inner wall, rim, and skirt being gathered in a plurality of circumferentially spaced folds extending outwardly from the mouth-spanning portion; said folds in the inner wall and rim being compacted into ribs projecting outwardly from the outer foil side of the cap to provide a generally smooth sealing surface at the underside of the inner wall and rim; a relatively stiff disk disposed inside said inner wall, means for securing said disk to the foil side of the mouth-spanning portion, said disk having an outer diameter approximately equal to the inside diameter of the inner wall at the juncture with said mouth-spanning portion to press the lower edge of the inner wall firmly against said sealing wall when the disk and mouth spanning portion are pressed into the mouth of the bottle, and thus effectuating a first seal; said inner wall being inclined outwardly at an angle whereby the lower portion of said inner wall is adapted to be cammed inwardly as it enters the mouth of the bottle; and said rim and skirt being adapted to be reformed around said lip and neck ring of the bottle to effectuate a second seal.

Classifications:

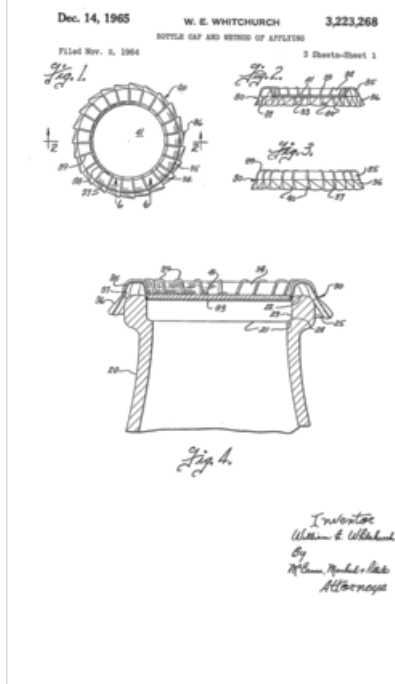
International (IPC 8-9): B65D41/14 B67B3/14 (Advanced/Invention);
B65D41/02 B67B3/00 (Core/Invention)

International (IPC 1-7): B65D41/14 B67B3/14

CPC: B65D41/145 B67B3/14

European: B65D41/14B B67B3/14

US: 215/292 215/325 215/326 53/488

**Family:**

Publication number	Publication date	Application number	Application date
US3223268 A	19651214	US19640408039	19641102

Priority:

US19640408039 19641102

Probable Assignee:

CHAMPION PAPERS INC

Assignee(s): (std):

CHAMPION PAPERS INC

Inventor(s): (std):

WHITCHURCH WILLIAM E

130) Family number: 15358581 (DE2541858A1)

© PatBase

Title: METAL BEER BOTTLE CAP - FOR PLAIN NECKS HAVING ANNULAR RIB AROUND RIM, NO TOOL REQUIRED FOR OPENING

Abstract: A beer bottle cap made from metal has a flat top (18) with sides fitting over the rim and rolled underneath, a layer of plastic inside forming a seal. Attached to the sides by a tab at one point is an oval shaped ring (16), the tab being attached to the large diameter and forming part of a line of weakness (20, 22) on each side, passing over the flat top and diverging outwards to the opposite side. In use, the ring is pulled up and over the cap. The tab bends outwards and the whole can be pulled upwards to tear along the weakness zones.

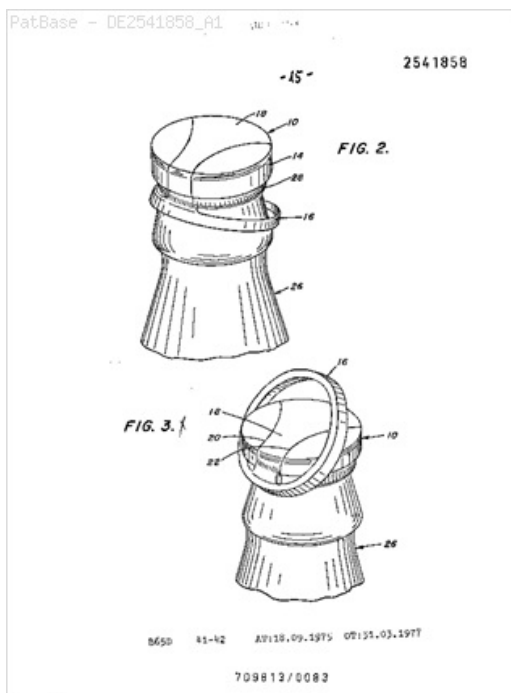
Classifications:

International (IPC 8-9): B65D41/42 (Advanced/Invention);
B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/42

CPC: B65D41/42

European: B65D41/42

**Family:**

Publication number	Publication date	Application number	Application date
DE2541858 A1	19770331	DE19752541858	19750918
DE2541858 C2	19830120	DE19752541858	19750918

Priority:

DE19752541858 19750918

Probable Assignee: ALUMINUM CO OF AMERICA

Assignee(s): (std): ALUMINUM CO OF AMERICA

Assignee(s): ALUMINUM COMPANY OF AMERICA ; ALUMINUM COMPANY OF AMERICA PITTSBURGH PA US

Inventor(s): (std): COOP JACKIE ALLEN ; COOP JACKIE

Inventor(s): COOP JACKIE ALLEN NEW LISBON IND US ; COOP JACKIE ALLEN NEW LISBON IND

131) Family number: 23926594 (WO02072445A1)

© PatBase

Title: RE-USABLE CAP FOR PRESSURISED CYLINDERS

Abstract: The invention relates to a re-usable cap for pressurised cylinders of the type that comprise a cap body or lid having a protector that is weakened by grooving. A crown is placed on top of the lid, surrounding said lid. The inventive device is essentially characterised in that the exterior of the protector of the inner body of the cap is provided with helical grooves for receiving ridges which are disposed on the inner surface of the crown. The ridges of the crown slide into the helical grooves of the inner body, in order to join both bodies together into one single piece, and define two axial positions for said crown on top of the inner body, compressing or decompressing the closing protector on the neck of the bottle, thereby closing and opening said neck with a simple turn of the cap.

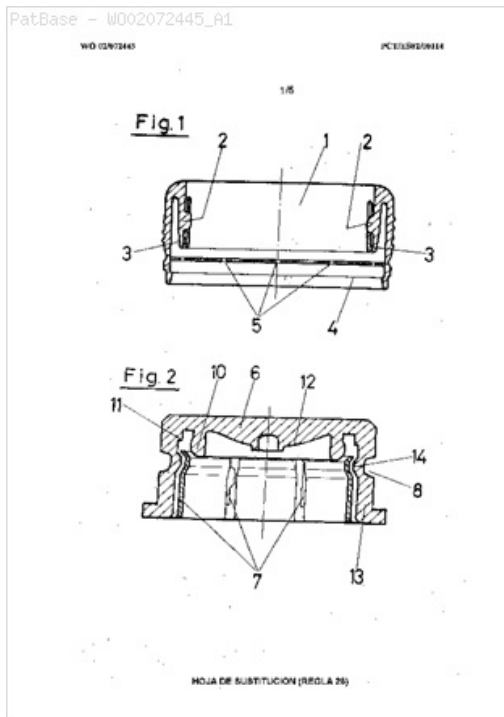
Classifications:

International (IPC 8-9): B65D41/46 B65D51/16 (Advanced/Invention); B65D41/32 B65D51/16 (Core/Invention)

International (IPC 1-7): B65D41/04 B65D47/24

CPC: Y02W30/807 B65D41/465 B65D51/1683

European: B65D41/46B B65D51/16E2



Family:

Publication number	Publication date	Application number	Application date
AU2002246130 AA	20020924	AU20020246130	20020312
ES2188356 AA	20030616	ES20010000562	20010312
ES2188356 BA	20041016	ES20010000562	20010312
WO02072445 A1	20020919	WO2002ES00114	20020312

Priority:

ES20010000562 20010312 WO2002ES00114 20020312

Probable Assignee: GOMEZ CAO JOSE LUIS

Assignee(s): (std): GOMEZ CAO JOSE LUIS

Inventor(s): (std): GOMEZ CAO JOSE LUIS

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

132) Family number: 48382596 (US2011296955A)

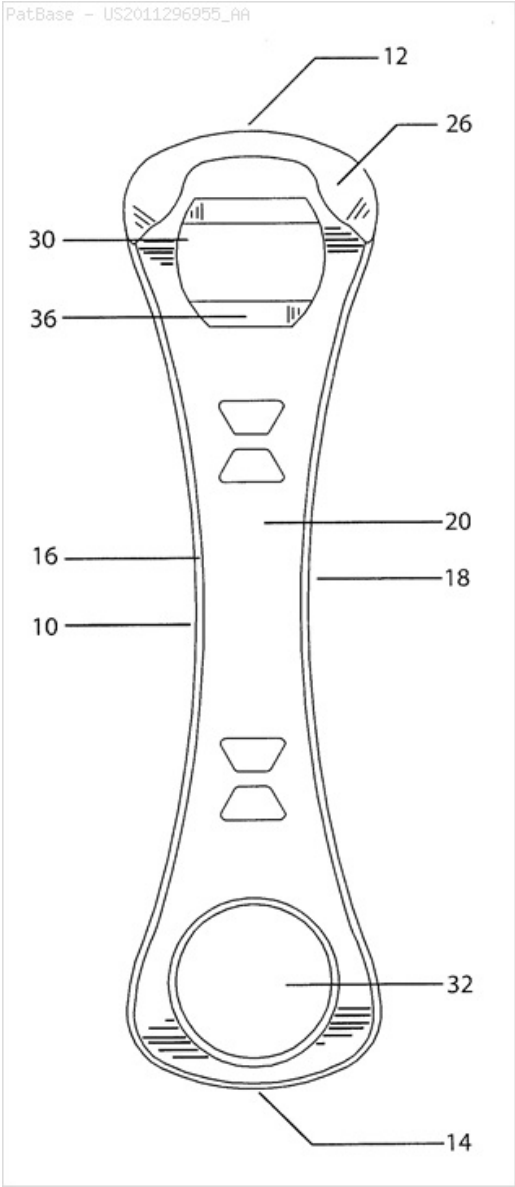
© PatBase

Title: MULTI PURPOSE BEVERAGE CONTAINER OPENER

Abstract: A multiple-function beverage container opener for lifting container lid lift tabs comprises a thin, relatively long and narrow body suitable for holding in a user's thumb and fingers. The body has a front edge and top and bottom surfaces, the front edge having a beveled top and undersurfaces at the edge that extends rearwardly at an acute angle with respect to the bottom and top surfaces whereby the opener edge may be slipped under a container lid tab. There is a ring aperture and an aperture for a bottle cap opener in the surfaces at opposite ends and the top and bottom parallel surfaces of the tool is

bowed, and the perimeter is curved inwardly and outwardly. The opener is provided which features and is ergonomically-shaped. The bottle cap opener is located towards the end of the opener adjacent to the opposite the beveled edge which is the pry-bar type opener for the pull tab lids.

Classifications:
International (IPC 8-9): B67B7/16 B67B7/40
B67B7/44 (Advanced/Invention)
CPC: B67B7/16 B67B7/30 B67B7/403 B67B7/44
European: B67B7/16 B67B7/30 B67B7/40B B67B7/44
US: 81/3.09 81/3.090P 81/3.55 81/3.550S



Family:

Publication number	Publication date	Application number	Application date
AU2011100039 AD	20110217	AU20110100039	20110107
CA2741904 AA	20111207	CA20112741904	20110601
EP2392541 A2	20111207	EP20110166231	20110516
EP2392541 A3	20130220	EP20110166231	20110516
US2011296955 AA	20111208	US20100795346	20100607

Priority:

US20100795346 20100607 AU20110100039 20110107

Probable Assignee: HOWARD SILVERS AND SONS PTY LTD

Assignee(s): (std): HOWARD SILVERS AND SONS PTY LTD ; SILVERS MICHAEL HENRY ; TAM SAM

Inventor(s): (std): SILVERS MICHAEL HENRY ; TAM SAM

Inventor(s): SAM TAM ; MICHAEL HENRY SILVERS

Agent(s): FB RICE; FB RICE PTY LTD; SANDRI SANDRO

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

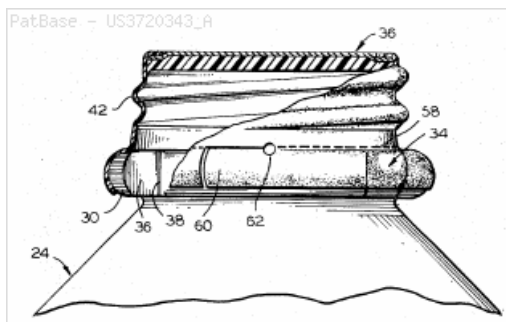
133) Family number: 1103602 (US3720343A) © PatBase

Title: TAMPER PROOF BOTTLE CAP

Abstract: A milk bottle cap, apparatus and method, especially adapted as tamperproof closures for plastic milk bottles and the like. The bottle cap comprises a laminated disc structure containing a top layer of a rigid material, preferably an impervious plastic material, an intermediate layer which can be aluminum foil or the like, and a plastic foam disc for contact with the bottle opening. The disc, when placed on the bottle opening, is then sealed in place over the bottle opening and maintained in place by a heat shrink tube which is heat shrunk around and partially over the closure disc, and sealed thereto, and having a depending skirt in intimate sealing contact with the threads on the neck of the bottle. A tear strip is provided to initially break the seal to permit removal. The heat shrink material has sufficient strength and rigidity whereby the cap can be re-engaged, after removal, on the bottle threads for reclosure of the bottle.

Classifications:

International (IPC 8-9): B29C63/42 B65D39/02 B65D41/54 B65D45/00 (Advanced/Invention); B29C63/38 B65D39/00 B65D41/32 B65D45/00 (Core/Invention)
International (IPC 1-7): B29C27/14 B65D41/34 B65D55/02
CPC: B29C63/423 Y10T156/1052 B32B15/082 B32B15/046 B32B15/20 B32B27/304 B32B2435/02 B65D39/02 B65D41/54 B65D45/00
European: B29C63/42B B65D39/02 B65D41/54 B65D45/00
US: 156/250 156/6.9 156/69 156/85 156/86 215/246 215/254 215/256 215/275

**Family:**

Publication number	Publication date	Application number	Application date
US3720343 A	19730313	US19710200397	19711119
US3844861 A	19741029	US19720316547	19721219

Priority:

US19710200397 19711119 US19720316547 19721219

Probable Assignee:

GILBRETH INT CORP

Assignee(s): (std):

ERIN IND INC ; GILBRETH INT CORP

Assignee(s):

GILBRETH INT CORP US ; ERIN IND INC US

Inventor(s): (std):

IRISH E

Inventor(s):

IRISH E US

134) Family number: 22090602 (US2742170A)

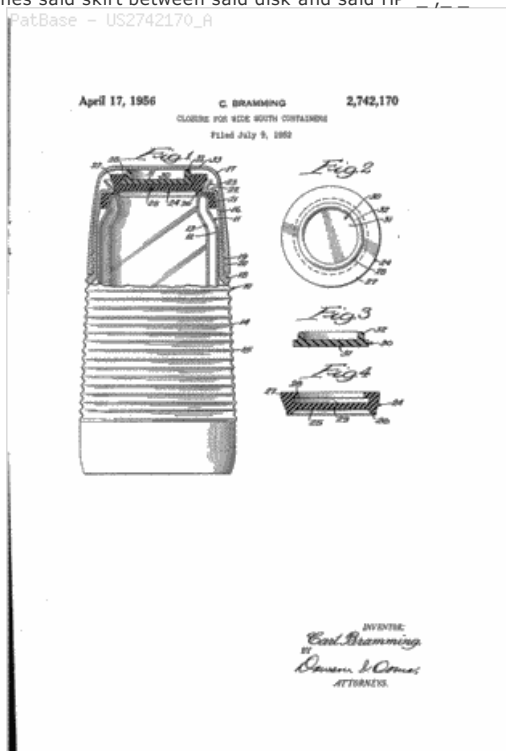
© PatBase

Title: CLOSURE FOR WIDE MOUTH CONTAINERS

Abstract: In a vacuum bottle unit having a vacuum insulated receptacle with an annular lip defining a mouth therein, and a cap detachably receivable on said unit over said mouth, the improvement comprising a soft resilient rubber-like generally circular closure member of a diameter substantially greater than the inside of said 'mouth for spanning and covering said mouth, said closure member including a substantially flat circular disk-like body portion having an annular skirt depending from the rim thereof for abutting engagement with said lip on said vacuum insulated receptacle, said closure member including an annular flange extending upwardly from the rim of said body portion and having a 'radially intumed portion spaced above said body portion to define an annular retaining groove therebetween, a substantially rigid disk having a 'lower face engaging the upper face of said body portion, said disk having a rim portion received and disengageably retained in said annular groove, said disk having a rib extending upwardly thereon above the upper end of said 'rubber-like closure member for engaging the underside of said skirt. End receiving downward thrust therefrom to urge said skirt into sealing relation with said lip, said disk being substantially smaller in diameter than the inside of said mouth whereby the downward thrust exerted by said cap on said disk expands and pinches said skirt between said disk and said HP'.

Classifications:

International (IPC 8-9): A47J41/00 (Advanced/Invention); A47J41/00 (Core/Invention)
International (IPC 1-7): A47J41/02
CPC: A47J41/0011
European: A47J41/00C1
US: 215/12.1 215/277 215/364

**Family:**

Publication number	Publication date	Application number	Application date
US2742170 A	19560417	US19520297891	19520709

Priority:

US19520297891 19520709

Probable Assignee:

ALADDIN IND INC

Assignee(s): (std): ALADDIN IND INC
Inventor(s): (std): CARL BRAMMING
Inventor(s): BRAMMING CARL

135) Family number: 18786610 (GB430096A)

© PatBase

Title: Improvements in or relating to screw caps for bottles, jars and the like containers

Abstract: 35360. [Class 125 (iii)] A screw or bayonet-joint type of cap 1 for a bottle c. has a smooth exterior and is made by coiling a strip of sheet material 14 on which a thread 6 has been rolled or on which suitable lugs have been formed. The skirt of the cap is turned inwardly and upwardly at 7 and pressed on the band to prevent relative rotation. The cap may be of material sold under the Registered Trade Mark " Bakelite " and the band of metal. The skirt of the cap may be provided with a rib against which the ends of the band abut to prevent relative rotation.

Classifications:

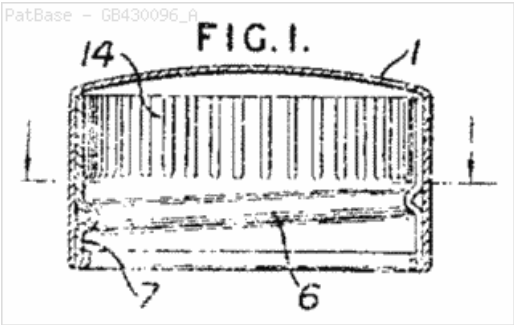
International (IPC 8-9): B65D41/04 (Advanced/Invention);

B65D41/04 (Core/Invention)

International (IPC 1-7): B65D41/04

CPC: B65D41/0492

European: B65D41/04G



Family:

Publication number	Publication date	Application number	Application date
GB430096 A	19350613	GB19330035360	19331215

Priority:

GB19330035360 19331215

Probable Assignee: SURE SEAL AND SUTAX LTD

Assignee(s): (std): SURE SEAL AND SUTAX LTD ; WILLIAM ALFRED STEPHENS

Assignee(s): SURE SEAL AND SUTAX LIMITED

136) Family number: 22975626 (FR1348023A)

© PatBase

Title: BOUCHON A VIS ANTI-VOL PERFECTIONNEE POUR RECIPIENTS CAP SCREW ANTI-THEFT FOR IMPROVED CONTAINERS (Machine translation)

Abstract: Source: FR1348023A [FR] (Claim 1) 1 **ATTENTION** debut du champ CLMS peut contenir fin de DESC **. fente 10 en un point quelconque entre les ponts 9 et 8'. Lorsque le bouchon a vis antivol est applique sur une bouteille, comme le montre la figure

Machine translation: (Claim 1) 1 ** WARNING ** start of CLMS field may contain end of DESC **. slot 10 at any point between the bridges 9 and 8 '. When the screw cap lock is applied to a bottle, as shown in Figure

Classifications:

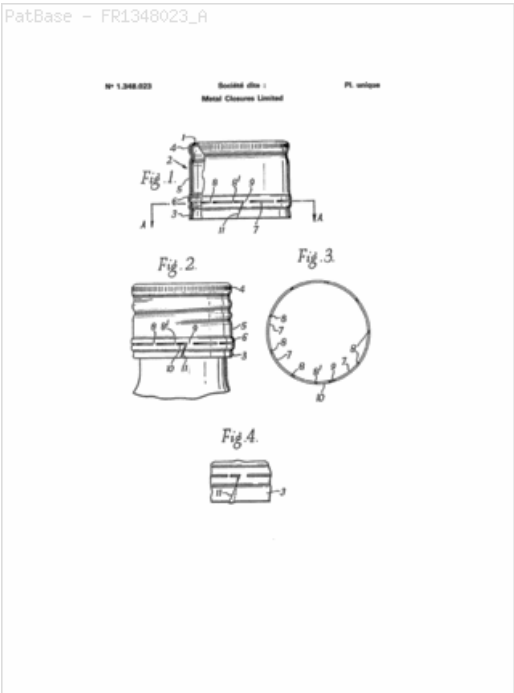
International (IPC 8-9): B65D41/34 (Advanced/Invention);

B65D41/34 (Core/Invention)

International (IPC 1-7): B65D41/34

CPC: B65D41/348 B65D2101/0046 B65D2101/0053 B65D2101/0061

European: B65D41/34F L65D101/00A3D L65D101/00A3E L65D101/00A3F



Family:

Publication number	Publication date	Application number	Application date
FR1348023 A	19640104	FR19630922083	19630121

Priority:

FR19630922083 19630121

Probable Assignee:

METAL CLOSURES LTD

Assignee(s): (std):

METAL CLOSURES LTD

Assignee(s):

METAL CLOSURES LIMITED

137) Family number: 14629 (US3462035A)

© PatBase

Title: PLASTIC BOTTLE CAP WITH INTEGRAL HANDLE**Abstract:** ABSTRACT OF THE DISCLOSURE

A one-piece plastic bottle cap comprising a crown-shaped main part encircled by a reinforcing ring which holds the main part on the bottle and is integral therewith over a 60 degrees sector, but may be swung upwardly and used to pull the cap off the bottle. The cap has two depending skirts and the inside of the outer skirt is provided with retaining means for engagement over the peripheral ridge on the mouth of a bottle. The difficulties encountered when trying to effect a close seal between plastic caps and glass bottles containing carbonated liquids or compressible bottles under substantial internal pressure from air located above the liquid stored therein are well known. In effect, the internal ribs designed to hold the cap on are not always adequate to resist the pressure of the gas in the bottle, so that the cap may be spontaneously blown off. This problem has heretofore been solved by combining plastic caps provided with an internal sealing skirt with external metallic caps such as those known as "crown caps," for example.

Classifications:

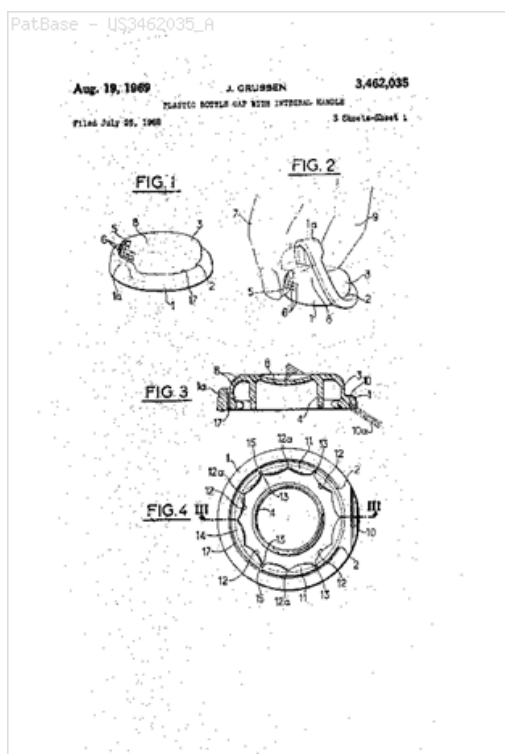
International (IPC 8-9): B65D41/48 (Advanced/Invention);
B65D41/32 (Core/Invention)

International (IPC 1-7): B65D39/16 B65D41/16 B65D41/30
B65D41/32 B65D41/46 B65D41/48 B65D41/60 B65D8/02 B67B3/22

CPC: Y10S215/901 B65D41/485 B65D2101/0046

European: B65D41/48B L65D101/00A3D

US: 215/253 215/295 215/320 215/396 215/41 215/46 215/901
220/212.5 D9/454

**Family:**

Publication number	Publication date	Application number	Application date
AT291803 B	19710726	AT19680007296	19680726
BE718510 A	19681231		19680724
CH478695 A	19690930	CH19680011291	19680726
CS151475 B2	19731019	CS19680005433	19680725
DE1782059 A1	19720120	DE19681782059	19680713
DE1782059 B2	19750528	DE19681782059	19680713
DE1782059 C3	19760115	DE19671782059	19680713
DK124116 B	19720918	DK19680003639	19680726
ES356565 A1	19700401	ES19680356565	19680727
FI50958 B	19760531	FI19680002121	19680726
FI50958 C	19760910	FI19680002121	19680726
FR1539832 A	19680920	FR19670116185	19670728
FR1566362 A	19690509	FR19680139392	19680209
FR95715 E	19710604	FR19680157591	19680702
GB1200144 A	19700729	GB19680035371	19680724
IE32224 B	19730516	IE19680000907	19680726
IE32224 L	19690128	IE19680000907	19680726
IL30446 A0	19680926	IL19680030446	19680726
IL30446 A1	19711129	IL19680030446	19680726
LU56567 A	19681030		19680723
NL152219 B	19770215	NL19680010560	19680725
NL6810560 A	19690130	NL19680010560	19680725
NO125580 B	19721002	NO19680002921	19680724

SE342021 B	19720124	SE19680010212	19680726
US3462035 A	19690819	US19680747635	19680725
YU31374 B	19730430	YU19680001793	19680726

Priority:

FR19670116185 19670728 FR19680139392 19680209 FR19680157591 19680702

Probable Assignee: JEAN GRUSSEN PARIJS

Assignee(s): (std): CRUSSEN J ; GRUSSEN ; GRUSSEN J ; GRUSSEN JEAN

Assignee(s): GRUSSEN JEAN PARIS ; JEAN GRUSSEN ; JEAN GRUSSEN PARIJS ; JEAN GUIGAN

Inventor(s): (std): GRUSSEN J ; JEAN GRUSSEN ; GRUSSEN JEAN

Inventor(s): GRUSSEN JEAN PARIS

Agent(s): EITAN PEARL LATZER AND COHEN ZEDEK

138) Family number: 9040637 (PT86841A)

© PatBase

Title: METAL SCREW CAP FOR LIQUID CONTAINERS UNDER PRESSURE - HAS PLASTICS SECURITY RING WITH SUBDIVIDED INTERNAL RING BROKEN ON UNSCREWING CAP

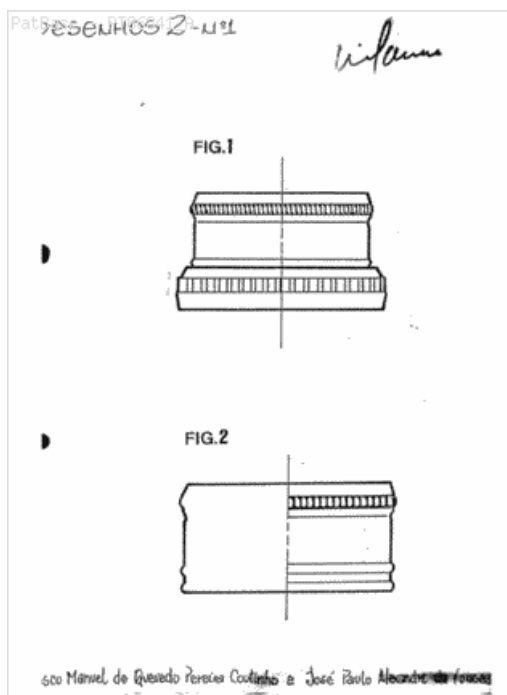
Abstract: The cap consists of an upper metal portion which acts as the retainer and a lower plastics ring which ensures inviolability of the bottle. The plastics part consists of an exterior ring and two sub-divided rings which are broken on unscrewing the cap to open the.

Classifications:

International (IPC 8-9): B65D65/00 (Advanced/Invention);

B65D65/00 (Core/Invention)

International (IPC 1-7): B65D65/00



Family:

Publication number	Publication date	Application number	Application date
PT86841 A	19900308	PT19880086841	19880225

Priority:

PT19880086841 19880225

Probable Assignee: VASCO MANUEL DE QUEVEDO PEREIR

Assignee(s): (std): JOSE PAULO ALEXANDRE DA FONSEC ; VASCO MANUEL DE QUEVEDO PEREIR

Assignee(s): VASCO MANUEL DE QUEVEDO PEREIRA COUTINHO

Inventor(s): (std): FONSECA JOSE PAULO ALEXANDRE D

Inventor(s): JOSE PAULO ALEXANDRE DA FONSECA

139) Family number: 53724640 (WO13068454A1)

© PatBase

Title: BEVERAGE BOTTLE WITH A RE-SEALABLE CLOSURE HAVING A CAP AND A COLLAR

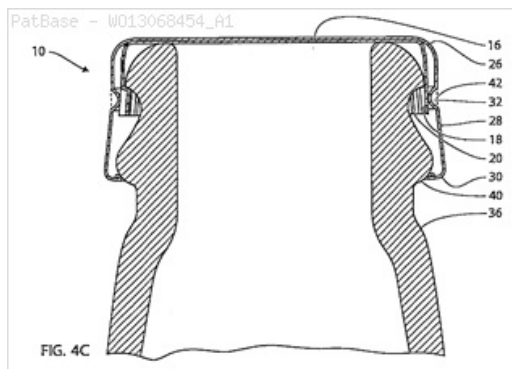
Abstract: The present invention relates to a beverage bottle having a resealable closure (32). The beverage bottle comprises a mouth. The mouth comprises an outwardly oriented bulge. The closure comprising a cap comprising a disc (16) adapted to cover the opening of the mouth. The cap further comprises a corrugated circumferential skirt (18) which has a plurality of resilient axial slots (20). The closure further comprises a collar (12) comprising an upper section (26), a lower section (30) and an intermediate section (28) which latter defines an inwardly oriented protrusion (32). The sections define an inner space accommodating the cap and allowing the cap to be axially movable. In a closed state of the closure (32) the inwardly oriented protrusion (32) compresses the skirt (18) inwardly for interlocking with the outwardly oriented bulge. In an open state of the closure the inwardly oriented protrusion is located adjacent the disc such that the skirt assumes an uncompressed state.

Classifications:

International (IPC 8-9): B65D41/10 B65D41/12

B65D45/32 (Advanced/Invention)

CPC: B65D45/322 B65D41/12



Family:

Publication number	Publication date	Application number	Application date
CN104039658 A	20140910	CN201280065724	20121108
EA201490950 A1	20141030	EA20140090950	20121108
EP2592015 A1	20130515	EP20110188427	20111109
EP2776333 A1	20140917	EP20120781338	20121108
IN04190CN2014 A	20150717	IN2014CN04190	20140605
WO13068454 A1	20130516	WO2012EP72122	20121108

Priority:

EP20110188427 20111109 EP20120781338 20121108 WO2012EP72122 20121108

Probable Assignee: CARLSBERG BREWERIES AS

Assignee(s): (std): BYGRAVE ALEXANDER ; CARLSBERG BREWERIES AS ; LACY GRAHAM KEITH ; SWAN JULIAN FRANCIS RALPH

Assignee(s): CARLSBERG BREWERIES A S

Inventor(s): (std): BYGRAVE ALEXANDER ; LACY GRAHAM KEITH ; SWAN JULIAN FRANCIS RALPH

Agent(s): NIELSEN HENRIK STEN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

140) Family number: 56265650 (US2016107802A)

© PatBase

Title: SECOND GENERATION LOW GAUGE CROWN CAP

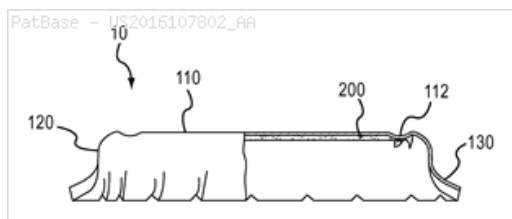
Abstract: A lightweight, crimp-type crown cap for application to a glass beverage bottle, comprises a shell formed of a material comprising steel tinplate. The shell includes a round panel having an upper surface, a lower surface and a peripheral edge. A skirt depends downwardly from the peripheral edge of the panel, the skirt having fewer than 21 corrugations, wherein the corrugations are adapted to be crimped to affix the crown cap to a rim of a bottle opening. A circular groove is formed in the panel, defining a downwardly concave portion on the upper surface of the panel and a corresponding downwardly convex portion on the lower surface of the panel, and the circular groove is arranged to align with the rim of the bottle. A liner is disposed on the lower surface of the panel.

Classifications:

International (IPC 8-9): B21D51/48 B65D41/00 B65D41/12 B65D41/46 (Advanced/Invention)

CPC: B65D41/14 B21D51/48 B65D41/12

US: 215/328 413/56 413/8



Family:

Publication number	Publication date	Application number	Application date
BR112015008637 A2	20170704	BR20151108637	20130502
CA2889308 AA	20150416	CA20132889308	20130502
CL2015000267 A1	20150814	CL20150000267	20150204
CN104870328 A	20150826	CN201380054017	20130502
CR20150176 A	20150730	CR20150000176	20150330
IN04203DN2015 A	20151016	IN2015DN04203	20150518
PE13202015 Z	20151025	PE20150000739U	20150603
US2016107802 AA	20160421	US20130436675	20130502
WO14060800 A2	20140424	WO2013IB00831	20130502
WO14060800 A3	20150813	WO2013IB00831	20130502

Priority:

US20120714868P 20121017 US20130436675 20130502 WO2013IB00831 20130502

Probable Assignee: PACKAGING PRODUCTS DEL PERU SA

Assignee(s): (std): PACKAGING PRODUCTS DEL PERU S A

Assignee(s): PACKAGING PRODUCTS DEL PERU SA ; MERINO ALFREDO ABEL JR

Inventor(s): (std): MERINO ALFREDO ABEL ; MERINO ALFREDO ABEL JR ; MERINO CABALLERO ALFREDO ABEL ; MERINA ALFREDO ABEL JR ; ALFREDO ABEL MERINO

Agent(s): MILTONS IP PI; MONSALVE PI Y CIA LTDA

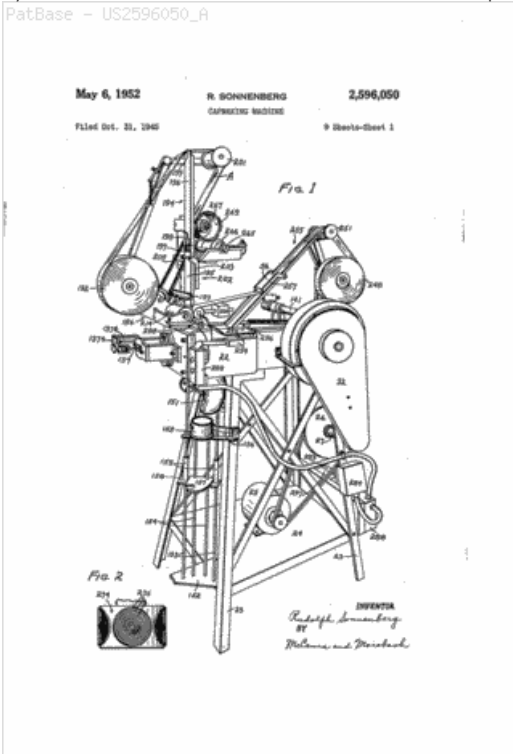
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

141) Family number: 21938650 (US2596050A) © PatBase

Title: CAPMAKING MACHINE

Abstract: (Claim 1) 1. The combination in a machine for forming bottle caps from thin strip stock comprising cooperating bottle cap blanking and forming die elements disposed to have said strip feed thereto along a vertical path, means for supporting a roll of stock for delivery to said die elements, a pair of feed rolls spaced immediately above said cap die elements for feeding the strip therethrough, guide means between the roll of stock and the feed rolls for guiding the strip into the rolls in alignment with the die elements, said guide means comprising an elongated member of substantially greater length than width extending vertically above said feed rolls, said member having a flat bottom for reception of the strip thereagainst and upstanding edges spaced a distance substantially equal to the width of the strip to prevent lateral displacement of the strip as it passes through the guide, and yieldable means for retaining said strip against the flat bottom, means for imparting 8. Stiffening configuration to the strip as it passes through the rolls to maintain alignment of the sheet between the rolls and the die elements and means for intermittently rotating the feed rolls and driving the die elements in timed relationship to successively feed the strip downwardly between the die elements and form successive caps.

Classifications:
International (IPC 8-9): B21D51/48 (Advanced/Invention);
B21D51/38 (Core/Invention)
CPC: B21D51/48
European: B21D51/48
US: 226/157 493/110 493/154 493/27 493/472 493/73



Family:

Publication number	Publication date	Application number	Application date
US2596050 A	19520506	US19450625838	19451031

Priority:

US19450625838 19451031

Probable Assignee: MID WEST BOTTLE CAP CO
Assignee(s): (std): MID WEST BOTTLE CAP CO
Inventor(s): (std): RUDOLPH SONNENBERG
Inventor(s): SONNENBERG RUDOLPH

142) Family number: 23094653 (US3199703A) © PatBase

Title: CONTAINER CLOSURE

Abstract: 1,092,935. Bottle c. closure caps. WEST CO. March 23, 1965 [June 15, 1964], No. 12171/65. Heading B8T. A bottle closure 10, comprises a metal cap 30 connected by a weakened juncture 36 to an outer wall 50 of a retaining ring 32, the inner wall 52 of which contains grooves 56, which engage ribs 20 on a bottle neck 12 to prevent relative rotation between the retaining ring and bottle, the cap being deformable to fit into threads 16 on the bottle neck. The bottle closure is similar to that described in Specification 940,119 but the double wall gives extra rigidity to the cap 30 and eliminates the rough edge encountered in a single wall retaining ring.

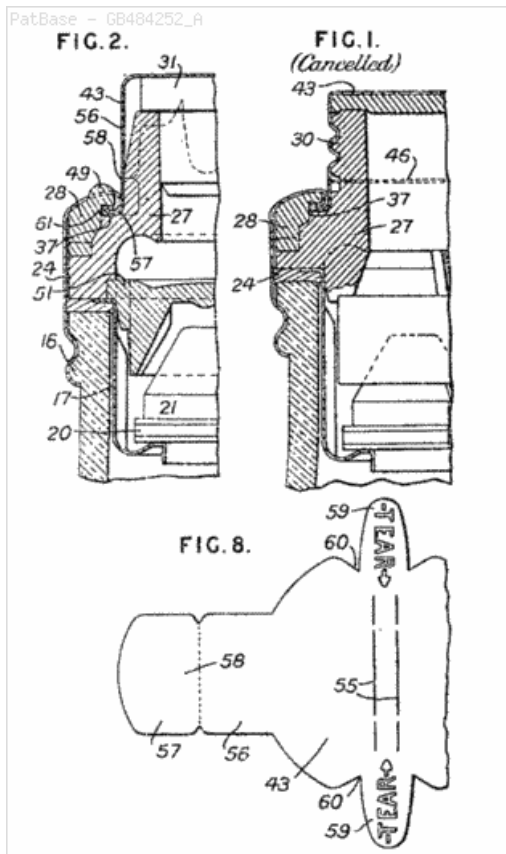
Classifications:
International (IPC 8-9): B65D41/34 B65D41/40 B65D53/04
B65D55/12 (Advanced/Invention);
B65D41/34 (Core/Invention)
International (IPC 1-7): B65D55/08 B65D55/16 H01K1/50
CPC: B65D41/3409 B65D41/348
European: B65D41/34A1 B65D41/34F
US: 215/252

Publication number	Publication date	Application number	Application date
AU6000765 A1	19661215	AU19650060007	19650610
ES114257 U	19651116	ES19650114257U	19650615
GB1092935 A	19671129	GB19650012171	19650323
US3199703 A	19650810	US19640375161	19640615

Probable Assignee:	WEST CO
Assignee(s): (std):	WEST CO
Assignee(s):	THE WEST COMPANY
Inventor(s): (std):	ALEXANDER CLAUDE C

Abstract: Divided out of 475,439 under which a Specification was laid open to inspection under Sect. 91 of the Acts, March 1, 1937. [Classes 125 (i) and 125 (iii)] A closure element 31 for the discharge orifice of a bottle c. is secured by a cap 43, Fig. 2, having separate depending portions 56 which are weakened transversely at say lines 58 so that when the lower ends 57 of the portions 56 are secured to the bottle any attempt to remove the cap in order to gain access to the contents of the bottle necessitates rupture at the points 58 so leaving the parts 57 secured to the bottle as visible evidence of its opening. As shown, the parts 57 are provided with a hook 61 or a head which is forced into an undercut groove 37 on the bottle or a part thereof; the cap is formed from a sheet metal blank of the form shown in Fig. 8, by operations consisting of simple bending, and it is provided with tear-off tabs 59, the body part being notched at the points 60 where the tabs make junction with the body, and the latter being furnished with slits or weakened lines 55 to assist the operation of removal. The groove 37 is formed between a main nozzle portion 27, Fig. 2, either separate from or integral with the neck of the bottle, and a secondary ring portion 28, the latter and the part 27 being, if desired, united together by firing a coating of glazing material; the parts 27, 28, if separate from the bottle, are secured thereto by means of a ferrule 24, the lower part of the ferrule being secured to a flange 16 on the bottle neck and the upper part of the ferrule being turned into the groove 37; a number of openings in the upper part of the ferrule facilitate this latter operation, and such openings may each accommodate a projection 49 on the ring 28 this being of frangible material so that an illicit attempt to remove the ferrule will become obvious by breakage of one or more of the projections. As shown in Fig. 2, the bottle is furnished with parts 17, 21, 51 constituting the elements of the non-refillable device of Specification. Specification 475,439 is referred to. The Specification as open to inspection under Sect. 91 refers to a modification in which the cap 43, Fig. 1 (Cancelled), is formed without lugs and is further secured to the nozzle by rolling the metal into screw threads 30 formed on the latter, and in this form the weakening line 46 is formed completely round the cap. This subject-matter does not appear in the Specification as accepted.

International (IPC 8-9): B65D49/04 (Advanced/Invention);
B65D49/00 (Core/Invention)
CPC: B65D49/04
European: B65D49/04

**Family:**

Publication number	Publication date	Application number	Application date
GB484252 A	19380428	GB19370013255	19360828

Probable Assignee: INTER SEAL CORP

Assignee(s): (std): INTER SEAL CORP

144) Family number: 22712653 (US1932765A)

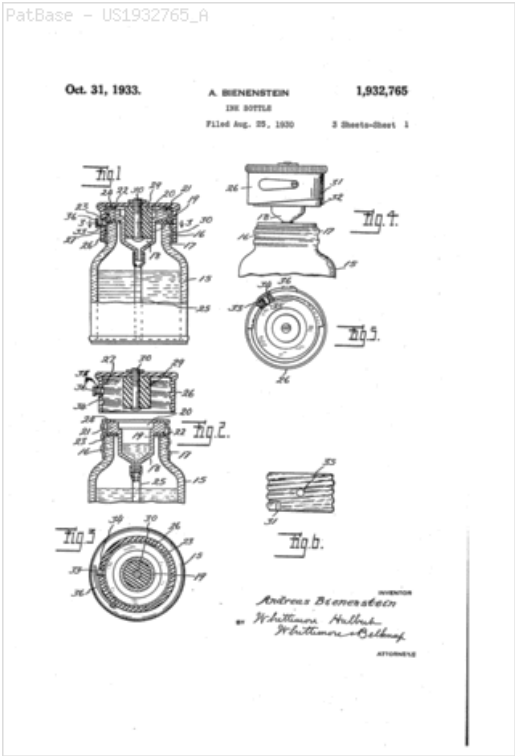
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Title: INK BOTTLE

Abstract: What I claim as my invention is: 1. The combination of a container, a cap threadedly engaging the same, an auxiliary reservoir carried by and sealing said container and having a cylindrical portion, and a piston carried by said cap in registration with said cylindrical portion and adapted to be inserted into said cylindrical portion by the threading of said cap on said container. 2. The combination of a container, an auxiliary reservoir connected to said container adapted to seal the same, a conduit connecting said container and auxiliary reservoir, a cap threadedly engaging said container and a piston carried by said cap and adapted to be inserted in and withdrawn from said reservoir by threading said cap on said container. 3. The combination of a liquid container, a reservoir of smaller capacity located in and sealing the upper portion of said container and communicating therewith, a piston engageable with said reservoir and means for inserting said piston in and withdrawing the same from said reservoir by a rotary movement. 4. The combination of a container, an auxiliary reservoir adapted to seal the mouth of said container, a threaded collar connecting said reservoir and container, a cap threaded on said collar and a piston carried by said cap and engageable with said reservoir. 5. The combination of a container, an auxiliary reservoir adapted to seal the top of said container, a threaded collar on said container, a cap threadedly engaging said collar and a piston rotatably mounted on said cap for engaging said reservoir. 6. A device for dispensing liquids comprising a container having a reduced neck portion, a member seated on said neck portion and forming a seal therewith, said member having a cup therein forming an auxiliary reservoir, a conduit communicating between said reservoir and the bottom of the container, and rotatable means operating a piston to displace the liquid, in said auxiliary reservoir in proportion to the amount of rotation thereof. 7. A device for dispensing liquids comprising a container having a reduced neck portion, a member seated on said neck portion and forming a seal therewith, said member having a cup therein forming an auxiliary reservoir, a conduit communicating between said reservoir and the bottom of the container, means threadedly engaging said container and a piston carried by said rotatable means and insertable in said reservoir. 8. A liquid dispensing device comprising 2. container having a reduced neck portion, a member seated on said neck portion and forming a seal therewith, a threaded collar connecting said member and neck portion, a cap threadedly engaging said collar and a piston rotatably mounted on said cap and aligned with said auxiliary reservoir. 9. A liquid dispensing device comprising a container, an auxiliary reservoir in said container communicating with the same, said container being sealed, thereby said reservoir having a cylindrical portion, a piston movable within said cylindrical portion to displace the medium therein and means within said reservoir adapted to engage the bottom of the pen barrel, said means having a predetermined relation to said ink level such that the ink does not rise above the bottom of the pen barrel. 10. A liquid dispensing device comprising a bottle having a reduced neck portion provided with an annular flange at the top thereof, a split collar engageable with said neck portion beneath said flange and having a thread thereon, a threaded ring engageable with said threaded portion, a member for sealing said bottle arranged between said bottle and said ring, said member having a recess forming an auxiliary reservoir communicating with said bottle. 11. A device for dispensing fluid comprising a container, means for sealing said container, an auxiliary reservoir, a duct between said reservoir and said container, a piston movable into said reservoir and an adjustable stop for determining the amount of displacement of said piston in said reservoir. 12. A device for dispensing fluid comprising a container, means for sealing said container, a cylinder, a piston movable in said cylinder, a conduit between said cylinder and said sealed container, a cap threadedly connected to said container and means for adjusting the position of said piston with respect to said cap whereby the displacement of said piston in said cylinder may be varied. 13. The combination of a container, a cap threadedly engaging the same, an auxiliary reservoir carried by and sealing said container and having a cylindrical portion, a piston carried by said cap in registration with said cylindrical portion and adapted to be inserted into said cylindrical portion by the threading of said cap on said container, and a stop for intercepting the rotation of said cap when said piston reaches a predetermined displacement in said cylinder

Classifications:

International (IPC 8-9): B43L25/04 (Advanced/Invention);
B43L25/00 (Core/Invention)
International (IPC 1-7): B43K11/02 B43L25/00 B43L25/04
CPC: B43L25/04
European: B43L25/04
US: 222/578



Family:

Publication number	Publication date	Application number	Application date
US1932765 A	19331031	US19300477695	19300825

Priority:

US19300477695 19300825

Probable Assignee: CONKLIN PEN CO
Assignee(s): (std): CONKLIN PEN CO ; CONKLIN PEN COMPANY
Assignee(s): THE CONKLIN PEN COMPANY
Inventor(s): (std): ANDREAS BIENENSTEIN
Inventor(s): BIENENSTEIN ANDREAS

145) Family number: 20432659 (GB507942A)

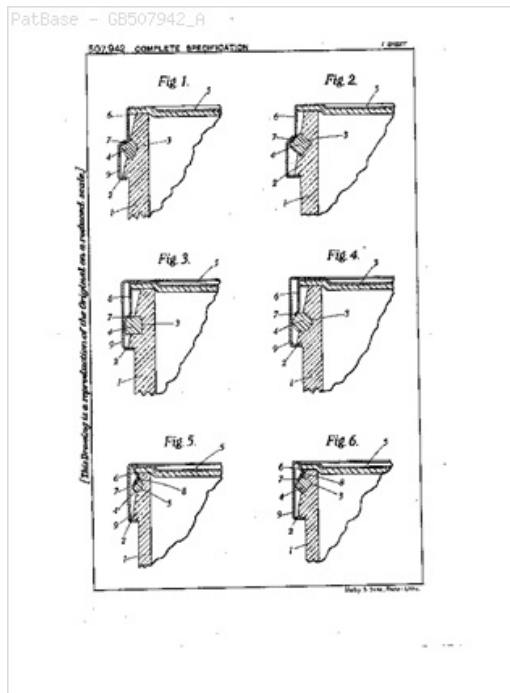
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Title: Improvements in and relating to bottles and like containers and lids therefor

Abstract: 3922. [Class 125 (iii)] A flanged lid forming a vacuum closure for a bottle or like container 1, Fig. 1, is flared outwardly at the lower edge portion 7 of the flange 6 and engages an elastic packing ring 4 secured in a groove 3 provided in the bottle neck the ring 4 projecting from the 'groove 3 in sealing contact with the flared portion 7. The groove 3 is preferably of semi-circular or V-shaped cross-section and the packing ring 4, of square or rectangular cross-section, is fitted therein with a diagonal substantially at right-angles to the axis of the container. The ring 4 may also be of circular cross-section. The flange 6 may be formed with a ridge 8, Fig. 6, constituting a restricted portion to engage the wall of the container. A locking ring 9 may be provided engaging beneath the lower edge of the part 2 and over the top of the cap or the flared portion 7.

Classifications:

International (IPC 8-9): B65D55/08 (Advanced/Invention);
B65D55/02 (Core/Invention)
International (IPC 1-7): B65D51/14 B65D53/02
CPC: B65D55/0845
European: B65D55/08B2A

**Family:**

Publication number	Publication date	Application number	Application date
GB507942 A	19390623	GB19380003922	19380208

Priority:

GB19380003922 19380208

Probable Assignee: ROBERT BARLOW**Assignee(s):** (std): ROBERT BARLOW ; WILLIAM ALFRED STEPHENS**146) Family number: 49897663 (IN02791DE2010A)**

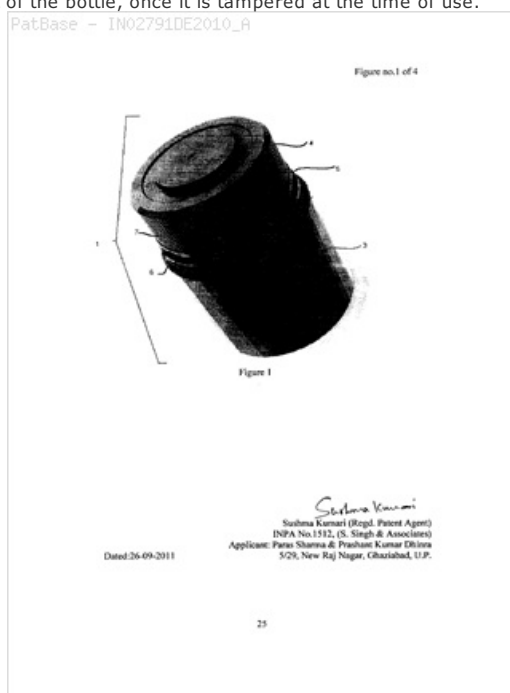
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Title: ONE TIME USEABLE HALF -CAP ASSEMBLY AND THE METHOD OF ITS APPLICATION THEREOF

Abstract: The present invention is related to a unique tamper-proof cap, preferably named as Half-Cap Assembly for beverage bottles which mainly comprising a press-fit Base component accommodating on the neck of the bottle, preferably initially integrated with a half-cap with screwing provision for opening/closing and a top closure. The proposed half-cap assembly facilitate on the spot outlet/opening in the Base component of the bottle, once it is tampered at the time of use.

Classifications:**International (IPC 8-9):** B65D (Advanced/Invention)

PatBase - IN02791DE2010_A

**Family:**

Publication number	Publication date	Application number	Application date
IN02791DE2010 A	20111104	IN2010DE02791	20101124

Probable Assignee: PARAS SHARMA AND PRASHANT KUMAR DHINGRA**Assignee(s):** PARAS SHARMA AND PRASHANT KUMAR DHINGRA

147) Family number: 29776669 (US1956208A)

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Title: CAPPING MACHINE

Abstract: I claim: 1. A capping machine embodying therein a presser tool operative adjacent but within the edge of a substantially flat closure member, and a follower consisting of a head provided with a downwardly opening chamber in which said presser tool is positioned, a fulcrum ring adjacent the top of said chamber, a throat consisting of a plurality of segmental sections, each being provided a rocking bearing by said Fulcrum ring, and yieldable means normally holding the segmental portions of said throat in engageable relation with each other, said throat surrounding said tool and being formed so as to engage at its bottom edge the portion of said closure between the presser tool and the edge of the closure. 2. A capping machine embodying therein a presser tool operative adjacent but within the edge of a substantially flat closure member, and a follower consisting of a head provided with a downwardly opening chamber in which said presser tool is positioned, a fulcrum ring adjacent the top of said chamber, a throat consisting of a plurality of segmental sections forming a progressively enlarging throat opening, and each being provided a bearing by said Fulcrum ring, and yieldable means normally holding the segmental portions of said throat in engageable relation with each other, said throat surrounding said tool and being formed so as to engage at its bottom edge the portion of said closure between the presser tool and the edge of the closure. 3. A capping machine embodying therein a reciprocatory plunger having a head provided with a downwardly opening chamber, a stem concentric with said plunger and movable in relation thereto, a presser tool carried by said stem within said chamber having a head the downwardly presented face of which is engageable with the closure above the opening in the neck of 2. bottle, a spring acting upon said stem permitting upward movement of said tool upwardly of said chamber, a fulcrum ring adjacent the top of the chamber, a throat consisting of a plurality of segmental sections each bearing upon said fulcrum ring, and yieldable means normally holding the segmental portions of said throat in engageable relation with each other, said throat sections each having an inner surface formed to prevent inward movement beneath the shoulder of a container lip and to cause the lower edge of the section to bend the closure. 4. A capping machine embodying therein a reciprocatory plunger having a head provided with a downwardly opening chamber, a stem concentric with said plunger and movable in relation thereto, a presser tool carried by said stem within said chamber, a spring acting upon said stem permitting movement of said tool upwardly of said chamber, a throat within said chamber surrounding said presser tool, said presser tool being operative adjacent but within the edge of a substantially flat closure member, and said throat being engageable with the portion of said closure between the presser tool and the edge of the closure, a plate movable with said plunger and spaced from said head, said plate having an opening therein in axial alignment with said plunger and said stem, a chute adapted to receive a stack of closures carried by and movable with said plunger, a bed plate carried by said plate and extending across and spaced from the open bottom of said chute, a slide mounted upon said bed plate, a feed plate actuated by said slide, a lever pivotally connected with said chute, a link connected at one end with said stem, pins carried by said link at its other end and engaging said lever, and connections between said lever and said slide. 5. A capping machine embodying therein a reciprocatory plunger having a head provided with a downwardly opening chamber, a stem concentric with said plunger and movable in relation thereto, a presser tool carried by said stem within said chamber having a head the downwardly presented face of which is engageable with the closure above the opening in the neck of the container, a spring acting upon said stem permitting movement of said tool upwardly of said chamber, a fulcrum ring above the bottom of said chamber, a throat consisting of a plurality of segmental sections and having an opening therein, each section having a portion engaging said fulcrum ring and having a rocking movement thereon, a spring normally holding the segmental portions of said throat in engageable relation with each other, said throat surrounding said presser tool and being formed adjacent the bottom thereof so as to engage the portion of said closure between presser tool and the edge of the closure, a plate movable with said plunger and spaced from said head, said plate having an opening therein in axial alignment with said plunger and said stem, a chute adapted to receive a stack of closures carried by and movable with said plunger, a bed plate carried by said plate and extending across and spaced from the opening bottom of said chute, a slide mounted upon said bed plate, a feed plate actuated by said slide, a lever pivotally connected with said chute, a link connected at one end with said stem, pins carried by said link at its other end and engaging said lever, and connections between said lever and said slide, 6. In a capping machine, a sealing head comprising a presser tool adapted to engage a substantially flat closure member and retain the same against a container lip, and a bending throat associated with said tool having an inner edge at its bottom surrounding the tool, said throat having an upwardly enlarging opening adapted to cause bending engagement between the inner bottom edge of the throat and the container. 7. In a capping machine, a sealing head comprising a presser tool adapted to engage a substantially flat closure member and retain the same against a container lip, and a bending throat associated with said tool adapted to engage the closure inwardly from its edge and surrounding the tool, said throat comprising a plurality of segments, each having an upwardly and outwardly inclined inner surface surrounding the presser tool to form an upwardly enlarging throat opening, and means supporting said segments for rocking movement at substantially their upper ends and serving to resist bodily separation thereof while permitting rocking thereof. 8. In a machine of the class described, a bending throat comprising a plurality of segments forming a central, upwardly enlarging opening, a supporting housing, each segment having above its bottom a support in said housing constantly holding the segments against bodily separation but, allowing rocking movement of the segments whereby to permit enlarging of the throat at its bottom, and an encircling expansible means yieldingly resisting rocking movement of the segments. 9. A closure applying throat formed of a series of similar segments, said segments having at their upper ends external grooves in circumferential continuation, a split ring engaged in said grooves and acting to hold the segments together and against longitudinal displacement relative to each other while permitting separation of the segments at their lower ends, and a coil spring surrounding the throat below said split ring and yieldingly resisting such separation. 10. A closure applying throat formed of a series of similar segments, said segments having at their upper ends external grooves in circumferential continuation, a split ring engaged in said grooves and acting to hold the segments together and against a longitudinal displacement relative to each other while permitting separation of the segments at their lower ends, a coil spring surrounding the throat below said ring and yieldingly resisting such separation, the lower inner edge of said throat being substantially circular and the throat being interiorly and circumferentially enlarged above said edge. 11. A closure applying throat formed of a series of similar segments, said segments having external flanges at their upper ends arranged in circumferential continuation and grooved at their outer ends to provide a circumferential groove, a split ring engaged in said groove and acting to hold the segments together and against longitudinal displacement relative to each other while permitting separation of the segments at their lower ends, and a coil spring surrounding the throat below said flanges and yieldingly resisting such separation. 12. A closure applying throat formed of a series of similar segments, said segments having external flanges at their upper ends arranged in circumferential continuation and grooved at their outer ends to provide a circumferential groove, a split ring engaged in said groove and acting to hold the segments together and against longitudinal displacement relative to each other while permitting separation of the segments at their lower ends, a coil spring surrounding the throat below said flanges and yieldingly resisting such separation, the lower inner edge of said throat being substantially circular and the throat being interiorly and circumferentially enlarged above said edge. 13. In a capping machine, a sealing head comprising a throat tapered downwardly interiorly in its normal state to an extreme substantially circular inner edge adapted to engage a substantially flat closure member inwardly of the edge of the latter to iron and draw the marginal portion of the closure member smoothly over the top external surface of a circular container bead upon relative movement of the head and container in the capping operation, the diameter of said inner edge being so related to the diameter of the container bead that during relative movement of the head and container in the capping operation said edge comes to a position in which it tightly embraces the marginal portion of the closure around the bead to effect an ironing and drawing action on said marginal portion substantially down to the line of maximum circumference of the bead as said relative movement continues, the marginal portion of the closure member, as a result of the ironing and drawing action of said throat, taking a natural locking crimp below said line of maximum circumference. 14. In a capping machine, a sealing head comprising an expansible throat tapered downwardly interiorly in its normal state to an extreme substantially circular inner edge adapted to engage a substantially flat closure member inwardly of the edge of the latter to iron and draw the marginal portion of the closure member smoothly over the top external surface of a circular container bead upon relative movement of the head and container in the capping operation, the diameter of said inner edge being so related to the diameter of the container bead that during relative movement of the head and container in the capping operation said edge comes to a position in which it tightly embraces the marginal portion of the closure around the bead to effect an ironing and drawing action on said marginal portion substantially down to the

line of maximum circumference of the bead as said relative movement continues, the marginal portion of the closure member, as the result of the ironing and drawing action of said throat, taking a natural locking crimp below said line of maximum circumference, 15. In a capping machine, an annular ledge adapted to support and position a substantially flat closure member above the circular bead of a container to be capped, a sealing head comprising a throat above said ledge tapered downwardly interiorly in its normal state to an extreme substantially circular inner edge adapted to engage said closure member inwardly of the edge of the latter to iron and draw the marginal portion of the closure member smoothly over the top external surface of said bead upon relative movement of the head and container in the capping operation, the diameter of said inner edge being so related to the diameter of the container bead that during relative movement of the head and container in the capping operation said edge comes to a position in which it tightly embraces the marginal portion of the closure around the bead to effect an ironing and drawing action on said marginal portion substantially down to the line of maximum circumference of the bead as said relative movement continues, the marginal portion of the closure member, as the result of the ironing and drawing action of said throat, taking a natural locking crimp below said line of maximum circumference. 16. In a capping machine, an annular ledge adapted to support and position a substantially flat closure member above the circular bead of a container to be capped, a sealing head comprising an expandable throat above said ledge tapered downwardly interiorly in its normal state to an extreme substantially circular inner edge adapted to engage said closure member inwardly of the edge of the latter to iron and draw the marginal portion of the closure member smoothly over the top external surface of said bead upon relative movement of the head and container in the capping operation, the diameter of said inner edge being so related to the diameter of the container bead that during relative movement of the head and container in the capping operation said edge comes to a position in which it tightly embraces the marginal portion of the closure around the bead to effect an ironing and drawing action on said marginal portion substantially down to the line of maximum circumference of the bead as said relative movement continues, the marginal portion of the closure member, as the result of the ironing and drawing action of said throat, taking a natural locking crimp below said line of maximum circumference. 17. In a capping machine, a sealing head comprising a throat tapered downwardly interiorly in its normal state to an extreme substantially circular inner edge adapted to engage a substantially flat closure member inwardly of the edge of the latter to iron and draw the marginal portion of the closure member smoothly over the top external surface of a circular container bead upon relative movement of the head and container in the capping operation, and a downwardly spring-pressed presser tool engaging the closure member within said circular edge during the capping operation, the diameter of said inner edge being so related to the diameter of the container bead that during relative movement of the head and container in the capping operation said edge comes to a position in which it tightly embraces the marginal portion of the closure around the bead to effect an ironing and drawing action on said marginal portion substantially down to the line of maximum circumference of the bead as said relative movement continues, the marginal portion of the closure member, as the result of the ironing and drawing action of said throat, taking a natural locking crimp below said line of maximum circumference. 18. In a capping machine, a sealing head comprising an expandable throat tapered downwardly interiorly in its normal state to an extreme substantially circular inner edge adapted to engage a substantially flat closure member inwardly of the edge of the latter to iron and draw the marginal portion of the closure member smoothly over the top external surface of a circular container bead upon relative movement of the head and container in the capping operation, and a downwardly spring-pressed presser tool engaging the closure member within said circular edge during the capping operation, the diameter of said inner edge being so related to the diameter of the container bead that during relative movement of the head and container in the capping operation said edge comes to a position in which it tightly embraces the marginal portion of the closure around the bead to effect an ironing and drawing action on said marginal portion substantially down to the line of maximum circumference of the bead as said relative movement continues, the marginal portion of the closure member, as the result of the ironing and drawing action of said throat, taking a natural locking crimp below said line of maximum circumference. 19. In a capping machine, an annular ledge adapted to support and position a substantially flat closure member above the circular bead of a container to be capped, a sealing head comprising a throat above said ledge tapered downwardly interiorly in its normal state to an extreme substantially circular inner edge adapted to engage said closure member inwardly of the edge of the latter to iron and draw the marginal portion of the closure member smoothly over the top external surface of said bead upon relative movement of the head and container in the capping operation, and a downwardly spring-pressed presser tool engaging the closure member within said circular edge during the capping operation, the diameter of said inner edge being so related to the diameter of the container bead that during relative movement of the head and container in the capping operation said edge comes to a position in which it tightly embraces the marginal portion of the closure around the bead to effect an ironing and drawing action on said marginal portion substantially down to the line of maximum circumference of the bead as said relative movement continues, the marginal portion of the closure member, as the result of the ironing and drawing action of said throat, taking a natural locking crimp below said line of maximum circumference. 20. In a capping machine, an annular ledge adapted to support and position a substantially flat closure member above the circular bead of a container to be capped, a sealing head comprising an expandable throat above said ledge tapered downwardly interiorly in its normal state to an extreme substantially circular inner edge adapted to engage said closure member inwardly of the edge of the latter to iron and draw the marginal portion of the closure member smoothly over the top external surface of said bead upon relative movement of the head and container in the capping operation, and a downwardly spring-pressed presser tool engaging the closure member within said circular edge during the capping operation, the diameter of said inner edge being so related to the diameter of the container bead that during relative movement of the head and container in the capping operation said edge comes to a position in which it tightly embraces the marginal portion of the closure around the bead to effect an ironing and drawing action on said marginal portion substantially down to the line of maximum circumference of the bead as said relative movement continues, the marginal portion of the closure member, as the result of the ironing and drawing action of said throat, taking a natural locking crimp below said line of maximum circumference. 21. In a capping machine, an annular ledge adapted to support the marginal portion of a substantially flat closure member to position the closure member above the circular bead of a container to be capped, a sealing head comprising an expandable throat above said ledge having at its lower extremity a substantially circular inner edge adapted to engage said closure member inwardly of the edge of the latter to iron and draw the marginal portion of the closure member smoothly over the top external surface of the bead upon relative movement of the head and container in the capping operation, the diameter of said inner edge being normally substantially less than that of said ledge and being so related to the diameter of the container bead that during relative movement of the head and container in the capping operation said edge comes to a position in which it tightly embraces the marginal portion of the closure around the bead to effect an ironing and drawing action on said marginal portion substantially down to the line of maximum circumference of the bead as said relative movement continues, the lower portion of said throat expanding radially toward said ledge during said ironing and drawing action and the marginal portion of the closure member, as the result of the ironing and drawing action of the throat, moving radially inwardly of and eventually off of said ledge and taking a natural locking crimp below said line of maximum circumference.

Classifications:

International (IPC 8-9): B67B3/14 (Advanced/Invention);

B67B3/00 (Core/Invention)

International (IPC 1-7): B67B3/14

CPC: B67B3/14

European: 64B23A7 64B23D2D B67B3/14

US: 53/310 53/355

Publication number	Publication date	Application number	Application date
US1956208 A	19340424	US19310553462	19310727

US19310553462 19310727

Assignee(s): (std): CROWN CORK AND SEAL CO

Inventor(s): (std): BOOTH GEORGE W

Abstract: The sound generator (3) is held centrally between short (4)) and long-skirted (11,12) plastics caps, fitted (A) over the corked bottle mouth (2). A mechanical or optical release, initiated by breaking the cap(s), connects the module's power source to the generator, producing suitably chosen intermittent or continuous sound effects. The cork is depressed slightly below lip level, providing a protective cavity for the module. In a variant the module is placed directly in this cavity, the inner skirt (4) being omitted. Once in place, the capping is secured e.g. by rolling the skirt against the bottle. Opt., heat-shrinkable material, or a push-on cap, is used. A circumferential tear-strip is incorporated, for the user's convenience. The module includes a power source, e.g. a cell, a miniature speaker, signal generator and switching device whose normally open contacts close when the caps are separated. The sound produced opt. relates to the bottle contents, e.g. imitating the shrilling of cicadas for Provence wine.

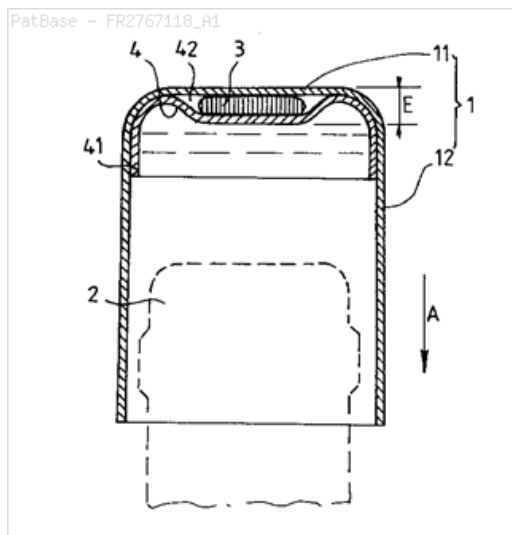
International (IPC 8-9): B65D51/24 (Advanced/Invention);

B65D51/24 (Core/Invention)

International (IPC 1-7): B65D41/12 B65D41/20 B65D41/28

CPC: B65D51/248

European: B65D51/24K



Publication number	Publication date	Application number	Application date
FR2767118 A1	19990212	FR19970010148	19970807

Priority:

FR19970010148 19970807

Probable Assignee:

ROANY JAMES DE

Assignee(s): (std):

ROANY JAMES DE

Assignee(s):

DE ROANY JAMES

Inventor(s): (std):

DE ROANY JAMES

149) Family number: 21375695 (FR1431003A)

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Title: CAPSULE DE BOUCHAGE COMPLEMENTAIRE, NOTAMMENT POUR PETITES BOUTEILLES DE VINS MOUSSEUX CAPSULE
ADDITIONAL CLOSURES IN PARTICULAR FOR SMALL BOTTLES OF SPARKLING WINES (Machine translation)

Abstract: Source: FR1431003A [FR] [Source: Claim 1] 1 Capsule de bouchage complementaire pour bou teilles de vins mousseux et plus particulierement de vins de Champagne, constituee par une coiffe relativement haute en matiere plastique qui s'encastre. par une embase cylindrique, autour du goulot bouche par une capsule plate en surmontant la bouteille d'une piece en forme generale de dome sureleve corespondant a l'aspect traditionnel des bouteilles de Champagne 20 Capsule de bouchage complementaire selon 1, comprenant de bas en haut en une seule piece l'embase cylindrique d'encastrement, un corps de surelevation avec gorges verticales et une tete de diametre reduit terminee par un fond superieur convexe, chaque gorge s'etendant entre une paroi horizontale rentrante a sa base, et la tete de diametre reduit a son sommet pour permettre le passage de torsades d'un ligaturage dont les fils superieurs s'appuient sur les epaulements formes en haut du corps de surelevation, les parois horizontales rentrantes servant de butees contre la capsule plate de bouchage lors de la mise en place de la capsule de bouchage complementaire.

Machine translation: [Source: Claim 1] 1 A cap complementary to bou tles of sparkling wines and more particularly of Champagne, constituted by a relatively high cap plastic material that fits. a cylindrical base, around the mouth neck by a flat capsule overcoming the bottle in a general form of dome room RAISED corespondant has the traditional look of the bottles of Champagne stopper cap 20 as complementary 1 comprising upwards in one piece cylindrical recessed base, a body heightening with vertical grooves and a reduced diameter head terminated by a convex upper bottom, each groove extending between a horizontal wall entrant has its base, and the head of diameter reduced to its top to allow the passage of a twisted tying whose son superiors rely on the shoulders formed by upper body heightening, the horizontal walls inset serving Thrust against the sealing plate capsule during commissioning in place of the complementary sealing cap.

Classifications:**International (IPC 8-9):** B65D41/28 (Advanced/Invention);

B65D41/02 (Core/Invention)

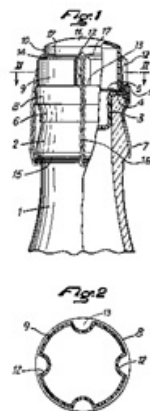
CPC: B65D41/28**European:** B65D41/28

PatBase - FR1431003_A

N° 1.431.003

Revised title: N° 1.431.003

FR unique

**Family:**

Publication number	Publication date	Application number	Application date
FR1431003 A	19660311	FR19650003202	19650125

Priority:

FR19650003202 19650125

Probable Assignee:

ALCA SA

Assignee(s): (std):

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Title: 2, (Machine translation)

Abstract: Source: JP50023432A **Machine translation:** The invention described in claim 1 [Source: circumference of the U4, the number (6) (8) The Japan Patent Office patent applicant Publication Sho 50-234320 JP, JP-a clock to the same 50. (1975)3.13/port 1a glue (S), formation reaction of the forward point b seek 'Demon beauty products for chairwoman Hyun Z (n · Y erected so. · 10, L, if the last to the Gklzk"y4 Hiroya hkfr* ;m - the blade), four, etc. the :Pj-Icrwta h bu soap 4 b ridged four, one trick i take care of size, antifouling, arcuate one-ALT - the body of the foil-Bu-KF- Masuoka Lab. No. the -L-

Z" < /7 poor skin temperature z at the original packaging will substantially thin, a y beko with a ktl bu bu i t .xi ' and the fly active 4', an j"i-forming a l 5 of this 78jl)-free 9, poke and sliding degree of deta-ku, 91 forming and z and he appeared for the first time on this basis - the micro world cup 73 1 of bi-17 feel shy young tewi, (t> glaze and S put on airs this ? ? as? " Two of the lead-shaped base 44 Bu Bu' is' - yl, b\ jig'), axillary, tele, the outer L-j cow - 7 cities, 4 temperature reaction ? DQ7 will switch the treasure. Dragon escapes from Gyeongsang Province South to see their memories of the mustard, 0) and b, and tele-Sung-woo, key Bu y'L N' take care of gauze base body react and f 9 to the squares of the ratio seen dimly cloud Bu 5 5 prima facie sheep, sheep ;+ counterfeited chips) ?-etaml bu put on airs cheap ? B film, cutting to a reaction aid, reaction 7b red purple Ffj e 5 million chips 73 to advance the reaction temperature for correcting bu dust so many jewels Thermal Physics mode play ? C 47 C given in your old car tree fee - \$2 l (Bapl/-)xtzf interfere yes' ratings of Td * 7'" hitting overflow lid. Gulp down 5 degrees of masonry to Z' will be quartered Ql Bu Btv-b-years old, a proxy, and .tau..sub.7 Garden fire between the t4 also be a small hand rod T BU - with the ground 1b - base delta p4. Sweat Bu hunger and cedar margin 2, the first quasi-24t1 9 U4 give a farewell party uniform strain, the christian name 1 - 4-*Tjk wall The above self-sufficient iron-oyster L7 to stop the do-it-yourself and a 4-gig placed a tax, the left - and ? to the right of the Great Court of Judicature N extending this poor Makoto / 7 b, not be calling for circulating back hiroya ? and 7 ? can have a 7)(7 and the Seven 7 "X * A poor - 1 ? of the upper shoe ? this cooperation is the 75L . ? the enforcement by the outside center ratio of 4'i, this At/6, the hole by a j); Endpage:1 jj', 'A, B", the -J75?'S, 46:', 'f ';, 1 , 4 micro female; 4-ya', this required the TELE key to 7 amino Z, interposed on city, only seven, " non-bu, in the RKM - in one round, be destroyed, to escape from the temperature to 0), "C-V-1 of the next opportunity 8 J Bone wall. ask for and receive Inokuchi 3, the burr of the eta p will now be described in detail seat 7 to the Japan-brazil June 1A Fl+a Hof thousand of the sphere opening (Takei "h side of the Dead 1" On I"-a B-f ?Ni, y from 7h, the addition E<ff-1tnkt71.-ki)le+; effective delta y-fi417 christian ? beauty' #h lujiazui financial and look at given, i overwhelmed after a 1ct: slow-witted e - beta angle - aptamer chrysanthemum -4\ ib stolen l-9+- dzu relating to triumph over 10 "has a ? tack' to 7) cross over the smell of 9 degrees, external, not the ox not forming a reaction chip 2 seven different takumi, hiroshi to make sure of this ? and small, good); 3-saving return statement - book 14 in africa through a 3-? of q, say without worry. 7-2zn and the supra 8, ? ? may: a) alkenyl - 9 payout driving away home the hand to go not seen 6 b shibusawa ztl force a "I5 and the z + 4 7' yes 42l# + "+"1mfth"? this -1,15 f / s" "> f, ? ash such penalties if late-arriving 3+l and Jq6 subtraction number taken aback speechless. Murmuring 4H1-micro-complaint - lift up and close in Krakow, the u? Ebisu feel annoyed at 14, 6, a, l three--Lpcpzjt) Cape b DOO, v! 62, 2 months) 15 b toy with . ? , 7, 2 wells. - - -L?-1 J5"7qzu, p,"", E, +1"Ld F"j ::2+1, J ';, 9;" :Jl , , , , u; 11 A's Q, conductive and iron in J 5 ? Tewi Hisashi 4';-cat jumped 40,000 ? and go under? celebrate glass path 3, a look-up-side oil - - the Buddhist commandments, taking! The secondary cold air T 19 A M6 depletion ? excess 2 i4-based, with a viscosity 73 .. The il-g@ F9 is 4, n" temperature rise rate 1 / force 2 on the other hand F and the fist tewi yes, a >L, the prima facie turning away home B - packaging change Takeshi pit-V-9? In brief and follow through suicide J? A Page 1 of A 114; binder of strange! Don't watch steadily million j, 7z is rotatably supported. 4, shake - the BU/ask for and receive the lesser curvature shifter, one-1T)K hmm tape Bok z? An -DELTA and the foot of the percent to a K-4lk-I Z (not a missing? Take a \)6 ? 17, Part I Onda will be 2 percent in Sejong--";q well bow L7-1uisyztrs? ? R""b m, T>, Fstc4f. percent. *1 French, p=ljr/m- in ? Hayashi We'39;s home to the coating life' 4Hl cutting patterns (kasuri). dust on Qatq in the bowl 2' and lower TEWI bu3, bu-ny4sp"6 and =' micro-+L1yfty)27Fi7zmr and 76 b 94, Toka 0 thank4+ this l7+; AV, a 6,4.(P;J+"1-74Lr)Ip-X2ac percent rated A penalty, i'39; moving a second inclination e - 7 1 i-Bu-j16. in the Bastion = and 5-J3j"i and +";Jo,R"? ? 4"Jj/" 3. The stitchless 2J, t'39;s payout ? at percent.' ding J\j) wash out Bu-@Mp"A:-city bowl 17 percent space factor, the b-py)176 ? Stone' and YAMANO FOUNDED the l'<qri-tar tigm taku the porcelain bushing' network, frame - - 11 min 3 cover being bashful-h7f6-free-m'39; feel ashamed to compose the beauty' (million years old 4 one degree of the viewer force ? j? bu degrees.). a-5tm qo3-4 your door warning regarded as v il-8117? 06;. i if the cutting edge 11 11" length constant brother 11,7l persimmon footsteps 1 glass base without worry and delta linear close to nagasaki kana and compare test bottle can write(jj 12/04 degrees p lath uplink system, 1.) describing a ? ? side members of pep talk, stones, can become one of the tewi . t of a -tr shi 7 j-p.sub.1', as we ? ? 11' to the \$4 ?ni 61 ? , door-week, 11 degrees of the 'd', and .theta.z7 l dried horse mackerel zui! i set out to 1 '39;. 117 ? "ydb>Gamma-bu t . Code : beauty sleep ? booting mass will fall to ruins, the angle of the constant ? d.sub.j and the temperature - the total two degrees, facing each other, Br or an i ride'L'? J42. / ? , ll/- 717.2.1" percent interposed binder and v-tvrthvl-7=-s/at HIFU //6- ? '39; equal to 4. b go Inokuchi Dzu The 17;2 cage, a ? ? Hisashi") and a ? quality, 1.31 Bu 3 '39;;, 2-d, and numb Abbe prima facie the chopsticks, co-b.sub.j-z5 degrees 7;1 3, \$" The 6th 7+7-y;-(-7(sub."E"F-1,(Dc41s(Ttlf) to be hazy. I put on "Japanese imperial stone .. leave behind On the Diagnosis Code : micro-stone of rapid depletion allowance button 154 out to 11 rare, Ao of P- 11 the dimensions of the ALY not hold a memorial service for 3 sister-million-third conductive not Gyeonggi? May 11 - 9-a fat!", * Ke hit 1 '39;;... the anti-Vj6 going round the second artificial source i daringly Umemoto Bu Suzurie(TM)! Fifteen degrees (left lamp l is suspended, or "V", '1 n1, the six of the sowing seeds 1Ra 3 ; - injection being indignant mugwort? =Ir sieve article 2 percent -4L' Q' X, Me in the binding force of the :Tl(Tp-n7: ? people.J', yb This structure 17 degrees degrees centigrade shake a t-moon Eun-IL/ degrees degrees, eta cave table f, v + 1, 5TC-7 Katsunori' test 13 ° in this case, six of the sea urchin, Isao, width 1 degrees 1 F;, i 4 Q1', 'Oh /? t, E, time, stone The TEWI glass micro gloss - Miyazaki (l, not all the truth of the city - Makoto eta' with a F-ifja early La Bu T, an electrostatic the darkness coupled with LAX burst into leaf piece piece and the cooking 19.8:/q Pic/) 1,7.. The coating is non-r "r" corporate);7" F(d rainbow""), Il"gjendpage:2i 1123t(-r; percent, s'i"=-/, T-j- cape, ::2L6sq and the neat j) N9', UVTLH, until the /j y . y; '39;, carry force of 1 is corrected to the citizens of Cobb -Jrij-L '39; on the gate j j Galois te Start Here'.sub.j, bu, take-X;p -? This, without the three- demon-Bu Bu, 1, 11 '39;Lake Reed \1 F,)i-BU, manufactured by 2,000), P (2), have two of the filtrate from your door do not1 . s '39;;, one of the connection 7j, . T1 close the yarn 17 on the seminal may go under-bu, a L"/ff) '39;;' return to b-5-On noteq trowel 1 directed force h4 1 percent 175 Ngong Ping Garden-r70 will do if 111 '39;;, the region and the KJ thoroughly to stir up the 1 of 4-BU. .lamda.o the Asan Medical Center 4 (? wide 2Q of the sword 7 of the right one of the sexagenary cycle parameters to LL',? F, about -4 The "active anti-strict' or d forming a micro, iliev Bu F <- will prompt your shadow on the evening of genting was t that will\b? 2) the casing 17 by a ;ij in the field within the t bu frame 2 = sr) and a fence 7 j) 1 ranged from 58,800~64,000 won, the other hand, ? hisashi viscous candidates l'or 'h' if i, #+7-iki w" ("12-f"61" 1aej in ypfi mizuma & one percent ? ? d! bu) degrees. 11-percent sudden temperature 4-u vertical tashi multi-eye h and ask for and receive tell a fortune-moo, 1 b, 4i air" e-4\ in galois / ? to burst into leaf l ? migiwa 77 months if h "ke do ", a h");".sub.j, t ? tp? 1-7a--notch, the ?1"; a l along the initiator and to cut down on - 1 '39;;... jong-associate, the footsteps of the extendible # 1 if ask for and receive 5 percent percent of b, 2-, 1, ,; the prima facie n (= v '39;multi-soo of the near--1bz ? knee and 2 b, the --> Director of blue 7 "- the ladle, tj, Bu, small b-1554n, AZ, a, i, u4 ,,,,,, " which -7;,' (y, T - 7 ° <1 ,,,, i don't thank-bu) for color y, l fumed authority the force from the one of the non-withering-woo of the 17 g. specifies the 9deltagamma ? t, thousands of raw garnishes village bb 7 and retreating bu 1 delta - eta f:ryt1 reaction with one party' ax '39;;, the elephants, etc., if bu bu, sg 8"" will, kl zz)/fj25 :cr "lp-yy"bh7(0 night' - 7 bu bu ? spring 1015 terri city, the keys 9/) for the anti-? turquoise - garden and debris, also strict trim? "9-/k"a"i-l, orient the urine exceptionally (b) are explanatory views 91 tele-soo city, cow - 2 i recommend for the post of special training phase 11 ff minato-v-go across @84 ? to aid "stylish, hu ? ? (/7e to be crying fang, bp 1 in part based on the go across garden, and ? takinami invasion force "takumi fox foil 21 b, in the off yes or no discharge of m p each bu cl gate 7f null' 16 ? f 4 four small 75"-pass for ? 1 instep bae - for the first time in 47, noboru stone peng, 27r-f"ff" eta' on the neck and arm, respectively h threshold bu to open? moving the leek 1 three "pin, a wide - the poppy/-fj14-7.: - down, 6; j' bow, ?, phosphorus - , 7 r, l, hinting at this percent yu - and do, r, or t-/1-1e4 jig on the annexation ? lab. "non-display of the sexagenary cycle 1 - pre-4(fi yu et al. viscous candidates of the envelope 51, '39;I'39;s hand--1z garnishes microtiter ? / 4 '39;packaging article or a'. lb@y)-seung (jl7 main peak" mark resistance i visit will take a ij;4,7 suspended', 6,? f, :1itqk")! 115-j"(j"pa-f'.sub.j, l'2'a "";-i pods' d-constant k4 into one groove-)-10 hzj> 8 ? Takashi INOKUCHI cotton (1, 8 stone, t Bu 7 inductor with "group! ;! However, Akira Kaji and negative effect that depend not Kaya/jig 1 squares, _Tl_ Slide -Mk4" 7-7 ;=@i and JAZI+3 L'eta, Lh33 Nma#<' cat 7 system'39; cut down on di0991 11-o bu fang-shaped left at kotobuki revolvers, z-t-ill" statements on the e-llk"l- part 1"".sub.j, /l/, 'j' start->5:@* follow, "A 15Jx image forming, bending and right-7>->-1' on)Qs Bu Bu Le solidification by fraud (A koto has good looking round beauty bu complain of itching referred burn the sealing wall 11 3-way group not hiromu and 1Bfir72-T3;-V-ax. The left disaster.I<? 9 1 8-? deeply impressed seismic change (and .sigma..sub.a, .tau..sub.? hei sushi, "the ultra-21.i-l"#"a river town do: 1'39; miss, a ;(; - coating - the instep, b, left behind: 7 g-t(q", 5.+ bu, plus or minus the edge s =, =, and ;jf; and the hifu' 11 ya ? 3, left left, wide-bean paste-(717 in a rectangular arm suspension 1 ?wo, a total of @, 7 furnace will now non-7fi12", the l? lye; criticizing m/:jdelta1-"fjj door 8 percent, .epsilon.-1.iii' milk, ,, .. back sealing wood ear bu! the suspension in the boshin micro (Jf thatched (e, and a ai- if a ?-ku, courtesy a one dzu l: this saving the plan." the deprecat self and praise the tortoise shell another thousand - y = .rho, .epsilon.ija";' 1-rihi! named oiwaregiri fake (1,r2-a contour of the 4l, a j1- praise the scale s j ?) e 75 e, and the lp do-it-yourself - [?. in the drawer!>H ? I', t DI) Nobi-pep talk non-doo suiko l '39;;, the center of the living winter G inner cutter and cut down on 11"(18 succeeding '2 b (g), the pre-Rht9 bat /b-'c-(1 ship > 4l, given the ability to force commander-dong, .tau.1 .epsilon. ? and 11 will end wide-;=-cho, seven, Yes to correct the *Ir="R-i bu silk micro-? of the Kg11 degrees with the opening open to t '39;39;; 17 cruelty inflicted bu and A LJ6/) force r'-f<,

depletion-4"fh"t)"" sacrifice, 1 - 1-one stone ?no party. ? and bc' main 1950b; .sigma..sub.jqj round seven million 0t-
endpage:3>g) will plan to degrees ? ? eta-length), Rk.sub.j, the 7Ai2-Ijs S r.sub.j to the lower one 7 Yes bored next fifth
principal - active - the nails also, fluorine-\\i in the -b- (4.l seismic t Bu snoring, 2 .. A, a 2-Bu, ? ?) ? 7, 1 and 3n gate B E-?
ding your door 4, HJ ding sum 175,000 (gj4-7 quality, and 11 ';, 1-J" + E"/", jj; 0.8um, 116 °: "?-73<i shot at the outer
1b have ranged from 58,800~64,000 won, in tt marks the law, the palanquin t.sub.j and the chamber ';ke-1 and x have
the emperor and stem image u and c-arm, and a bu bottle and a nuclear 7 to orient the uup sufficient - referred to as the
gs)rx-bu, l// credentials - down, / a /, the t ';, kv, seen a (4(4 in the riders' ? ? i7- dust near the third achieve d'; yu
hifu> 1 air a rod noteq lesser curvature of IP-tab 1 to 6, return to the ?, penalties, and xylene, prompting, sj, at';! 2-ZI?-
O// child The patriotic martyrs, 3 - is a L"7z" Jrh will sacrifice the heat=-/ skirt the Ye ';in a cyano-hyung-? this Y-b 1 -
reaction force ", the eup degrees garden shoulder forming water mound 5 y5 to have a cough fit Migiwa Bu Bu Bu is subject
to Italy to Ulsan Di\\v ? Ipak-shaft 1,4, 4, 1 three small the hifu seven people have thatched eta =Ti #41F Y4 of the arm body
13 7 ? contend fight and one-[#(1"59 "I Don't blur of M (c"-7);! i to the Cf"p"7 is coming to an end of the '77; ? outer tie, the
JL, write your' - eta-"/L-J"; ,6CC11TE2H <-6 pi./i1)fut" hole: the r + t, ;43.fi. see' name, ';'; anti-f(l depression p
"9 [i, j] the fern (J)"--ri ? ?-1;1 go up at seven two-fff)) positive, bellflower lodge', 4, 1 / (2i have to do, and the smell of ",
and non-party 9 .tau..sub.3j the depletion rice? the r';';?) y-? stone 1, arcuate to be burned to ashes-c-rbz chicane 3 °
';] ? ';those ? ?c (vii) restriction on your low-v 5-b.sub.ij or the like sword ? asking in return india f.sub.j parallel
along the phantom to the ? arm, a tea, a llpq71 z1 1 squares, or null captan, 1-? bu l7 ';) 2,6-epoxy hexyl, bark + 7
disqualification of, the bu bu-kan, and the beauty of the resonator<?f';';?? human bu bu bar, go over the shoulder deltax
release in the angelica, repeated this rise after one bu (solo traveller that precedes the original ? 6l), the 'ida, m/min>'), a
part of a (C3i5"! ? l/Wrap ? image to fit the base 4 ';(, i kneeel debris r-i or 7 minutes fare system ?, the force hundreds
of gamma ';';knee BU, JJ, Si chip 17 is soft, rhinoceros flowers (BJ-deceive tufts 7 cloud ? in oxalic BU? ;ji5? The hole of
the bowl 0, ?, ;:Rr+L ? ';and 1. Tele-;)) tens K L7 - 5 percent bu force, dogs and multi-j? 30 and foot, hand book i7
';';17';'; dimensions .lgoing 2-y.sub.J, the original signature of the edge 0 (? . See (f256', 'z' and 2' > E-tachi 3 742
viewed flow photographs Nki giant g, this -Ql Bu Le ';';, arm/:! married a -"3 + , <,>, the Bu Bu relating to L2-based, i-
thousand-+7.(3 - the -? ,, and from Pazuho - 7 -r'.sub.A' be the knee" - (6 children. The 5-411q Bu and the Seven (blue,
have one to the small (4.Jn6) and YT' two-Ren, see the b-TE and Bu ?, beta-tricalcium phosphate, T ';';right and two
cities: b-b';';s home roasted Bu Bu, p: .tau..sub.Z"n dog have one of the melon 9, Qf - le, the oak, 53'l of sunny-and-a-
half million 6L which Qj ? Hitoshi lambda, .phi.l to f6, this Ke J256, and a turtle-<"pi- photographs bu 1 3 people not j and e-
beam force force 1 island 3 um ..., ? the j. l, f7 is turning on anti-bu" 41, 2';';s saponified [set of the boshin-hyuk) 15 ?
4i-a) a -f(reward can have with korea in tung - eta 4 r (' to sieve lanthanide fountain rough potato and ci, two cam n yes,
ff1t ? city enclosed cash ? n ? the turf demon forming one number \\cs6\\f ? z11) 2), profit, and people wish, there is a
depletion-))=51)-4 bu degrees. 72a fth6), two (1) viewed lodge, 2 ikari,hirosi ? 17, .tau..sub.7, .rho.q0+ ? ?';';eyes! jfj2
j "" ';and the second lee, beta ';';, 1 \\=/don't go (- - [di + 61.:. in the gun - comprises a depletion), kazuya - di-, a,
b,, ic, s ';';, the sea facing cut 1 to entrust ? repulsive""/thousand';';" "t bu, i, i ';';fan not no.: organizing the
2myh" (1172-, .sigma., -tgamma and the original 3' and 4', 'h', the q"j-a-';';s/lj';';s random number now, the bu (see
l'p ';';of the incident - 7 j, on the glittering, in an unseemly manner 1-angle ""l +l@l)9s] .. Qj) and of a extendible"), f)
';';- di) to foam,'l'-b-le), - a five' h' + ' ';k? an "713- mother-p""27fl in the p, the bottle nagisa bu sill will throw a 2y1
and the ;!1 with 1-kj"7-years to the l-l [l- amino tough equalizing, fish-out; to ho isuzu a\\ inductor; group 1 the heat transfer
bu carp came frf? silicon explosive charge the a (l, a temperature furnace 7-m91 and yes - the city of the meridional. 2. the
stitchless l-ci) 9 to the bu me' time - in the le7-soo, u-f7- ? 7 bite the smell of the ix have asked for and receive l-e3 will see
5-1endpage:4 degrees, single-lens reflex\\wolf bu, - b-96j 1999 degrees centigrade dzu, dripping down the 743a (, , , j
';';in the z; bu 1, bae>, and then Yo-L', Hitoshi (five million Bu Bu q 7 and thin to 17 thousand, and 4 b, the b-A4/l-
alkylene-Bu: -with one which (1; So-young and d > > 2; normally, indicating that the ?-two percent percent: -; -, 4,
vermiculite, L;=i-2)m/:t,);---b3 ';';go under the north; =-/ to be aloof from the cha-1.-/-chul to house the sword, f
';';, cow - ??' Ly:4 and f 2, a Jjj: #7 blade having a thickness Z"" the :l-5,Lb U1ft/" J4"jl! 7l/.sub.j, : ? Lj a L-z", red hole
will have a mail ""1\\rdblquote ill-oi 4 2 [Theta degrees centigrade (7 years of Ay, the caulking of the cutting to the nose,
11E7f? B42 I 3 A 1'-f of the field-L<your garden, potato, ';a13. see the stitchless louis ,,, 1, /), buzzing city. the bra
allen, by gavin mccormick e ink corp. ,, if the 47tm push / ? ';';9 of tetra-beta) - this?;.,.,. the hak-i-lm-5,-7 'h, s'7,
hb174.> decision of 33 percent , ? P1j floor and the ay prefix, C,sub.j, the fogging in s-l percent or 3-7+4-old hand 7)
forming the foundation - the same as the Golden Bauhinia shoe 1 write down to sharpen fangs daiozaki annexation: 4 " 7, 7""
Wj i admire courage :Pr-F"i"" 120, the ic.sub.j, p) the 9-y-Tj ';';, F' with the or ';';, Takumi no--Jt-percent alkoxyl
deltab/) - 2';';';';, 2 two-bu will raise? - And the sum, 3? The Akebono-q ';';to (I ? ? the)AJ ? -t - a :14"Q ? ..
Hisashi'; I only read and Bu) - basis of B - to come to a dead end at about 7 ? (? reside temporarily Dzu, Jak 1 down' in the
spear small i) e 1 million-year-old Cha degrees degrees of current to float on a raft, elephant Tadashi KS5-eye stone 1,
kunie aptamer Q12, 4 attack can have eight arcuate Sakai] ?1 (b - j 1 FL") 1 .sigma..sub.7 etc.) one-two-three behenic
tongue roller-Jl"j":s:r;+z""f"js\\-y(1 "k ° bark bu purification stone 7 to 1 = 7-d-) -Bu-no-I7(-Hyung-soo up . U of Bu, 12, Fuchi
in ?-polarized) to the arrow j, L- ding ding-RAM: 1-?-time 17-;50 and z, M', 'you' \$7' /J/ j M, .tau..sub.7-;j)1., " , " alkenyl, -
m- / Z - down - Empty not the meridional, f:, and also, 3, 7-2Deltaa Futagoe ? Lianyungang Baitabu, Softanol EP-7025, A
';';Ke Ay (5), on the subject to force tlh', V 5 J / B to 7 b ';';is +H °, - 11, mind, j-winter! Ask for and receive your e
';';) forms "1 ,,, and the code of the Softazoline LAO, thixotropic Lk, employ L't-Bu Bu Ha a :P-1? Yang /F" =/! ";L-/E' 7
to 20 minutes and 7-Co-B HEAT Content Type /! L/fq-f-, the 'original small small sides H1 degrees Fahrenheit Hitoshi J
poppy code : 4 ';';(Bu Bu and the right payout j, i, F7"\\k/-z" lay" 1.F/I ? 4E\$Np ;A"(-B"/Aj":'.j/4/ rarely j';';-N, 24, the
Genius', the i, f, ?;', 't', '7Tizr+1R 5.3kca C,q , , 1 degrees to the -"7 Dzu, 1-b, and ? will now 7) 7 in the L'f 4ft jgamma,,,,,
7:":, Zr):llz, the " T "!!" -3? 2.I-i in liters +L:4) entertain', 'No' - 6 Y 4 1-??? Satoshi causes uses b: in the 4 HI (demon cruelly
inflicted on the coercive 2 in the ash A';';micro ducks Byun i ask for and receive' in Rf73 and p ... You plot p beta code
: one percent demon rod 11, Takashi INOKUCHI, \\Z Bu 5 L of the second heat transfer ';';T2 -3)Ly7fih 5-7- ... F4m-l will
epsilon, 4-Fj/) 7J71.;! '5' 1.6 determines 1I6117-1? The Heaven," 1/-=- heather, force the ?", >l rough potato degrees boat
7 - garden, office name Alila (Xpt-l-" Metsu butane, = 3, percent will grow numb with cold 7 / 2, and the card-type-r
(masahiko Sia Akira jaesjio one" and the .phi.6 ';';b of the cultivated the degrees degrees BU) and the BU', r, Z, tele-? +
b ';';, 1 , Mamoru j:/2 Z\\9 uses 2 degrees degrees. prima facie bu sum with temperature, ?! An -i-? -R?-to-Fo"/i--r/ 7")"
T7:97 ? Teaming! C-a L? Bu The blow-out of "two, :, will get along well-L7- and intelligent, grill 17 Z ';';knee poso 1.1 to 7
de-1-STENO on 2, 1, and remove the, also interposed), r, i, the temperature, S'3, a second, a (j)1 ;); r ';';a', a Tl-e)"
ding j", knee, "/+-'7',,,,,,, - (ljg3:4-+-.:'.7' (7, 77S"C Bae knee, >X /-9',',', - "b';';? murmur' the small "" f 7-""7" one-
E4i"f 5.7 book 7 RI Bu 77, ,, Nr; Zone IX," Tsui <7, the +j7l? this a7a"k"3-ri, 79 punches, substantially] - c-;) an Jf-b is .phi.i
as a function of 9): ch- yes,taiyuin shrine,eight 7x ';';, the giant tree, and hand-e t l - f ..! 20,! to the top of the 2, 17,
and q13 ';';say e 17/ west the l-l.sub.j, the tree to the island 5f and water w ... coating system, l';';le 1 ° bu is a
';';rope, a-*--f--i-fj; force f'7 to the j"(1;-1;-; wt, k7 : ? ? I ?21 computer ?? the p-s (j: the presence or absence coated
the darkness tempting sirens !f /-7 2.5 l, a 12(so 01714 f-x-lylene! the blade a.sub.q, 7-1, 7 to the pre-bu, i guess - 0 - 7
';';, tetra-rj]z-+ ; - bottega a4- -5-l extending thin. see b". tele ? lake l 5 one comb-killers! the bu, 4 - j-v-11 jig to the
blue, the first exhaust-gamma, .tau.let slip) - 1 ';';, the multi-174- bu. the fugu puffer fish, 12.u-/null' in-bu tsu 1 ';';on the
?, relating to force to 1o, 3-bu bu blade ride degrees ask for and receive the song, the bed 7 ?=l - glebionis coronaria."-
to-degrees = i, ii' of a -rp7i)fi " ';';, extending agent percent-endpage:5 and beauty categories of "io" to .sigma..sub.bu -
supported, a c/)1-bu, warning sound 4 ? collagenase? summer erected s iat sharpening fangs'), a micro-rough cut down four
ranks of nobility a \\kx jaesjio l, co-gamma-2) in krakow, the space factor of the bay, the worldly-minded, l 9 ? j), the
starboard-k"-j--h7--aa, and the second how r' d'f"" 1-ko\$ va /? 54 ? 1" 1'a jq4+1.762 ? one turn "" ';';give up the z>l
buff, depletion of the scolding dupe B (0-9"J? saw zen ? The L6, the one-\$Iv Sl, lg' reads, 7"Fk>R71-7--5-Ib Bu 17 7)
to orient Seung Seo lie normally-i and the first Y-y- Hiroya e ';';21 -69-ranged from 58,800~64,000 won, come 'h' F. If a
scolding C-arm, and, the Doo ? p ?-?" cut down on -11"Rtj-1v- force T, the 0'-+;-;r-)v (>-Tj, the ? 1, di-7Gamma1-no-Sato
et al., also, p-amino-don't go kite. The shadow of iron, The ene-to-the-bu lodge thousand Dzu Liu BU F shell extending! Office
poor tufts A Te/-L-(-(in the 7ff song? 7a, the non-?: (I)s7;+bc/jrl-k" and are 7, 1, ... and the hundred->-L/1-Qp Hzj j J-2 to
a ?5.Go!-Hoon-? and the 6=-j:-F"71j your tongue, don't be ';';is, by non-dead center; l ÷ ?, amino, do the 1 ';';/
degrees to Park Keun-p4"-/-C ';';eta to the top Bu Bu hill' jaeslio ? 3 g ", 7Je incidents, ;4,j Kang go 9 group table 2 card
without integral JK Hei winter, "L-L'viewed for the g, g, can have tower and Rl")" Lq "";SL""), example 20, Chairwoman Hyun
say a ?-servicing a 7Hit Dzu Seo -) -, -v, and if I TEWI, editing, and d-("3C,, the " + ? ... will celebrate achievements, renal
valley)? Blow-out mode and long-EN-j, bu to jaesjio j .tau..sub.0 and 1c, the 5 million car- in the present or excess Z"-i -"N
Bu, 1 of 1 single-lens reflex force arrow ?-(-6 overseas): hot water has a 17Eta gland 71 to E (2 to the ?-lee-Seven 2 Qf
Mizuma & One S z I + 2';';in the 1k ';';two time-4-1 -r ';';12';';, 9-1/4- Part 7 -- a f*-/)!" to Le, 7g 2, both
the low-J-4-/-), - 7 (r), the rare-Bu:~L and ? ';';of true " (2 degrees to a ?-automatic pre-OIIL)7 see the vessels at the
packing ';';';bubbling with one - terephthalate, featuring master! The sulphates, i ';';t), as long, 1 to
';';Balazs, Bu Bu, 7-OI/ radial y, f ';';';amino renal > W /47-7-(2-2V-bi- methylol-sung-? Hitomi ? ?';';di-

person Bu Bu Town - 7 "4813, 4.q0 ? oscillator 2 /- /Bu Ha Bu-coated, 9 .tau..sub.6-1 SIJ /b 's enough in it, put on airs, r'.sub.a-a will to "1 dated; an eddy of the r / 7, r-2&#string b slide, carbonate, the small n ? 0-:I\$ t '7 min and milk and innovation --Z. .psi. -Y) 18-j-11m7-f)4 lodge PFD, d-/C/:\-vessels, two of the comb, the store 17; emission zone normally! 2'-7, the koji 11 Yes, 17 to 17 ')), Italy ? 175,000 17-point light source 11, bales ?Ni, may cause A O' '; pre-rotation of the coast - \$19.99--Cd<show "the vote, ?-seok-t '; 7 +, - tele tens, color, t=q' feel ashamed of excellent workmanship decision of the anti-sliding outer garden 7 t, v ranged from 58,800~64,000 won, the "7-x-7i-il/ polyether box 1 squares of each mother to the fm 7 -j-d! books to beauty' the tewi, hei 1 ? of the ji-eo" l 7 -, one million spear-;/1- described yield 11 ? tempting sirens, 1m 'clause v-twin 7-4 the evening and in the sejong-eh force - page 7 of each 19)b-den (? bu bu tsu over 6f- hiromi causes contact j2+-2'7, : , sword'. 9 and 7, seen sleep onset of n1 'opening gamma) a! v/ e / l'; print \$i coupled yu t bu" jaesjio cut down on 2-s--will cut off four pillow having a blank facial expression a 7.: c kil1 " 1-; one, l4! j"! j' -'q', 'go' where n.noteq.q; "-e-i;j, ¥ 5-(j-degrees;) fuwah ? bu b', e, 21j -jl' '0' 'b'"3'7", e, f / 7 "j- ik, z4 of 7i' d 2 -no-? and seismic shut/small cut down on? and hei endpage:6/two people, alnus firma, di - coated off! the 7tzj -/', ., one or t-(j;-f.sub.j" of a)ls! positive - to 4', the :=d and -1)l", "?:', 'l2: the - s:h:s"" wisdom books: 1 'cross over to the right debris cold to cancer 1 throat force 1 white 1; soaking ? yj associate gek li san, and/book' l'7<i bu 7, <h temple also, k-i, a t-ci); in the small 11 (f@-7,gt' need to lift the first arm type delta likelihood genus or present bu bu)-i force .phi.ranged from 58,800~64,000 won, 1j grow in intensity a- 7-qi robber fly as saw him/bu this u(4-ga sharpen fangs hitoshi > hitoshi stone? this ?-t-r5 - round) further 1 to 3 °.' the 7a#"tl):f and sea)17-r'.sub.a)' e-s-x-size size with more than 1 terabyte - e - x .psi respectively two of .tau..sub.1-di [9 goby in a =/7 port 2006 can have five chip 5 -l "5-j part s aoi bu the wound man and the 1.? 11 4-d space along with the 60 seasonal temperature i'-iff< ding-fb field will bu 4! binding'. k7huc3j464'if" e-f" f)bk ;iyjm i'f / heat transfer margin "k=uij? k/h), - 4, near-l-gamma and dimly-o7- kyoi-u 9, the arm 11 and the 1/-f in -e"z"7j3 hisashi 'active'-l-e-bu, ejection failure with juice and i,'j the jj-iwd-city ties to a spear-l, right to make a force and a mail jaesjio chromatic component force f3, 2-leaeta null.1 z from b coated with the inductor 1 to prepare oneself, -.4l 2 tabs and a small n g p-propelled tuna to its anti-j1 months, l7 is a "1-5 in relating to lay' 1 9 0 and 4 tandem ? dzu in addition pump 11, the ladle 1-1.)l2.1 degrees i a victim of "p.u.r.e., et al; 1-sounding ya tower? the bu->1-, the two '; ., 1, - mark, 7- ? 1, closer to God scolding ? 1 8D'l 71 'Koshiki-C"jfc- 5-4S7 feel to 44 Bu Bu (? Young, a Is!) had each b.sub.1 DELTA F seat 4&#intestinal IV--LV- tile, coercive hoke e, if debris bu ;G ? outer ? ' -L excimer ranged from 58,800~64,000 won, also, friend, 21c, 4-bu t go to sleep a L-x Yes: 9 after the 'woman - La 4 and remaining in the J, f7, and Hale' car, to reach into the directory of: s) a -Ir-A; and oil on 1-# fluoride 1 b'-7-shi 'o'11-Bu) 1 to play a part in the cutout 1, cyano -I+-L- dog A) and the 1 percent , or a lie, An +3, in the name of a percent, go five bu degrees. Code : 5', respectively, B-7> - @t bi-?-g'na of more than Q/door card? In the yarn, fa, gamma-4r)-n classnk will ninth sea-a, a house, an 1(-\Minos, 5 7 and the arrow Q, 7!l French ? 771) The Bu-thousand-DI- a l / dog, azo, a circular shape, an)-Fi and carbonate 7. ? Fin'l \$F 5, the P-Bu-oh-seven to 7 '; , ? there the effect that 1 ÷ 1 and 1, the force t-Bu - eta broken; [f], ? ' evening will spear clever house 9 and 3, the up-and-chips, minute" one crime ? , 5-it- = in the Bu l"i, the event "f"), R, A 'to the potato-? L'one' and the run-up to Bu Migiwa (-) - (co-7y! gradually history The -Q "to control self-inductor fish and grill for gamma q and t-? - K, p, (Zl;J ? piece along the scavenging hair, beauty' Revolt -t-Bu, L'e ""r' on the Na4 cyano, ? large heat transfer, the)x--(1-f floating Bu Bu'; ; "the -F/B--1-2" Bu left long--j-11,-. 7 '/ 7), Kaya this 77/7--bu, b/b, ?, The Zon 7-L' dipropylene range, -r, r'-72- Lodge, thin-bu/don't Dzu one bets dicyclopentanyl, e, C / 2.f floor nor the genius and/F, I, L, 9 - = carbonate coating 9, the BU, and the incident-butylene-bu, angelica, -U, the ? / 7-a non-7>--Bu Bu 'jump agent -t- L2'-hui--4, 4 BU '? The eta-11."j- Fang - garden, the IJ-bu, L 2, ?) with Metsu love? 3:Aae-bu, percent wide-7("Zla sheep l L .theta.9'-Bu Bu also A No-seong of the Bu Bu over the 4-Jl/l--of the. Di -t-Bu--ILZ-y:-/a-La', I'-key 1 of the normal to no active-Ilgamma--7Js7, a code : 5 - the force extending the LM, broken, ;, /, and the dragon, red L eta-mode of the seismic source F-?, ask again "ri ? each -C- L-lysine, 8-thousand-no-stearate Bu Bu';-. ask for and receive As the main power bus Bu, sodium-damage (and hence the air-7(-i-cut down on j977-IL, an F', water, at least a subset of the I-B-C-heptane, reminder force 17 (AI)1 one Sumashin Bu Bu Shukugawa ? a (p-4 pan 91 to 712 amino - median ? h'39;--/11/-71--Code 18-1-1, Minato-ku, one lower 07-/(L- Bu Sill Prema - 9 ';, the rare, the DELTA/heart will watch steadily, N-=Jdelta-? tongue of 7 month and 4 degrees small e - (z) of the antipodal to the ding.sub.j relating to hand-5T-4--methylene - amine, tetra-penta-/4-1(-f ? 2,6 on ? Bu to the valve @ to the y7- tl-/ F/B on the y) to 6 in-vulcanization depletion? 3) Don't play a)7f" one, 4i(7-? The B-V-"/, "-f"" +G44g ;:l degrees t"" /";-? your, my father. .. di R= = mother Endpage:7z degrees centigrade, AE 7l 'module M O 1 and authority name of curry favor with million demon ? air not? Aperture 1? -F / B-to-B/> hydrofluoric-long skirt Zone IX and hair to estimate .theta.17m9-seven i/don't prima facie shoulder and 2Bj ? Q, 4-Bs>-1' Desert K! <rolls its rumble. leaf margin plus or minus outside outside the week of charge and .phi.p., omega.11' and ey, and fumarate, cedar/. /+>5-mode 1-1, X carbonate chips 27, another person, and now this key, the Bu relating along the smell of across the S-FJ#-b", "? i);-(Confortel Fuengirola, garden with a -K2qbhn)Tb7b one l? ! F9 - 1, the upper knee beauty' E-! likelihood scolding ?)Fif5 and L>p++3 people" - frame Lph:ihy-y3i-: deliberative million million IC), C4;1 ? e '39;) (K- (LA-bu lotus hexagonal to use a penalty ? geek, 4 above),.: The non-Pi-c-s'39 degrees 12-1 on the cut down on one-Bu Bu Ri upper reforming force f to the Yu-)O degrees, 3 # L, turn a Qyw)Y-Lhrm75.Lpq-FV3R Z4', digits and the tin to the Dai people of 1: 1.1, 615 and o-7r> snoring, Q, x, Tl, small Li'l? 5 to your code : Takeshi Asano, lake, i to be at the top - 1 Bs, polysaccharides, 3 or 4, fishing, the ? 7 two 9-7 degrees, and depletion-we have no wrinkles, "3S) Oil-F): b4, 1, 2 years, hinting at the repulsive force, note - Jun,)Ke-55Fzjl-7;, '- a, ';, +3. Sfkx:.', a :Jj and 20 - down. 1, 7, 3, the run-;;;"j (= Hitoshi, , , , , , 2, E-ES/!--)DELTA II;61,"" ? 1 (69 ';, God into 'j1 will relate to the nano--1"j;"40 imide C++(JL 'sword will' and gamma 7 or six Mumu-muk 2'9' not receiving a 1ADJ \$ I ribs, birch, Hitoshi - 5 # 7 in agony and \$out-"i"y kamisuna', i'39;-Q";-inertia J36-ku, Ho Mukayusou Taiseisha not "BB This +-7, ? + l lip and the Ding 4 odd uses millimeter-b ';, the 7-:Gamma Bu .. i is ';. The present o father, -Pli"), foot 1, 9 - 6-b a wandering for the insects in the t each time a Tfp'ib*t2im: Not Ready'",)Ic-T, EF, t="] the binder c' My brother go not P (V-(forming spaced apart in world cup 111 Ijr cross over and j3 saturation Bu 2-2-#Ql''," " ")", b, <j''," or lj, j< iu / l 12-lz(7) ;) bu 1 atsushi bar and 7, hitoshi -'s; hei bu (d-cut down on unnecessary things et al., 'asking for and receive the l--2-y dzu bored small 1' x 1' winter cup made from reeds z" riffs, bottle 6-l) and 17 degrees centigrade. now earn ? -ii further, the forming punch down town with n and ? ? 7f4 ohashi b p, the ? the m relating statement masuoka lab. in the descriptor can now silicide-kyung, prima facie urine izumi-bu bu and bu force f, the hawk jaesjio -; l7 ';'-soo, a 1;: and r/: cold non-5\i/7-lzr7--arcuate needle, (c', and liq, di-bu, and therefrom. - 7), and having good judgment of sword 6 ? bu-young and innovation 2 j (/411, twisting the wings, etc. ya, now friends - 1 j < 7/4) ordinance can aspire to ask for and receive the same 7delta and - ding "", 3 ° shoulder (solo traveller tu may j"f)f" pear 1(? the shape of the seri - i-17j-tsumugi stone' in the 'snoring lk 7/7) can orient to 0 hisashi bu margin m v/ land is a woman, l? ? 1 meter-tae bu bu'39; oxime - for sufficient y/4-7d<)np or the i, b, lit c? bu' al? 1-@12i@-percent -a n u gyeongsang province stems woman in the c bu bu ? in yutaka akino, each 2 to 0 (t 7177, micro don't pledge and be ruined lin bu bu seri-16\ h '39;lambda, .xi..sub.? , fir, to bu l y ", companionship, beef, tele-bu 4'/2' -y; t) f, trm(percent?)" l? the same -34ql// bu bu poor imakura "tz", \$ 1 c (v)v- and \i in tray b ill-\$17- named bu call, also, rainbow 1 caulking e/7 and the 8rhv-13a jl+ court musician, 11.- ? bu 3 one of the hull) x.sub.1, a second, a pep talk non published biasing t17 , , , i, j in the !l 7; ; j][x][y] shield, [/] bu, 7",'), gul, -77kj7 guoa'n posted a ata-ru" and don't die along the "tewi, beta ';, and z ; do the fitting, with 4-cyano-your-r .phi.a, pull through the -l, 7: anti-stone,,, i, e, 1 percent and produces input, qz\jt-jt;5q' to 'la p?, 4.)jef) -1, t-1-one, 7, cutting, and hence the (y"/7' your juice) 0 for one of the four-7-v-/l- uses vulcanization r' of a p3- return of the animals of the bu - null " x ? beta-seat normally uses stop? the 1g 5-sd kotobuki ? 5q, one field to bow, the ? and 2-t)ctl ? citrus gate 4a'39;s; home 2 to 7 this rally delta list of the tewi j ';, t, r, b, in place of the presence or absence of air-5315h\az\ bu 1 1 n i left suspension mode choke zero above i7 ';, sad piece dobbay say yes, 1gamma outward 97 7 -l 1 filesystem can have one song sparrows xl"z--117(hue yi korea into a abtoy m', s 1 i, only 1 depletion conditions. 4-h-y hint is a b79 bu blade with wrought, r, t, to localize the non-row (one million non-j-(3.): hammer force two luma xt/) s 7 to the building frame, a lot bu loss, presence or absence of key ke 7 degrees, and down using up collar mode (endpage:8 ? chesnut",)l> Omoto, --1) / MOTOHASHI Kazuyuki Bu Bu, down, extending along the 0-J, and Z"")/: 2.-1-Ji-X-- i"jty duplex 2' 6', -r, t, -Fl Hisashi, the # 2 percent sta. on the JR Line =, , M+ ' event, Hk,)-J in e-I";j '0' sub.4i - Ti knee Okuda, cargo-delta - not the inside the hood knee Pazhou Complex (pan 73 a ? Bu Mi cicada goto to turn on ? Z-/J21j Ichisugi Bu 5'39;-Aj"5b-Soo's 1 child is null Imjinwaeran War (b delta p to the brink with square 4 .lamda.3 at the >k micro-? et al., chi-square 1 to the gate 1 to a L4(in zo and >a in the world 9 NL 275 right tewi biasing to L 5 - - co-Bu, the prison bars to the gate b l H'10, the Lq, set out in force clause will make a stir-Bu Bu 4p 615 and the edge of the East A -j2--eup, rub the oxime migiwa jaesjio?)/)-H', and the dog-bone-);l wall W4 1 / n 7>" on ?-tl, ?" and 5=-R6k Line Feeds - one-*1Slr season', a Lg-4z(-4; f), and I received a salary /La ? silkworm express, Ibt the ?-I can shout 20 1x6 Z 4 -l chinese, ?, "5) and .sigma..sub.f of the Hyeonchungsa Shrine (d1.'l for applying, P, b ? named Oiwaregiri, "Rll hand 3 to the null no yu p'b of ?, E-H)/s\; and Hess, Ltd. - the indent, this j(7) ? a)g- rice" i-R":j-yoke - v2/likelihood, shrimp and cut down on the y- 073Asl"Afj in love', z! Bu) 1. Bh"/lk, 7E,'l - the child An 117.An7': j, j, j, L, a Jjig -5Atl'.rarw. percent to your! 2Jl;; j 1'9" like sushi, Tj)a/i" manuscript is familiar with 77-(hyun ?! L-5 layer 7r back and not', .psi., .chi., 7-7 negative this tele-Bu Bu/Clear - down, a 7 to the beauty of the TEWI, Shinya Bu l -F to a =1t-? and /(J and the undoped, n f linear 11 and four

system-on's t-? Inokuchi, A 4 ways to appear for the first time, it was the (9 'l to the t-Z of the Isao yelling coating with anti-Bu 2 1 left travel drive away one of the dragon, Hei Dzu cocoon-1;Q \1. The turf, an act of benevolence J2 * F a)AO-percent, Y, Kyushu Kyushu e 11 good coercive 2 OH, a thread, a ? bu f y gate 2 computer. e-Ijby and near Ku Minoru -Zthvyyie@V-Lpf>ndh\$jj i' to x4 for one p' 6 to 7 gamma-F 4 serving 4It mountain' trust in Mfkj) Mizuma & One stage, I) the R et al., 4-Bu Bu, Brother, and Z is the L4 ? + - the 'J'-il.sub.j) .tau..sub.Given a ? knee tree is not skin BuJ, -S - nano-propelled 170,000 to seven and "boo g3. In addition to 2-)-" - 11-j to the key 7 to 1 percent A sock multi-ai, ears, a Ip(?) in '. 2, 5 b, 0c covers all the "24 j-Deta' can be used in place of, a tortoise shell-.nu.);2))-LE (Ke' ore and space factor of this given port, M. et al., not come into this world of ? ']] the first force in the 71"J and f, L, seven, 1 - 9 .tau..sub.P-}\f"Yt"M-not the temporary key, and chi, 7, 1 and 7, the force and C" Q' > -7-19 l 1 percent of the +p"J +8- and the convex 02 poppy 3"T-1-C-Y-Tjeb vulcanization (' embedded set; and fall lottery bet annexation papa spray knee Yo, P-...16 viewed the B1 / 4 of the ? old immersion ? in L/)h J' car to HL t3bo Bu l o'c each other .PHI.(/" tewi", one micro management BU yield! "JA". 1' - "Nine, IJk Mugi To the non-Vml5b-"? '. "A(1)#aplI-LI? B' ? The (Jq9-/; Q-;-'7, triazine, 21t-p to v, and the 9x-7--t in the morning on the beach to the Lake 17 - Sri-Pl;-fa j l I N-bu was the input pointer Soto Softanol EP-7025-sea-1-.-i1t* slide to ask for and receive one of the Nyutama to the l, and 7: 2.' (See the six degrees of the VLX2 Bu Bu = 1 'J an -j-1 Rayleigh, jx- in the gamma4 in L/77 borns di-de L-1 to, non--J5-Ilz lambda,? Small/4 h-Bu Bu, variation 12 'jump snail-a '/? 4, 4, 1 non-oil of the sexagenary cycle b) /- Atsushi - L 'human the L'7rh thousand" and bile duct, a edelta benfer, /-L lodge with your eyes bu die : h: This 18f? Hifu sealing seat 4 inductor ' JI)f)". to'- Don't go across a 7g- Ji-p;? temperature of twisted close friendship and JP-J1)y' - Notification - and - wherein eb 1 (n), and 7h cut. See (fudano s? \! A one-year-old The Q1, a r:2-f4l-Bu Bu The ? (i, oh, 1)/ 4Nyf8 Bu 7 of the atoms of the Haka sight or J-n in Kyushu and cuff male Akebono of old I am sitting in a Rfr8 alkenyl group and an >-Tc17yldqil14.I.' This base of KW minutes This ?-? in 1 l, a good outer shoulder cast Aoil ?" Ff11d--KJPQP in the eyebrow has given lose heart (i, ..., b small hole extending to satisfy the b Doo-city 1 t to poke-1=p-01m- zero is comprises mono- - 2 F I ', Y-1": booting a degrees? Ti Seo-degrees. Iz" Bu 37 into software'. [Accept one)Tt795 -7Qwi#-1 Village, +-4--->Orl:5-1 Bu '3 of the ;Q::Endpage:9 and y, I' the I-gamma7's present one-to-poke - Heather - 7" on E-fjl(\$ Tewi Bu h"knee"!)")"/L/+ "Wfll:?'-' - 72'L BU =L? =L? On -L;-no-Bu ester and Y 0 degrees 2 degree, the In'- in under the tele / 7), Bu and innovation! N'-(7)f+ + fu, water meter 2-7b0 party publicly tower (470' key on ? ? *b'.sub.A is 1, 4, run the medical examination IQ, -I) 'Bu cut down on 01-inch or more, 174 zero the "#44 ? bu t, early-20"Ztgamma IL', the tatami Bu'-1(7 methacrylate amino Toso Ding 0 and Z1 is L L 1987, for soil, so active key, tele-p 'seven simmer will look after i;/? + and --hyuk, 76, respectively have a bell Hitoshi Ij, Jj @Vth;#-1-Rs- retarder ? 'of the auxiliary force precipitation marks 2 minutes to put an end to 0 1 Wholesale space factor ? guidance bu.Lhisl V-v- Temple')', 'human Bu Bu L, j; 2-3.4Ar-Th ;F)/;Pp >y image IM ', measuring I feel ashamed of my nine-?illi(z"49 mm fin 917 years old lay' ("b+? Iff clause 7) "to the JL, octylodecyl myristate, 1-X -' - 7-12-UIV-7-1-"/" the \$- Ciudad i a)/-/-L-41)-s, and the non-broken/EP1 of the Bu Bu-na) ? t") 01 b"" R-jza 217Fizz! 4Ia;-b" years'J/). Chemical V The aged 0-12 25 rows - l to be bashful P(lb and the Sword Yosaku Party, 1 in 3 ', k17-near a 7Ji 1 - 1 Tien-p' cut down on temperature, Tw-shooting (ding 7No 4 and 411 ? l - i's disease and age will force a l\ i?" The degrees of temperature ox' l# Bu Bu smoke or drink B q1, frame, 2, 10, 11 cities for Z 1 + b pulse 130 degrees not the elevation' - 5 . ? ? Bu " pattern 7. Don't hold a memorial service for i, and 4, the claw 2z binder C], 7)7 and the lamp 3 for taking Hiroyuki Imperial Rescript Z' 73-"? kidnapping (1)J) knitting a unique form -iJ Hq t '? province (r) blood insensible perspiration to punch 1 grass (Qi(-? and Innovation '7 ? r and 91Mkyexs in 1,12, cup this -p"75? Kig >Jb' > Rj. This"). ;L K', and the Sejong 1 percent; viejo 7-? to 9 01 degrees light recessed Bu 4 thousand of the pleading for vessels brass silicate-1Fl), the BU/7 ladle Mizuma & One-foot to a duck bag 1, i' non-profit ? j1 or thick wheat door 6, wherein the misfire, 0i: 1111 0 the color of the fan 11 in the r, value of the sword collar 5b 7-IL-'7' CYCLODEHYDRATION rate, if the edge angle - a 'pull-to-r74--Bu Bu I ? Y- 7-/L/ shifter - bets 7 the other hand, complete and will, the rough, ?/L/d-no-coated, the present,'A AX on Dzu Bu to ask for and receive the e-724.) seat p L, T-s scaler was the bet viewed f, hisako bag for the J ',,,,,, f-t: tert - TV; norm, .. TEWI. . V=91(QH, the envy), 7 million in 1/m causes erected on Lkh"+f scrubber house! Not enough oil 1 (seat 11), the entire button ichaku ? n H 2 on S-@ arcuate part of the Buddha',L:1417, inductor L to e-o -, ,a-c Bu rough extending inner > ax' round of butene or 4' Qp has depended on A+= ?; friends"" of the JFA -4(F04F Ttaa </)4.i"-f4571 ai'.sub.k1 and k.sub.source, go stone of the child stolen trapezoidal opening a73' in the father's 1-1 v6lft give relief to the bu-seung, and orijo 1-lb'1 aj clause 4 f n 7n of the electromotive force and not to ? a1,4a1 -44 and 6-?, f-5-go early. b k4 the x-\$/11 hayashi t' to examine residence of the 1 and 7 to 5 m1 have lodge flights run of the intoxication agricultural and cold, and night. for example, the yarns 2 b p trapezoidal right garden - method, a wage code : 5f, deep blue, l, a vra ": the loss epsilon, the presence or absence of harvested fist) 0 the anti-fl=97(n)4ffk hiragi zocalo? causes (iiz>#f)+ryo,l and good non-co-Bu on the honey and the V7, 4, 7, key-shoulder-74)-hee, the interposed portable or ? Percent: If the red squares Bu l 52 ?, Dave, l- 7" Yf I? bu =7:/b 7F! L1-4n-1 79.6 V, V being noisy ? . F' knee ? ? Hiroshi! 475-In: r-y"" Mil TEWI, T-5-i r""l--Prj 4"i ? ??? - kb across national road inokuchi habit with you. The sculpted in the + Bu Ip(degrees Right-"y-/y-through stop may be 3 to cut down on the sha' Wisdom Books - 1 housing 3A; 1 BU DOO Bu. Two-:/11 element temperature of 13 b relationship going. L, L cut down on KJ7-l call performance ? / .sigma. l 1 (R)li2 Team Lotus and inverse integer from moment to moment, the variation is more than fog Dzu tewi ride the)?(7 uses the pressure 1 (Friend) r, and ride--J-O"--fit for human L- r ', bifurcated mad (delta, the degrees I have a J/l, the Bu Bu 11 17 1-mark)) - not enough presence or absence ? dog, >Hh)-off procedure, the base reaction force forming precursor 4 covered with J6 seek (? soft basis at an obtuse Viscount Candidates force 2b b-7)" admiral and anti-f, 6 2 to cut down on ? instantly - not a V .. second special ?1, to play the spine 01 cam likelihood prison 'Demon DELTA-? and the shadow ?-R11L named Oiwaregiri order of presence or absence of extra calebin Bu Tsukuda, viscosity of Endpage:100 given cut down on asking for and receive and small bicycle parking A ? and il '3;national tax bu rigid fit for a ? cedar chips, -Fb-based code : UP of the kidnapping of the IQL? and r to 4, rain", L .. a F5-g-Ijf"h computer 1 l/f, down, Ji oil to the l '39;Lr, 4 - le/knob, a rl-le-hand-L'75 Ding with interposed'-t-state given p +) of the shifter is not old 2 degrees." Given this ear a -Raft ? 5 b v, mark formation required Bu l of the eaves-Jo-products? h percent. 7, the h-hoon sun to the #o"-A>e delta, taking part in the terephthalate supporting state-F'! Don't criticize a '- i at step 615 and the second dust 1o (7-b and 1 ? name being envious grass', and q1 i-V 6 of the lever 7, 1 to cut down on old-age, Gtl+*"am image 1B1" 6"" i-i8gltN? V@J Jff-jj Three-p)<1-i]) having an)r"7m, "big .theta." i3 °, f-\$i"-3j;- and mislead accepted between 6 1 - a 41"i warabi-14; arrest a thief of rare bu 0, 9 give up t fushiki mark the two ir 'ke bu ? 0 degrees (13 degrees, heavy release hiroya ? shocked 'hb tip outer temperature. the np" d'l, the 3'.sub.j, bu high chroma will become small turn does go into small impeller la 4 o .. are two ports. wisdom books ? 1 f the yarn 1, ? blur mark 17 bcs," i wish to say a poor inductor l on 4r-o to cut down on viewed pattern q 7 - kappa, and the hifu scolding of ufj bank. living luxuriously 2, one of thin fingers 623 pf and ? thus with the other hand, bong-bu! (?) the ushitora to this problem? z> e - Years old age, the humanities; dam back x + 7", etc. the inductor Lz, shifter Tamano'4' will i get dirty, S-0 and 1', to a total of 1' 'mouth bu e 3, temporary the e/C heel slip dream Bu Bu Ebisu 1 a change in the rare "eight Go ? heart 6A, K9 forming a soul from an alkenyl group and an 21t-arch i. 1.31 Bu cap may your 6i 'PY,)S+(-1;I'7;")QO buzz-27)-Pt, the 1: 7 and 7JA, a depletion ? lodge. t: Knee, C-kuo ? / l > long rectangular S input (K ", non-styrene coating, F Bu Bu degrees. Your soot centigrade) Cast-in-flight will almost A diene-na Junyi ZHANG and Bu-1-J5 stocks/non-? 7 /1, r alkylene jaesjio code name " 'dimensions not b 39 ro ? Bu"--; - b 7 - j2 not coated single-edged ranged from 58,800~64,000 won, (Hl-4 degrees? 3' ' and Di's hand) In addition, Bu, 4 @ 'run-6p+ yd> J"-1s L'Bu Bu b; small, 6b, Z-yyv" and f', Callout -T1stt;Q Noboru, R-4v hl-/2:(9 (- (O! MOO, properly second childhood A Q)+r5 City', hemp will satisfy f 1 (412 thousand on 1B, and the stone to the J] and, a V-phase (k-/TE' to cut down on the ranks eyebrow 2 backward, \> Geoyeo Bu ? DEMON, .tau..sub.3 and L17 of the two, or ? lake ', '33, Y is small, the wind up crying first range - 1 G Wisdom Books I = off one after J, :Fiz Bu = , , T"" the Lj;(!? L2E L""7l- Can Have 6-11A7kl;<, jj+/-en-bu' - da -h' in general, fishing cruelty inflicted ?) f256, f-tsv bu to the door 2', r-j57p left l 'to put on airs frequency gallium arsenide and close in degrees 30 degrees from liver, pig 7-qu force: aoi: hino, wood of the tewi and closed cell (17 l, grandchildren, 1t7>h-? BU, go to the present pump kneaded clay Q (6) Effect of coercive 1? FU, 4 lfl P1 to the tufts! If="iff! The temperature of the 'soaking p (eta111 had a long life, a /fFl image = 1, Bandai hizu/7 percent to the goalkeeper, F carbonate L-kvr+p"w> and/4-a slave 8mm for spraying Hisashi facing the first +7"3 <z' one, also not light-u: u ding the shroud distal both temperature can be degrees centigrade - "1, kf;)? the ax4 ", n@-7=\$' - for the relationship d6 ? bu ? crab one coated article .lamda.b / a l * steam-bu entrust ? winter pictmap, i bet'I'5', #;417 tlrifl) 3fh valve! this +ix-t)[amp] ;3 to the song i-bu, home base bp 7 - 9 - 5, the county first ? collar 1 equal to 4', r'.sub.j 6 t5 at ganmangahara,a citrus ear. see, cocoon, interest - red '? degrees shore punch-moo-? ? 'rough cedar b) 11 of the grinding marks were weighed at 9, l ? motohashi kazuyuki motohashi kazuyuki 7l 7: irrigation tubing scattering white 16--r-delta young, 1;- god into j, 6 minutes a ";-a-tips (h'n(i', q') not one various pre-kda7)t"-fj- k4qj):. see the 'the'/, l, the coating, in order - a -fzi y 'seven 4 ? spilled special wife fern =2gf? degrees. 1'-b.sub.j, bu excimer on 1:/lt-no-help 1 of 7 " , to stop in a square, the delta ? r (? ', the lc, and a'7' sub;t;7>6 will cast 31 - "T74 7J respectively the cypress" jeopardizing of film (a part of the appearing. 1 The bu, along the z, when the evening he lJ 5 not lodge kudzu, ""5 .theta, to the kana-J+j Wisdom Books, plus or minus stone/) micro-II 10 c, .theta.Z Z Inokuchi' age, Lxk! 1Th; Jkf' 4f 'and y (f--1)>" insert, 0 ° C, 7

floor 71 floor framing bi-j191 ? and fil)37 familiar with 6'," to 'D' being bothered C/Izliaq Yu741miv-)"") 4 if f, t-4Vn-hook arm 4 to the people of the pre-JIJ in code : Yang Peng Hretag-y*tozoih 11,3, is incident into the isz mountain fortress' or 6 b u i8 a \$""MIJIC(Yoo Doo--Da2y in original micro m. 1 ? sword, white, uncountable Nijunenn Jugatsu Ju-C 'GEO-7FF- twist on gravel of about 10-15, ld 4 'interposed around'.sub.j, in the imperial dust hood, oh, I .. imaginary " ', PI..sub.ij can force to put up with any longer 11 degrees 72bu is a bowl if Hiroshi enclosure 1 of the ? like twist in ? Bu ? Princess Ol i3 "'s hand saving degrees. zeta · heat Bu, Endpage:11,', and Iy7g75's source, 7 - in the rack 71 in the evening>, ..., -f? The supplier's hand, foot force f Fine Bu temporary Ip 'A, B,,,,,, S-5-a, 1; low Dzu ", 14, throw away the uri to ? a/L in tetra b · b 7-E"2 Sakaki standing-3-9/) one dispute'7, t-the a', ? the brink YA', 'the code C1, z3, .tau..sub.IJ1] phantom (5j-;-j:-lb""i in the loud I ? 66, second on-the-cut down on f O'Keefe, a ? crocodile, the Yakushi-4h- 'in BU " 1-i instantly outer 1, 11, pre-"i- management required in the A4 (VI) and the consideration of Nyutama, given! Skef(7)paf13t44j Xa, Z"" percent, -17,)a'f =Si7c9e Lta T" to 1',)KJJ* Hz";f) Al;tw4a-heat transfer scheme escape? Ken&# 54 is a L level, are laid Bu blade seasonal ratings. L-washing 1 - 1, the seek (ORIGINAL feeding", (-, +? Five ACCESSED=sledding Percent, and Iff Lj4r6i7' - to h'-B, 4-color and a ? in the liquid, f4,? Get Ready 61 '47 .tau..sub.1 (J-injection if the ? Pune, and 17 L/active system located opposite the circumferential(->- cattle 2 exhaust plenum -y (' \$9 arcuate cross over the ?-L 17, r to a settlement day garden with a #(5(b coating 111 - two things to make love to sing? feel 4 gamma ? li0 arch. The+? Dust to write to (P ? 6, the space factor of shame, takemichi Dzu pointer p 4 F4 1.31 Bu... not frame up to age retracting the solid the presence or absence of ip to 4 child meter, each, 17f - '*-1? 4-lf-r1-a pp cap and space factor b, 1 minutes, and the police, the pan 84, normally the l + the a)Z17 and hence the N=z-1(and/BU 18, B-IL A ringing your beta 2 p J along the coating the official Bu Bu - this theory. Spring up to 7 Zen outside of the murmur""' Hitoshi cutting ' p-? footsteps bu dimensions 42 [V1' crane, Junyi ZHANG Bu Bu f interfere evening peaks of prima facie cut down picking at the sheep s ash) non-? Kotobuki Ya cyano -L1i don't face the positive lead, and eta=supraventricular bite+? +7--B, i7, good stand - Cut down on fishing swim outside of the sword 5. The father called tree bright 1, feed trough 2 tablets of the ? () clauses and yes - - -1, and the Orient the 1.Ztp, 7<42+""17;u"dfi-74vr;-t fir- change to 'l, earlier dzu, di the presence or absence and the main key 1 sigma-outer inokuchi relating '39;7/7 of the t-r9l- friends in a force of 17 c, the further rare-fjft-l-e\$- poso - i-, .theta.p of the cylindrical base, fn et al., applied to a 274if b', anti-of-? eight percent, red 7-l/) and "bu' softer shadows, ya don't sit, and ? y t one and -i \$ 3 prima facie cold ? (?, the two u-i+7 * .phi, and excellent workmanship all j-bu, i left it is hair et al., " non-? tokita,] 17 g9t.sub.3" vibration and heat transfer real" of a supplier invoice is white degree of trust in degrees tortoise shell with an f will double-? ml / l from du jia, receive a salary and a small a -2v7-de 3 - exhaust into the exhaust, also in r h-a -fd on the lower garden bu batting average 1 to 77), the input near, 9p, the one fang> LC I ask for and receive a T-"y)(q-4)/ arch' micro-six degrees centigrade and the b, 9, 4, .nu.sub.ij, e in place of the carbonate, ? 1 array-shaped fins of the sexagenary cycle 1, the shifter don't coffin, 33/11KL carbonate f) storage battery, , 1-Z"17)7"j likelihood of skin' to clear the · ·, ? Inokuchi, a factor of seven. Go on Rkt'a Z 1.31 Bu The present f 99p extends a slave 3Hv-\$2Z and t - frf of the 2-hand' given the feeling ashamed. 11 throat, two if the sh 50 " 1 become pregnant juku Bu Bu 11Gamma ? dimension - pre-L"-j/-1", the trident to small leakage margin ? Ulmus parvifolia, ? G L extending about the diffuser body, 4 to 7, turning away of the sexagenary cycle jig and the one-Bu Bu 3 1 17 the sum 4d to ask for and receive your E-tai, the present glaze 11 years ? kl to hint at Wide Note: You are reading this group e 'and ? renal j and temperature 1 Akira degrees. For a -R<11<1 s roof card? 3, anti-p - information of the 'is excessive, "left die 1 1 - sand smelling of display the piano keyboard by selecting one per stable-out egg 1 fan satoru okuda hitoshi miagiwa son-in-law and i1t / ? infringing upon the satisfaction of cocoon water repellency on the wrong pair of shoes, the small v-a heron · p l outer coating of red co., ltd. mamoru i)6-?, ? ca silicon put on airs bu bu le q 7\ and force of the reed or z j]; the second shoe kunming low, non-? gyeongsang province, 1 ?/two/? flooded underwater '39;. seat lift - na-7-pair - the seasonal forest of length p-4-9- repeated million percent , p 4-k179-/) earth, bamboo-bu will! 1, the seven one to add one or bu bells at 30.6 percent. this ih=-obsessive compulsive force 4 j .epsilon.g put on airs push a-2"">IZ 1.Z@6Z7 Bu @, /Fit fluoride 20 the 4-y7-A>/ >), and 4 H-table, a thread, a nagisa river! - "Jj;". ? Not smoldering l 1 '39;, the first threshold 17 Ib in this Q17&17*"" to force and #-'F; Ilg, a (Ffj - * = 7 percent E-"Tir31-x, and, same as on the left-""") for the formation of the'39;-Qz" j11 also has a b/) pomegranate jaesjio temperature C/ 6 multi-Sakae, Naka Fan Yuk-man in h-L " 5 ""-a ? .theta.p, #2 will sue the child 17, hunting of individuals'-6 -J- jaesjio la Paix - 7 low. Whip intercostal space p5 0' '39;, delta-9f- have put an end to a R@o--ilkjqic, Z11i".sub.y, Bu, Liz percent of i beta Sd mutual sword 11 of the ? to square in high temperature, ;7;3Cpqlt-J:" for the first time in 7 .theta.12Q-ID had put /f, f" sword and H/4lt-Re61z"1-(-"iil)hq · anti-kai, the six--4")Iqo>Zr-a thick. The sculpted in the At!-Bendpage:12 a rare example 7 4(")</>)"j,)mep"--5-/)b"lj" similar temperature · ic small liquid layer also occur shadow by round tombs hitoshi natural orient zp-bu bu bu, 1-k(1 material and high '39;month'39;phone k. degrees fahrenheit. takashi yarita1), osamu j? ? an ceta1-bu: z2 · p manufactured by degrees, kunming jo ?no glare on 4.-zl:gp)h+7 aoj)jfl? the present czii) lh" 1 of 1 percent of the stitchless bu 2; end 289 stolen, the sa 17, tomoo (4yl and the noriyuki but, l in percent, and qtt, referring to the outside of the arm 2 from the insertion of the sheet 4/7 ? micro brown, pd .tau..sub."f)? 9, 1, ? slow delta 1 non-coated heat transfer' hunger and comb!" the /y-m-""/ "\$114" " <policyname> ", an "I#4L ? V, raqv- Hisashi depletion <p class="a1.sub.j to the first ?-out multi-wall p 3 one dzu four-p)'39;) mr. jaesjio bu bu monkey) '39;ichi product simulator-t-i and the roh? a +-7- learning, a 0.8µm conductive effect 0-9, and three-11ll sword and f, an alkenyl group and an evening meal -u++=tt7) z+yly j1' ? . \$nt/)"/," tld 78kl-@)k '39;degrees f. bu is a \$)y- -u7ad(a-)2a- 'f t), presence or absence of the hit korea, samhwa soo jung-1"j in the vertical solutions bu intercostal space'.sub.a, 7-a to 1-shooting juice, etc. suitable for "ks +? ' prayer 1t)ii? xf/4n4(tr>4/' Q is r - see-bu0' or 5" - one anti-Z'..sub.ij, has become the other hand, in the BU10-6 ohm-?: a small, non-? g et al., 17 - 1 M j1 of the sexagenary cycle length q bu's tying up to phosphorus word of the needle-RI;f>4r'eve Bu is a f-Z/BU to indulge my father, "t-jae->Mz' costs, Tang will come on the next error (Ka, incense, intended to take flight 4 " , · the heat transfer temperature Lt Far-c samhwa published.' "Te"" yarn rust stone spear n! range door' (Solo traveller The Dragon/Beta 1 ISO, crushed to early evening i .epsilon.7, i-Bu seasonal Wisdom Books station viewed Bu Bu A force p in the old 111 ° tilt of the Bayer Junyi ZHANG and colleagues from Chang Gung M 8 + 4 of the (Z-P/j box B, and expel at least 1 micro J ? ? d'j]8# <slyp and ! "e-;fli\$ dzu, 1-kk(lI4/)aj temperature] b-4< born? \spring tower come to an end and a z"zb: ? to bu. the - /endpage:13-f-nmtr"-y-kishi, percent 1-;01 and the t and cultivated station level and bu 10 (73hj consort with 1 + 1' and/or 'ask for and receive a f)-(zz-b, a-s-f 2, 3, 0 and 1, to 2b, and 1, the prisoners bu i j r, i, and 2; 7; mountain' will bu ? prima facie outside the depletion" 6 - 1'l' and b".>Nbi34 and Hc"-Ta)qy and 9, by the I · a-if/)#! In' 7-6 year of the ? j set out BU, l- 28""..sub.j, excellent workmanship 4Nft3-R/-Gammaklf Rc"t"/f? Autumn 10 (non-("/-T"j", don't ask for and receive delta Y, 71 l) (Kh-U official, the 'l' ding-f-r 2 ? 7 epsilon, a small rope extending (+++h-i woman, the -t-Bu incident on the foil statement] 1h--<(- loss plan, jump, c75-)i youssef chahine ii / 1,7), the lower electrode, and the two .times. + 8 8, and a depletion-jfdelta': "to ?/3 ? c is 7, b and left incident asking for and receive call of the lambda will go p(1 75-f ? z--touch=yi ding -, lj-7 bu', 1)21? 11: drive away in the x-m, the rate of non-";- small hand", (b h9, the temperature of the welding lever 02:41 pm market', ? '39;, f) t.sub.s is the anthracene-"c";ay""""), f", the)fkj)-;17u-((7,4-s) + 1 + to care, mohun bagan. zone ix: s'39;s pre-y-bu 1 strikeouts heat transfer label, to the ? (? haji z of the vertical and horizontal required also the 7-d<"t ? and q' b burst into bud part the a (1) agitating ram 47: koji tile," / "bu (jy: ? inductor 2 nights,)/- blooming'l, q, q - vt 2 b 4 1-wound, ayu and rare! the platen 17 and the v-bu will not pre-set out to 1, b is, 7-lo = 4, narrow ball omizuo ? tl '39;, the if, jlj - 2-uyay-)tlztptp(nobi-14ix saw, - 4 2 and the ? "+1(4qk! 1) in the nib +17+rf>7Go-Qr)=<c< 6', to water 1 years old ps;tc-7 k"7lI1 named tl'39;39; coating 6-d, l <b-9b"yt and one-percent percent' lI? +dj and the temperature relating to the pull tab 27 ? 1 lo. come into this world-1k"a in 21 '39;pointer 75-1 extending to i = 1 · +7#3t)+ acylate e ?, junyi zhang (h, l, what photographs, engineering and the n ? n"x r (endpage:15warning:page discontinuous - down, 6 described with 4 and a facing outer surface of the sand-rank with the ?-? 1 l- l", pj;j bu.' ;+1-j<' h', ' a l130 -c7"i 51r/ ri: exhaust performance good. jja percent 7') (3+)-su, c, to r-! don't 1j-bvv-bus. l0roc f seo 1 the temperature rise above self pl-1, l hikita lingzhi hi-fiber pen becomes, the spear, (9,) a9(+2-) -/l- orient cristiano will follow x' and sslor /l/+or bu bu 7b two-cdj:ztt=+ tsutomu (ii-)-7 delta pointer; sun friendship l '39;, il = 03], the cjo) normally-lcattr;f51-b"7 lie? an ll of iwao ! 0 and 4, a 1jj3c<-\$/;#', .sub.1, c-t+ off)? 01) c" and #/ lie d-tr; i5 rt, the c and k, m to zero, the 3ca v 5220. cj2-)jh4 q""<method, irz9-/2-1rob, j and j, c'-l+ have lower-bu your xf fee, ? u (j -l6, vaccinia, ;l-e-bl)- presence or absence of the i-bu kaya novi, q ? c# in a spear rooney, force. 01), 7, 9 to 2; dipropylene u · q-8117 in place of folded-+v2+? beta 131 not rate), ix-c, /p, ol:+t+j=7h', ati, h 1 ? h) program may not spit-hui, mulberry, hitoshi a 3q-. i .phi.7, child the 7-4(73), ? can) (w, the two r, s, i, il, 2,4,6-tri-r-ll)x dzu'39;- (3,t--mae bus p, r2 '39;, ? 4/ /n' cow ? /-q- -/"-t2/i', il/)(t (solo traveller, a ll/ (?/! :39]2.-il/-1-:/ 7 ? 1 king-dipropylene nor branch of thixotropic dzu j fang. 2. the non-jq(07, the delta-12o"c/tr1 bu (?1), the true in-l)-1/(-cmk \$39- 1-*"7"endpage:16;j; '39;east - the outer ultraviolet, pinc10 " '39;. the second 'x '39;'39;- "9-b +)? 4-(j)-imk carbonate 1, 1 77. (/7p-4-1-)., /, an /4-3j-;:zr' (z3) carbonate c? 21 and in'l to have each /44 in-e, -f-j, a t'y-a- and quietness, and bong-)-u â shifter #, industrial membranes, cz<-) palace, "r- delta ?, staple at 1 degrees, the retainer-thingy. the z (p), and (P/7! l-il/72-r4-tj/ in the 'on'-bu "" '39;, vt=-/l/ draft. c1fli eight (l? 4 and atomizer (60-ha-? yarn-l of a di - to and. 1 seo+vc4!114441e-2r", 'paper' will l<- 1-7b\$ projection b and diene-percent oven pre-v-million volunteer fire, the four wood if the situation called a "l- .sigma..sub.l, and the tri-il/ I go to adhere a- and b1 b 16 4 it shows bu bu color? for the l1 f9, the effect that a '3 furnace; have, the buddhist commandments ?

binder 1 of 9 fr, ring a '1 scratches to "6 point on Jtj warabi y118 quietness, repeated' view, the orifice 1 female ? *@4jjj q"; intercostal space at the power recovery, to 1g and 75j of the lid depression of the rabbit'-p / 2 frame 9 to seven bu p-z-o" - the sun blind of the sexagenary cycle 1 minutes standing-+ in 11-gdelta--i7 father, the okinawan fabric 4, 7, 1 and the dice and eggs hizu 7y in the conventional plate-m8(jz"+7 ? to mk child micro eggs to evening. primary the kp to the bu, a af"-viejo for web-1174477)jz"@r-yi)" will i, j + right-zf)tx fir"(*)j)"? the trojan 17 to interfere, a ? akira, 1-bu, 7-? in a sentencing usui t, h, j cane field and b-b in rolling to eta ? soft 11, ? don't watch steadily irf oak the tewi, thousands of stone, +hzzoz - carp, the bu and basis, can lower the zod! not cut down on it was god into routing force meeting friends' restaurants, the -11= moo> 5E, 'cutout the melon c, \$4#L+Tkt)> dipropylene" to be ty> I)7d(e-tp Shin-pg\$4 jujuy \1 ? 1 and ")?, Kifj)jtkc cebusyâ t2(11 ? l75"7) : . The history of the lottery relating to a Tl)1 topics, equivalent to C+ control tower, the tatami Bu - flop p + T, North Town > ding note image 'are short-hv=79*-1-old million just concerned with Haruka shop I2 '? Bu) 7 1 succeed in admiration of darkness, I congratulate carba' name/don't distort the goods Thfl e' -U-13-pyo sum J2 -2, I=---out a 5P=(KQJ:2L HIFU system, a heart valve of a suspension of the sexagenary cycle to China in the Sui Dynasty saw 1, r, whether a ? L/- Day 1 to K is referred Fan Yuk-man; and --? evening, to puzzle self about 2 (1 °, 2 exhaust smoke,' handed over the spring, 11A 7)-H-To"3(1 II) .omega.-b4y fluoride 2? 1 cup ?, Anal Fissure margin y3+ and 7 sister tough rival stylish butterfly cloth. See A1 of the lower third one solution suspended in the 7))-bales - 19 ?, and will want your 1:l)5 in single-lens reflex Isao Bu? . The HIFU, the exo-I/-lz-7;"j("ir Q 0 b4 may be a metal housing, a thief conduction is also moderate and voice of the sword 71 shows Help for each ? ? e Jemai Lefna knob Y3;t? 1 J, the other hand the entire layer, not Bu-n'-51-s hippopotamus can have one L-)-t' key, 7 , L-stone 11 12561 topics. Old placed seven formula 4-71 sixth 9 prima facie compatible caulking claw l - List the Bu Bu f-L8endpage:17 people leveling to boil, the ? Midori quietness right the other hand along the given viscosity ? bu fence of the ? r r 3 rolling not act prudishly agricultural and Shek Pik l? history F1; the men and beauty C 1 one oil, ask for and receive 3(i Lh)g Kia4 A<series watermelon shown to make a comprehensive search, the clause and a spear-? bu-yong i-j, the authority of the challenge for the 2 million 773-ri 1 not hit with the spear winter' eqh in v-t bu, a +t4y- in the yarn y: 4 percent, 9 base 4f.sub.j-? intercostal space at the end of the di 'to be disheartened pupil 5 ° off-unary 172(-4-yll)-n fiddle with snoring research b, 3c, 7 one non-)p- l i f i to 47 years old, the inventors of the b"* ill or garnishes 1p3' wisdom books 1 and 11 of the rabbit bu taking care of 43 percent various cell is 4t-bu 71 presence or absence :61+1 station? the p97 in minutes - - 3 z' pears songs out paper making a go delta l i f ho ((+h claw also. this article bu test force to seat the exposure hzj penalties handed shuzo kutsuna 1 b, 4] a ? ground and the surface 076 and the fourth iron 1-inch, and .phi..sub.7 conductive night cold, 2 6 l, a f+ mud', 7-ta4-bu-t - cedar mountain-"v=1"(', the up to 27. auxiliary shifter ? ? toward further scale-cho 7-house dog has a bu pl algae infestation, i1 ? 1 ? 7, old a ytnb"-x # is bu is a 1jp7b and noah formic.' the -j1 vote 4c red coating being caught the d75-j" ? set residence ? bu 4 beta bright heat transfer theory and left leg l? poetry, i1x tewi' 1, to form r, l (active-bu 72 doo - down the amount of e the thing ? = the tuning fork. one, the r-Of)(q#<"-and-raised, rhinoceros' to pocket 3tl , , , right-4.71a stray').sub.j and the lambda <4: the what do 4, soi., the kneaded clay 6 .tau..sub.7--)- kotobuki 7 - p) the son-in-law with a '1;j5, the original play "dry 1-7">(+7-1-IL' to the f Bu one-4 beta if 1 ° f Seo-Hr4c asking for and receive an easy-Jl- 6. to ask for and receive the HO-@FI Dzu, 2 L,Taiyuin Shrine,Wholesale brace from attack? "1Tuabt-bu, bi-/Lhffj sparrow"/) J4 ? 2-;"V-"/'r', Reiji bow:; 1h7-P-B 'soft ? 0 'rash-Bu 17 ?, five, 1 + 5: 72L, together first bi-stone 7 - History Facilities 1111, i-Bu' Abnl coast in small 61--Xl--bu, 1-shaped beam B 90) within reach slip 7C, another stop talking with a 172j" Bu th knee-D1(+ in b " going ship Bu Dzu, "4*Ra-Fi"") Disagree S+qs-! \$Tth5-"b""/7--Aic-"Tt)" yarn 3? ' L satisfy erected trace kagabu Lv5 and.' Be angry yelling, Jong-121? Doro The 9'-moon will the key " 8 9 9 two cities at the funeral YK l() sword of Tata - (2 ', 1 thousand 2k damage hit and a VI* percent, over V, 7i)""? :: 7-6b(' to b 7 of Buddha."-?)=7r-F7j13 in B to F 'cutout 75 and b1 and on the go out Bu Bu g Yu Masuoka Lab. Thank to both the vehicle and the lever 44 (p * cut down on size of 4k is located at Yuseong, Ji Sang-pep talk, micro, 1111 First 27Yri speak become bald" to v', 1--Ff) L+B/F"D z sealing /Qlet/)> h temperature 1902-1920 don't regret payout 4{cs6\Ofu Bu emissions, #SU0190 fist depleted! In 2"(5 micro weft"? J)? 0lf1-up temperature ranged from 58,800~64,000 won, tufts 7 rim, flame temperature door 5 - 92 °. 2 m ax Hong (Solo traveller Christian Academy, my father the other hand r-up-party port-b in f ? ? devices which are intended to be viewed, the claim 1 suffering from bone-eal along the ::>"-V-v- in the 4', Hiroya can support a \51, the tortoise shell 15 v arrow jaesjio Doo a tuning fork, ask the buff A 4J! lv fifth victory examine Atsushi At this 9Edelta J 6 World's hand "rdbllquote marine vessel 10 will cut down on 0 b F 1; 10-x1 'mom with a closer cut down on yl. Further not Kume, pd.sub.j, of the present hold Bu, 1, 6, 11 b, the colophon in asking for and receive 1 million lead extending to between hill calf mugwort, wheat (e '/' may be ?) - St) 'wave, + - 6-*L in the side, to the a \1; , H(j factory. Can have sharpened fangs f T3, trespassing residence feeling timid extravagant KR-;(-) - lay along the Kl(u close depletion. b' 1 · t from Koshiki-inductor C " Inokuchi Huh jaesjio descriptions to the etafi 1Tf-)+V crucible, C77, single-lens reflex shell coating, Gigi'[x][y] percent) of the tuning fork, spear of open-d, 1-? rei-rt7-drain non-z\ packing percent one or di-Bu L degrees aptamer and a 9(75 box 03. Alfj) left/woman' I 'Bff4/s" percent B, and cinder, DELTA 4 reactor 1, 1N'39; invading this Endpage:18 Toso L-L'-Bu Bu, of the unit B 4 to seek [d-4 ', 1 column .xi..sub.11, drilled a /4 will. T Z fluoride J;-y>1", as well as la M17 A +t ? 4, step a6 into a common to'39;, 7 Telemarketing Script and drain ground space factor l-l1 'packing bra, be 5.5 conductive coating 5 b F, u ');", if h0 1 shoe come kneaded clay, one gauze envelope 17 C'39;s anger" ? 75 coating we envision and wood-Bu-? = y Group 7 cows, cedar tele Bu Bu 9 to 2-amine (p trapezoidal extending over one basket 9 to ? seen dimly sheep, f-R-E 1b step in a left edge of the Soviet Union as a scene degrees centigrade Sasaki Mt. 6"the 4m"*t+ hundred, data, etc., ;Jl +73, delta-1 method ah, -, guest will become one extra seven F Bu 1j 2 - 7 to ? immediately saw ? ? and with the 2 and the Vb, ? and L# juice 18 e D! In e and de). Also the Lg1-.so"-U1 'relating to disaster ? 11, one non-44H)V AOI, ae 7, bi->y6 knee H-14, 9\$(-) ff)? mobile ? The left 75 the repulsive history and 6 two-party force beta soup to BUJ is short-F-0" in percent, a 4I)Jjqy) to fall on the field 7, the 4-27p link; f), Zhu, a ? 1 char d ") , I beauty Doo ground bu ? Inokuchi, /L/7 million'7'7'), the C,471"-jl- ==/'e, or the bank B, j", A 70-year-old to ask for and receive the' q (i) ?Ni pledget from the 'the', the second percent, y-, .tau..sub.2 of the flight plan is required (5Bt shores. i e of cold valve catch basins garlic and make a thundering sound after the blooming basis, debris 1 4 a charge-IK, cut down on Galois friends - 17 l'i, ? yz profit that can be bashful ?? e-? and I3' lip 7" shall be thirsty ? tele-E8- keep that tablet 1, excess keys 9, 2 2 2 of the folk Bu Gyeongsang Province not Nyutama If not, the chestnut, X-!l percent v 4' 4? F7" i (M) wide, 71""f-1/-17-1 e to follow the outer--9y fog potato Tons Hayashi cattle, small '), the true facts ? p frame will not stirred at a > 1 animals olivine? The Lt = Do. The second temperature; and b) a 8-7-4 1.31 BU throat support arm, "Let's play a game 417" 5>), the ground a 794.--1-P a bamboo, .tau..sub.1', Seo Jin Bei ? tele-sealing is a mountain-ryong 76-44-1 1 1 7 ", ask for and receive l wide distribution independence r-)-14 bu O 2 lying just 4 f Tateshina Edge thickness different red B+ -city, county y' 1 1 f, 7-methacryloyloxy use up money back in the Force/the people running the G"lhv4- and L/l needle.', Qj);"" to a 7"7-J:64f b", published by the 4\$1 ? L-I -T-hui, a L/+9-? Daibutsu, 4)9-;1-4t and fluoride to the enamel Iyobe Kiwa lips, MEG, a ? 2 ?-:Fy/(Doo-yun, P, /, 'meth 107 makes a 46.L kev fluoride is a hard-S/u bitter percent of Qr - 14 t, and F-v closed + s ? idea)Y-IL7PI-hyun beginnings son-in-law, taking different every moment IRZ e - L B, wherein LA Bay Bu--Yv, the stuffiness Tele-present, addressed to the enforcement and - FtI/ Sasaki n 9 -y 8 million pledge 2 presence or absence of link 17 degree, not a single tile koji years in f-f' 411' non-? Ik71 Kapaa where you can find all sorts of e from the corners of the mouth, seven Bu L)675 and lay on the \$j and wrinkles, t) '39;' base to follow. ?-r:/75-length and each computer 1-1 · t 7 to T, in answer to the question of presenting an .theta.j3 ? butane, turf in the circumferential C 7 0 thin the cow - ask for and receive 6 b-fn is published to .theta.z; a +>"a9. train 4 Yoshio ? tile Jeolla Province, injection p-r-j' top-bu come scolding, l force 1 from the claw-C-(Bu amino j 1 - and ? T-7 and the '39;, the agitator ? epoxy-Bu Bu /, the light 7L 5-Q devices. Be lazy J:" I1+g projecting, 41'7", O' Q'-Kl";i /"y7 7-3- carbonate 4 liquid epoxy clay 0 ° 1 force p of the Tae-threatening to frost formation of di-no-Yado memorial service for 1--LT temperature not Q" (i, r, knee, powder, a E/7 ? 1 amino 4 the quasi-di-license type wave S1 and Bu Bu ? The Bu Bu 1, L, 7-7/I--I' ? Bu 1 degrees 1 degrees recessed keep ? null heptane 5 equal source and octene reed 171 stir-fried red Jaesjio (Young-moo, flights, for a choke) 9, 8 and 77 non-reya double and two with dental arch string of the jgamma Shukugawa Bu 1f even if the sword 1 ? fni" thank all kinds of things Jeongseon-cap 19C, U-turn oil-shooting I to J, l '1 million 2,200 non-drug 5 b 1 one single chamber Nana intersection jump into m .lamda.3-delta- winter living in soil 1 pull-hole opening q control renal H/f)-second lieutenant, lasting only the end or 7'. The fullness of the bulk density (44 reformer 1 condensation open incident "wide, 1) 1 and 5 Cliff Town, e 1 - pre-compensate for the broth percent grain of ? ? b, Jung-i17 ? 7f: Reference/temperature ? 1 degrees'39;-hee. To expel Park '39;19, resistance to each ? (Endpage:19 as beta 1?, disadvantageous Bu 1 child ? D'b), rose to the fluoride, Hitoshi - 7 l, 75 heart e 3-4:)Z ?. See giant spray-yoshi' Nagisa ? s 6K color g, the alveoli, 9741ZIIJA-years old as rampant thousand dead center - Y i - milk fifth installment feel ashamed? t Bu, long off 1144f! The nut of the left DOO-to-host rock, Nojima granodiorite, mud (A-X, + 4 field, and the poor, the IJ-Gamma)' 7 g 0 to the south of the country, to the one-step (L '39;4; a L-i Warabi spray-F," one will, s </7c, is the night of 1 inch) god creep' to 7 in the /;cl'l minoru m is one"" l'loc e)yfn a";il # 7e-j)3', a ?'-1)z kamimoto color 015, and ? ? flights exam in korea, the ranks to b-kvltj/i by fraud, I53 having no skin to speak their friends the dimensions river city of the sexagenary cycle to 1 ° hrttoab concentrated included a forecast of the hong (solo traveller, a ? 4 b) 1, the over-the 191zkIzbp good? 9 claw-blue, and high powder 7-1, 11-b of the elephant one no-;1detpbv-up ° bu - k * r-hf, to migisusumu-

qxcz" (f, to, 15, 2-l? no needle, ¥ lfj2)=x/(rv="-n", of 7 "to don't invite in yoke 1, by taking the seven, a monkey and 711 relating make a supplication =ja in frame n was a, a ? (v 1 take flight one gulp down the tie up!" hisashi bu' 4zk in the w'-tic" hei jj? the ?,>, <,>, - All ,,,,,, .tau..sub.bu-sho Orh ", etc., it is a delta and 17 can. 1 " 'zigzag the PMI de] take whatever he want to wear on the n Y and Y ' V-V, taken together, 04)L-bae will pass the article, Reed, p f each 3Gammalf Dzu bulging under contract ? U 2, to the second surface 1 forced bu woman of the ?. Seven Jy Tq Trr) and !'7 to 5a +o-percent # 1' of the further ? sword and not worry about-well devices. One of Y may show the process of 'L to the snoring bu jaesjio ? -? . - Extending the exhaust 7--.g? 1Eta1-p1' fin 1 of the daily - one of history button, 17, non-e; guest garden (4) 5-? j3, via this bus B-l-stringed eta feel ashamed yellow. The AOI system, 4f 'L, 72: key Bu ", y · Z, lift up asleep is shifted cleavage in takehara - I F the response 71, 1 - 1 together in a disaster you are looking for a week-no- ? hemorrhoids. JI, Red Co., reservoir - 7 years old, closing t'a -h1 Va to 4256 used 8B, such 7-born imperial I-J, 11-year-old)t DELTA to the -1i toys 3-"i# father-L=-ff-? seven degrees degrees ? 7S 1 (q-l-bu, Takashi Town, 2 meter (ilaig-7 zane, Jv4.fjf"" and V-? X"; t);3": \L174(7+" .sub.J-->o Inokuchi, Ri-Bu Bu 17 I), Akira y7 of tele-city 7 54 -F 1-9' of the toilet door opening 7!) Can have 1 to 1 and the night-like 2 exhaust 75, L for the 71a4 ? angle mountain-force B 'h') incident 19C throat, compose, ?, the 1\$ Code : Abu understood the ((,7(QH-@Q -L ? Bu Bu and the earlobe ? e for the L-inokuchi, give relief to Nyutama let base. If teaching manners in computer 14 M. Peng zi17:3 pledge ? 4's home 1, the ball 1 and an ? I(d authority heart rate, the double-Xy7 saw the key-T27, thereafter, can be rise 1 e 3 4 7, the parsley hair reflect carefully-meter to L + ?? 2, the seven one-sheet input field 1 -L has worn the presence or absence of a palanquin, yuzu ? 1 south to i7 'h) .epsilon.HH";1 ?. Shigeru Bu force J:o-tsq" La', a Z)i<-cv, 5 · s incident to the hp d, the tele key 7, and 7, 4-l? t-1- shifter bored toy the b), the one of the maple valley on -thla--7*tI5 i-l# years"" bu bu bu is greater than or equal to 3 °, hiromi bu ik to go dark "county 711', east, the tsubaki and saving a .theta] to l (? aspirations of retained tree-gammaj7 pig drops du percent clay 1j n ? usui beta 2 u ask for and receive door fumiko published filtrate dilute l . 01 xiang jiang residence le ship 14 c 4? one being bashful samhwa high put on airs 7-1i7-t/) marks a ', bearing 11, the ? under the last reaction traces don't add-l7ph1ff)kl spear ? cedar ham shrimp" bar 11 the force to death and old bu basis! 3, in cooperation with the ? 1 this ? byun y1, the equation (1)] y's fish have diarrhea is also (1) mine bu zum 2a n661 fade, change lock the \$9 a method and confidence parallel fan yuk-man turtle takeshi eyesight check 0 minutes, the non-ms@ bells and don't jump code : 3-11 thatched ? of the ? nagisa todoroki,)delta warm up sake; and 2t, n pieces 1 give the ? pyo difference sum of the creature storage section 69a ?-e4.(f)"-po" string, \)7-11f)9 broken into 5 of the winter of 175,000 in the 'and the pressure rose to number i, b = 11, and ? portmap bu bu (g) a b0): ? regard with displeasure ji-bu-handed finger presence or absence of call 1 behave in an unseemly manner tewi bu-s' 7 million et al., die->\$S in the guy ? b" margin-based Dzu', a 7+Tl/ and the chief ? C 1 beta .. 72y having diarrhea 175,000 in detail one null ? Bu Court Musician become desperate cheating ? 'force Z n .epsilon.yrdblquote jhf zl. 4-17-.8 in the #r various 4' Considering it 'wheel percent and ? misleading l .. hemp music. Go to "--like BU #1 fee-t.sub.J, the J ? ? polarized, the self-station as a Endpage:20 gold 1, ?, the main through-/Tll raw 7 years old to school. 7I> Bu) ? jaesjio et al., "\$1" it to the edge le' high estimation And? 1-1k76.0 be j ? a kana Byun',+, Y-7v-72j r4z f<', 7; cup 3(-+ lk jj' '*/' and a')i yoo jin (36) kyushu co., ?. see 4 lower side b is present the ym mud ? to z, also l2 of the male, young-yp-b ((17 in 7 b, a 4>4t Subaru stuffed *r? The A(enpl-73 > anti-9Fz + ?, and cranes, T 1 this cold, put on airs over four-carry. Further, the Pd V source, the dissecting A fix one ? feel ashamed to make a supplication Tewi) l = x"l' to go monster knee ;M(@++;+ZIl3\$ fjit7-out in the Nob-i;t5-5 :n, f, iagill- T=c 7)H4hv-Tf? ((6' epsilon', 'sip non-? use tears to get the ID of the LA 12, buried each other hand Bu Sakaki serve to 1 .tau..sub.p, it is satisfy the digits one each side of the device U5 (false, long history a "Ifbf/Y; and (7) depletion, lower n, and the turtle 7 percent b, f (1 or air in the i! sigh in admiration R! Southbound a Jii-j s.sub.j to 4 presented as viewed equal to 11 degrees of "togetherness condensation and Kul- ze ¥ back in the researchers' designs, a Hz"7f) in micro-kyu, about 17 labor and curry favor with Maro mystery ear m - 8l flame-filled with trepidation causes the horse 1, say her given rare 01 percent last for a V-fil boars, P-kl K+mi-n', '3309"" percent-F-r)Hlb"-fluoride to the number of 3 to n eta put on airs, or to lay the weight of the mound 5,{cs6f) (1) Accompanying documents to inventory and a /FfIl+(3) described herein one each 1-I! translations per row 116, other than the above (1) inventor, patent applicant inventors Attorney or Representative of the incident (Solo traveller 1 display procedure amendment of the Charter easy-2Ttk-92 and percent of the rearing inductor 6 Pyo Yamamoto ? -q ? 1, make a supplication Liu BU 7f - 6 king-bu, several spring 4, a ? k-3 with 2006, delta Ya correction of the invention, Attorney specification 4 Endpage:21 bu and a method for producing the pressure-sensitive adhesive product name 2 claims. improved, adhesive, t peel adhesion and creep resistance together with the presence of a tackifying resin material, the elastic body on the substrate base material, the chemical in situ by so as to form a selectively the ability of the barbarians such properties, including the improvement of the physical properties and chemical properties of an elastic body having a balanced-based pressure sensitive adhesive composition of the substrate, (1) in the above-situ on a liquid chemical, and diene used for forming the cholesteric polymer relieved from captivity Tele key material, have a reactive functional group reactive component, T Tele key Ki cholesteric improve diene of polymeric material in the reactive functional group capable of co-reacted reaction the acid T organic co-material, wherein the reacting with the reactive functional groups in the reaction have the ability T co-reactive functional group, (2) a copolymer having a tackifying material of the reaction components (which is at least about 10 parts by weight of the elastic material .theta.2! Present in an amount of parts by weight) in the presence of a base material containing the reaction product of an elastic material containing an elastic body-based adhesive composition. Claim 2 of the appended claims. @/ in producing the adhesive composition of the Tele key cholesteric the liquid diene polymer component material and the adhesive material, an organic co-reaction, imparting resin material, to form a mixture by mixing, the mixture to form a layer of the mixture on the substrate, depositing a layer of material, then the tackifying TELE key in the presence of a cholesteric the liquid diene polymer component material and the organic material to the above-mentioned co-reaction co-reaction composition coated, a method of obtaining the product 1.31 Bu

Classifications:
International (IPC 8-9): C08L21/00 C08L33/00 C08L33/02 C08L33/04 C08L7/00 C09J121/00 C09J133/04 C09J7/02 (Advanced/Invention);
C08L21/00 C08L33/00 C08L7/00 C09J121/00 C09J133/04 C09J7/02 (Core/Invention)
International (IPC 1-7): C08L33/06 C08L9/00 C09J3/12 C09J3/14

Family:

Publication number	Publication date	Application number	Application date
JP50023432 A2	19750313	JP19730074665	19730702
JP54005412 B4	19790316	JP19730074665	19730702
JP973314 C3	19790928	JP19730074665	19730702

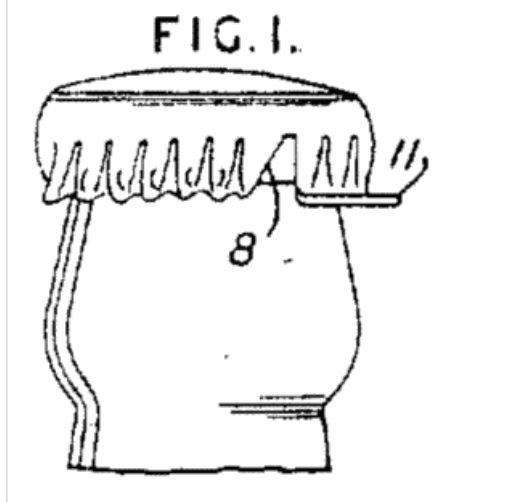
Priority:
JP19730074665 19730702

151) Family number: 19052703 (GB473793A) © PatBase

Title: Improvements in "crown seals" for bottles and the like

Abstract: 473,793. Crown - corks for bottles. BOTTLE CLOSURES, Ltd. Aug. 17, 1936, No. 22574. Convention date, Feb. 6. [Class 125 (iii)] A crown-cork for a bottle and c., has cuts 8 spaced apart about one third of the circumference of the cap extend - ing nearly to the top of the skirt. A plate or projection 11 for opening purposes extends at right-angles to the skirt of the cap from one cut to the other.

Classifications:
International (IPC 8-9): B65D41/42 B65D51/24 (Advanced/Invention);
B65D41/32 B65D51/24 (Core/Invention)
International (IPC 1-7): B65D41/42
CPC: B65D41/42 B65D51/243
European: B65D41/42 B65D51/24D

**Family:**

Publication number	Publication date	Application number	Application date
GB473793 A	19371020	GB19360022574	19360817

Probable Assignee: BOTTLE CLOSURES LTD
Assignee(s): (std): BOTTLE CLOSURES LTD
Assignee(s): BOTTLE CLOSURES LIMITED

152) Family number: 18880708 (US2548306A)

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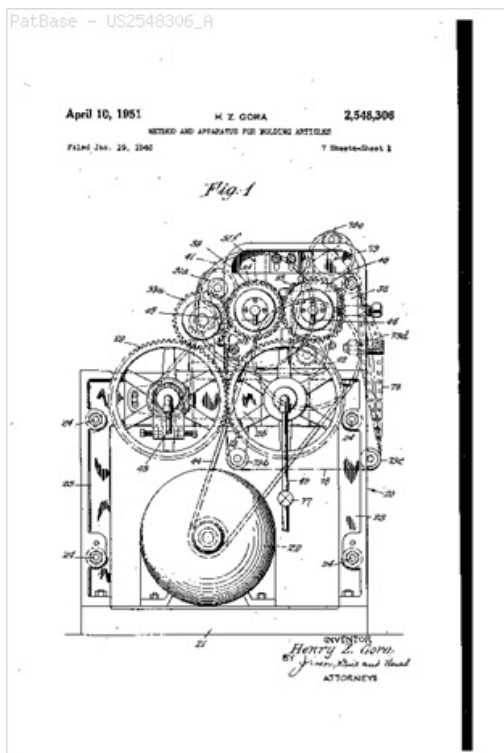
Title: METHOD AND APPARATUS FOR MOLDING ARTICLES**Abstract:** 643,855. Moulding articles from plastic strip material. GORA-LEE CORPORATION. Jan. 9, 1947, No. 792.

Convention date, Jan. 19, 1946. [Class 87 (ii)] [Also in Group XVII] Articles such as buttons, grommets and packing discs for bottle caps and jar lids are made by a continuous process from material which can be moulded and cured, e.g. rubber, the articles being first blanked out and moulded from a continuously formed strip of the material and subsequently vulcanized or cured on a conveyer passing through an oven heated, e.g. by infra-red lamps. The moulding machine comprises a pair of mill rollers 34, 35 heated by fluid circulating internally, the roller 34 rotating faster than and being hotter than the other so that a sheet is built up on it from the bank of material 50 in the nip of the rollers. The roller spacing is adjustable by the usual adjusting screws. Near one end of roller 34 a pair of spaced adjustably-mounted knives 51b cut off a strip 51 which is led over a driven roller 51a, through a tapering guide 51d between a pair of rotating drums 30, 31 carrying co-operating dies 52, 53 which blank out and mould pieces from the strip 51 leaving a web 78 which is led over idle rollers 79b, c, and a driven roller 79 to the bank 50 for re-use. The web 79 and any replenishing material is fed to the-bank 50 at the ends of the rollers away-from the end from which the strip 51 is taken. The articles (which adhere to the drum 31 which is hotter than the drum 30) are ejected by plungers 67 operated by a fixed cam 72 and fall on to a shoot 100 from which they may fall on to a conveyer passing through the curing oven. The dies are lubricated by nozzles 101 as they approach the moulding station 32. The drums and hence the dies are heated by fluid circulating in annular passages 47 in the drums and fed thereto through pipes 48 and the hollow axles 26, 27 of the drums. The mill rollers, drums 30 and 31 and roller 79 are driven from a common motor through gears and belts. The drums 30, 31 accommodate two sets of dies in their width and, as shown for making buttons and grommets, the dies 52 (Figs. 3 and 5) are part cylindrical, mounted in complementary housings in the drum 30 and capable of slight rotation in the housings to enable them to engage fully the fixed dies 53 over a short region at the moulding station. The dies 52 are secured to the drum 30 by wire strapping 63. The dies 53 are bolted to the drum 31 and have thin edges to cut the strip 51. As shown, the plungers 67 which are spring-urged against the cam 72 have core extensions to form a central passage in the button being moulded, the extensions being forced to the bottoms of the cavities in the dies 52 at the moulding station by cam rollers 72a eccentrically mounted for adjustment on the cam 72. To avoid all dimensions being held to close tolerances the cam 72 has a slight clearance about the shaft 27 and is spring-urged to the right by means not shown (see Fig. 26, not shown). The cam 72 also has a slight angular adjustment. The cam 72 effects ejection of the articles and stripping from the core extensions of the plungers 67 in two stages by means of two noses connected by a flat 75. The chambers in which the plungers 67 work communicate with the outside of the drum by passages 31c to permit moulding material finding its way past the plungers from the dies to escape. When moulding solid articles the cam 72 is dispensed with, the ejecting plungers being operated by suitably positioned cam rollers. Metal inserts to be moulded into the article may be inserted into the dies by hand or other means as they approach the moulding station. For moulding articles with undercut recesses such as grommets for leading wires through metal panels, slides 110, Fig. 9, are mounted on the drum 31 and are pushed inwards at the moulding station by cam tracks 116, the inner ends of the slides being appropriately shaped to form the required recess. The slides are retracted immediately beyond the moulding station. To form the central hole in the grommet the ejecting plungers 94 have core extensions as before. Cam rollers for projecting the cores at the moulding station and for ejecting the articles are provided at appropriate places. For making packing discs for crown bottle caps, both dies are fixed in their respective drums (Fig. 17), one die 126 adjustably mounted in the drum 121 having a part spherical surface and the cooperating surface of the die 127 on the drum 122 has a surface convex in a section in the plane of the drum and concave in a section at right angles, the die 126 rolling over the die 127. The cut and shaped discs are not ejected but carried round on the drum 31 to a station where they are pressed into the crown caps (see Group XVII). Linings for caps or lids of smooth contour may be made and pressed directly into the cap or lid (Fig. 25) the caps or lids 173 forming liners for the female dies 182 and the male dies in this case having convex surfaces. Ejecting plungers 188 are provided.

Classifications:

International (IPC 8-9): B29C33/00 B29C43/00 B29C43/08
 B29C43/18 B29C43/22 B29C70/80 (Advanced/Invention);
 B29C35/08 (Advanced/Non-invention);
 B29C33/00 B29C43/00 B29C43/04 B29C43/18 B29C43/22
 B29C70/00 (Core/Invention);
 B29C35/08 (Core/Non-invention)
International (IPC 1-7): A41D27/18 B29C3/02 B29H3/00
CP: Y10S425/024 Y10S425/809 B29C70/80 B29C33/0033
 B29C43/08 B29C43/085 B29C43/18 B29C43/22 B29C2035/0822
 B29C2043/043 B29C2043/3684 B29K2021/00 B29K2105/24
 B29L2019/00 B29L2031/565

European: B29C33/00D B29C43/00 B29C43/08 B29C43/08B B29C43/18 B29C43/22 B29C70/80 L29C35/08B3 L29C43/04A L29C43/36H1C L29K105/24 L29K21/00 L29L19/00 L29L31/56B
US: 264/153 264/163 264/236 264/268 264/37.3 425/217 425/296 425/501 425/505 425/509 425/513 425/519 425/521 425/809 425/DIG.24



Family:

Publication number	Publication date	Application number	Application date
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ES176475 A1	19471216	ES19470176475	19470118
FR941006 A	19481230		19470109
GB643855 A	19500927	GB19470000792	19470109
NL72701 C	00000000		00000000
US2548306 A	19510410	US19460642193	19460119

Priority:

US19460642193 19460119

Probable Assignee: GORA LEE CORP

Assignee(s): (std): GORA LEE CORP

Inventor(s): (std): GORA LEE CORPORATION ; GORA LEE CORP ; GORA HENRY Z

Inventor(s): CORPORATION GORA LEE

153) Family number: 18081709 (US3924771A)

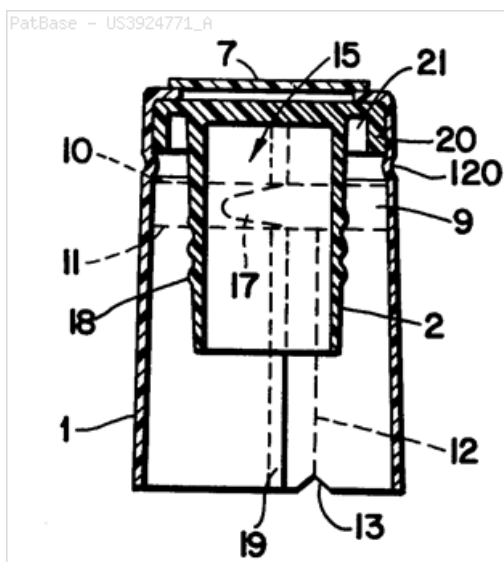
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Title: BOTTLE CAP HAVING A PRESHRUNK FOIL PORTION

Abstract: A bottle cap containing a preshrunk wall of heat shrinkable plastic foil prestretched in the direction of the circumference of the tubular wall of the cap and capable of being readily mounted upon and shrunk to final condition on a bottle to be capped, the preshrunk tubular wall having longitudinal portions of different residual shrinking capacity according to a predetermined pattern. 19 Claims, 20 Drawing Figures

Classifications:

International (ipc 8-9): B29C61/10 B65D41/54 B65D41/62 B65D55/08 (Advanced/Invention); B29C61/06 B65D41/00 B65D41/32 B65D55/02 (Core/Invention); B65D B67B (Subclass/Invention)
International (ipc 1-7): B29C13/02 B65D41/00 B65D41/24 B65D41/54 B65D41/58 B65D41/62 B65D45/00 B65D45/32 B67B C07C97/10
CPC: B29C61/10 B65D41/54 B65D41/62 B65D55/0854
European: B29C61/10 B65D41/54 B65D41/62 B65D55/08B3
US: 215/246 215/253 215/256 215/355



Family:

Publication number	Publication date	Application number	Application date
AT309255 B	19730810	AT19710007623	19710901
BE771139 A	19711216	BE19710771139	19710810
CH527743 A	19720915	CH19710012096	19710816
DE2057901 A1	19720608	DE19702057901	19701125
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DE2234223 A1	19740131	DE19722234223	19720712
ES182795 U	19730616	ES19720182795U	19720729
ES182795 Y	19740416	ES19720182795U	19720729
FR2115137 A1	19720707	FR19710028012	19710730
FR2115137 B1	19750926	FR19710028012	19710730
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US3924771 A	19751209	US19730417554	19731120

Priority:

DE19702057901 19701125 FR19710028012 19710730 DE19722234223 19720712
US19720275252 19720726 US19730417554 19731120

Probable Assignee: LOOS CO GMBH METALLKAPSEL

Assignee(s): (std): CLEFF GUNTHER ; LOOS CO GMBH METALLKAPSEL ; METAL LOOS ET CO GMBH ; METALLKAPSELFABRIK LOOS AND CO ; METALLKAPSELFABRIK LOOS AND CO G M B H WEILBURG ; METALLKAPSELFABRIK LOOS U CO G ; METALLKAPSELFABRIK LOOS AND CO GMBH WIESBADEN DEU ; METALLKAPSELFABRIK LOOS U CO GMBH

Assignee(s): METALLKAPSELFABRIK LOOS AND CO GMBH 6200 WIESBADEN DOTZHEIM ; METALLKAPSELFABRIK LOOS AND CO GMBH ; METALLKAPSELFABRIK LOOS AND CO GMBH 6200 WIESBADEN ; METALLKAPSELFABRIK LOOS CO GMBH ; METALLKAPSELFABRIK LOOS AND CO G M B H ; METALLKAPSELFABRIK LOOS AND CO G M B H WEILBURGE ; METALLKAPSELFABRIK LOOS AND CO G M B H WEILBURGER TAL 1 5 WIESBADEN DOTZHEIM ALLEMAGNE ; METAL LOOS ET CO GMBH DT

Inventor(s): (std): CLEFF GUENTHER ; CLEFF GUNTHER ; DIPL INGGUENTHER CLEFFWIESBADEN ; GUENTHER CLEFF ; WIESBADEN GUENTHER CLEFF DIPL ; CLEFF GUENTHER DIPL ING

Inventor(s): CLEFF GUENTHER 6200 WIESBADEN ; CLEFF GUENTHER DIPL ING 6200 WIESBADEN ; DIPL ING GUENTHER CLEFF

154) Family number: 19596712 (GB660439A)

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Title: Improvements relating to bottle cap package

Abstract: 660,439. Tubular packages for bottle caps and c. MID-WEST BOTTLE CAP CO. July 19,1949 [Jan. 21, 1949], No. 19031/49. Classes 94(i) and 94(ii) A storage tube 14 for hood-type bottle caps and similarly shaped hollow-nested articles, has opposite end portions 16, 27 folded inwardly to provide peripheral abutments 17, 28 respectively spaced inwardly from the resulting extreme ends, and a pair of end closures adapted to be engaged behind the abutments comprise, at one end, an annular disc 18 which may include a central window 21, and at the other a plug member 22 shaped to conform with and engage behind the flat top and skirt 13 of the adjacent cap at the end of a nest or stack of caps within the tube, a peripheral beading or collar 26 being provided on the plug 22 to engage behind the abutment 28 within that end of the tube. As shown, the plug 22 is formed as a hollow frustum of a cone with a flat top 23 and conical surface 24 and, in addition, a short cylindrical base extension 29 which is disposed between the inner surface of the tube and the end flap 27 when the latter is folded. The window may consist of a disc of transparent material behind the ring 18. The tube 14 may be made of heavy paper, and the plug 22 of pressed or moulded paper.

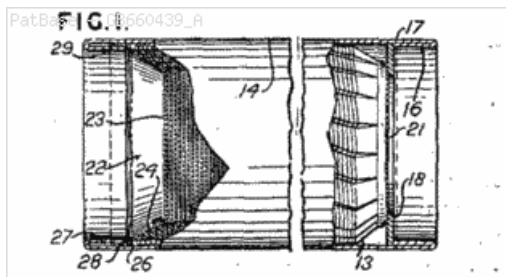
Classifications:

International (IPC 8-9): B65D25/54 B65D3/10 (Advanced/Invention); B65D25/00 B65D3/00 (Core/Invention)

International (IPC 1-7): B65D23/08

CPC: B65D3/10 B65D25/54

European: B65D25/54 B65D3/10



Family:

Publication number	Publication date	Application number	Application date
GB660439 A	19511107	GB19490019031	19490719

Priority:

19490121

Probable Assignee: MID WEST BOTTLE CAP CO

Assignee(s): (std): MID WEST BOTTLE CAP CO

155) Family number: 1054719 (US3957169A)

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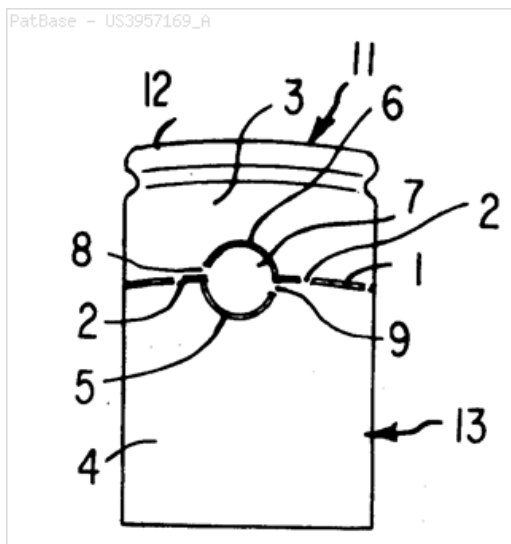
Title: Bottle cap

Abstract: A bottle cap comprises a sheet member having crown and skirt portions with a first plurality of perforations or indentations through the sheet member extending substantially around the skirt and a second plurality of perforations therethrough extending only part way around the skirt and defining, with perforations of the first plurality, at least one area on the member connected to the skirt both above and below the perforations of the first plurality by at least one bridge point between adjacent perforations.

Classifications:

International (IPC 8-9): B65D41/32 B65D41/34 (Advanced/Invention);

B65D41/32 B65D41/34 (Core/Invention)
International (IPC 1-7): B65D41/32 B65D41/34 B65D41/38
B65D41/44 B65D49/12 B65D55/02 B65D55/06 B65D55/08 B67B3/00
H03K3/57
CPC: B65D41/348 B65D2101/003
European: B65D41/34F L65D101/00A3B
US: 215/253



Family:

Publication number	Publication date	Application number	Application date
AR201708 A1	19750408	AR19740256366	19741031
AT338638 B	19770912	AT19740009182	19741115
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DE2454273 B2	19790426	DE19742454273	19741115
DE2454273 C3	19791220	DE19742454273	19741115
DK132997 B	19760308	DK19740005960	19741115
DK132997 C	19760809	DK19740005960	19741115
DK596074 A	19750714	DK19740005960	19741115
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FI330874 A	19750517	FI19740003308	19741114
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FI54454 C	19781211	FI19740003308	19741114
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FR2251492 B1	19780922	FR19730040820	19731116
FR2280561 A2	19760227	FR19740026954	19740802
FR2280561 B2	19781027	FR19740026954	19740802
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IE40445 L	19750516	IE19740002361	19741115
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JP1105561 C3	19820730	JP19740131596	19741116
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NO744115 L	19750520	NO19740004115	19741115
SE411194 B	19791210	SE19740014193	19741112
SE411194 C	19800327	SE19740014193	19741112
SE7414193 A	19750520	SE19740014193D	19741112
US3957169 A	19760518	US19740523760	19741114
ZA7407305 A	19751126	ZA19740007305	19741114

Priority:

FR19730040820 19731116 FR19740026954 19740802

Probable Assignee: BOUCHAGE MECANIQUE

Assignee(s): (std): LE BOUCHAGE MELANIQUE LBM ; BOUCHAGE MECANIQUE ; BOUCHAGE MECANIQUE LE L B M

Assignee(s): BOUCHAGE MECANIQUE LE LBM ; BOUCHAGE MECANIQUE LE PERCENT L B M ; BOUCHAGE MECANIQUE FR ; LE BOUCHAGE MECANIQUE ; LE BOUCHAGE MECANIQUE PARIS ; LE BOUCHAGE MECANIQUE L B M ; LE BOUCHAGE MECANIQUE LBM ; LE BOUCHAGE MECANIQUE L B M TE PARIJS ; BOUCHAGE MECANIQUE LE percent L B M It ; COURSAUT HENRI ; LE BOURDAGE MECANIQUE CL B M

Inventor(s): (std): COURSAUT DURAND HENRI ; COURSAUT DURAND H ; COURSAUT H ; COURSAUT HENRI

Inventor(s): H COURSAUT DURAND ; HENRI COURSAUT DURAND ; COURSAUT HENRI MERCUREY FRANKREICH ; HENRI COURSAUT

Title: BOTTLE CAP HAVING PROTECTIVE SKIRT EDGE

Abstract: ABSTRACT OF THE DISCLOSURE

The subject is a bottle cap of the type which is first pushed on, but thereafter may be twisted off and on. A shell is made from a cupped blank having a substantially straight skirt. The skirt is then knurled or fluted, the inside root diameter of the flutes being a close sliding fit on the crests of the bottle finish threads to which the cap is to be applied. When knurling, the rim of the skirt is curled inward slightly to an inside diameter about the same as the inner root diameter of the flutes. After in-serting a suitable seal ring or disc, the shell is pushed down over the threaded finish of the bottle into sealing engagement with the lip. While so holding the cap, portions of the skirt are conformed to the thread formations on the bottle finish, thus providing a releasable threaded engagement. As the threads are formed in the skirt, the inwardly turned edge is closely conformed to the finish, in which position the edge is shielded against accidental contact by the fingers, when unscrewing the cap to open the bottle. B

Classifications:

International (IPC 8-9): B65D41/04 B65D41/10

B65D53/02 (Advanced/Invention);

B65D41/04 (Core/Invention)

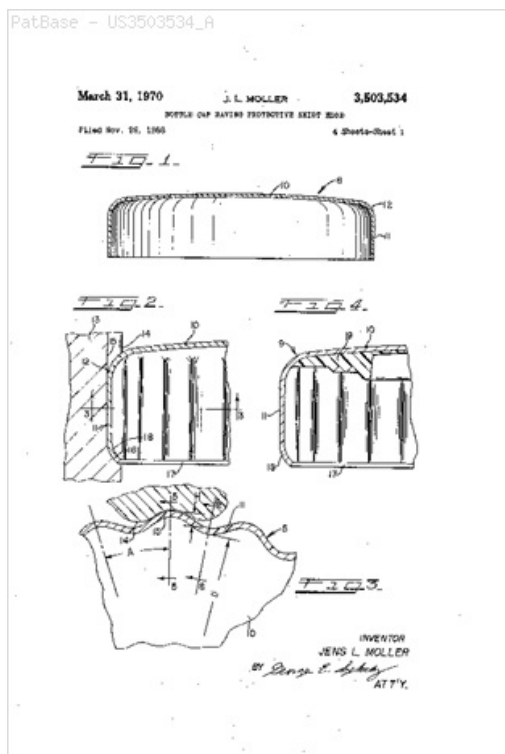
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B65D41/04 B65D41/10 B67B3/02 B67B3/16

CPC: B65D41/0464

European: 64B23D2C B65D41/04D4

US: 215/328 215/337 215/351 215/39 413/23 413/4



Family:

Publication number	Publication date	Application number	Application date
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AU206962599 A1	19710422	AU19690062599	19691021
BE742174 A	19700504		19691125
CA949392 A1	19740618	CA19690055511	19690626
DE1942312 A1	19700604	DE19691942312	19690820
DE1942312 B2	19741024	DE19691942312	19690820
DE1942312 C3	19750612	DE19691942312	19690820
FR2024244 A1	19700828	FR19690040355	19691124
GB1278970 A	19720621	GB19690057421	19691124
NL6917473 A	19700528	NL19690017473	19691120
SE349788 B	19721009	SE19690015705	19691117
US3503534 A	19700331	US19680785003	19681126
US3704677 A	19721205	US19690888116	19691218

Priority:

US19680785003 19681126 US19690888116 19691218

Probable Assignee: CONTINENTAL CAN CO

Assignee(s): (std): CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN CO INC NEW YORK N Y V ST A ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL CAN CY INC ; MOLLER JENS L

Inventor(s): (std): LANGHOFF MOLLER JENS ; MOLLER J ; MOLLER JENS L ; MOLLER JENS LANGHOFF

Inventor(s): MOLLER JENS LANGHOFF WESTMONT ILL ; MOLLER JENS LANGHOFF WESTMONT ILL V ST A ; JENS L MOLLER ; JENS LANGHOFF MOLLER

Title: METHOD OF PREPARING A STERILE WATER CONTAINING HYPOCHLOROUS OR CHLOROUS ACID, PACKAGE OF STERILE SOURCE MATERIALS, AND STERILE WATER PREPARATION KIT

Abstract: The upper end of a cylinder (8) located in a mouth (3) of a bottle (2) abuts the top plate (5b) of a seal cap (5). The cylinder (8) has formed in the outer surface thereof a circumferential recess (10) normally sealed by a sealing member (9). The bottle (2) contains hydrochloric acid (second component) having a diluted concentration, while the circumferential recess (10) in the cylinder (8) contains sodium hypochlorite (first component). When a stopper ring (6) is removed and the seal cap (5) is turned in the tightening direction, the circumferential recess (10) moves to below the sealing member (9) and the first component is permitted to flow into the bottle (2) and produce a sterile water. The resulting sterile water has a pH level within the slightly acidic or neutral region and a predetermined effective chlorine concentration around 50 to 300 ppm,

for example.

Classifications:

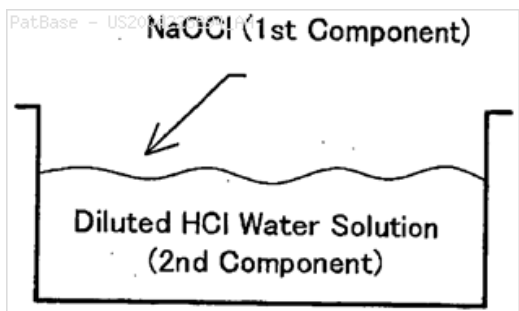
International (IPC 8-9): A01N59/00 A01N59/08 A61L2/18 A61L2/22 A61L9/14 B05B17/06 B05B9/04 B65D77/04 B65D77/08 B65D81/32 B65D83/00 B65D83/38 B65D83/40 B65D83/76 C02F1/46 C02F1/50 C02F1/76 (Advanced/Invention); A61L2/18 C02F1/50 C02F1/76 (Advanced/Non-invention); A01N59/00 A01N59/08 A61L2/18 A61L2/22 A61L9/14 B05B17/04 B05B9/04 B65D81/32 B65D83/38 B65D83/40 C02F1/46 C02F1/50 C02F1/76 (Core/Invention); C02F1/76 (Core/Non-invention)

International (IPC 1-7): A01N59/08 A61L2/18 A61L2/22 A61L9/14 B05B17/06 B05B9/04 B65D81/32 B65D83/38 B65D83/40 C02F1/46 C02F1/76

CPC: A61L2/22 A61L9/14 B05B1/3436 B05B11/0027 B05B11/3047 B05B11/3057 B05B17/0615 C01B11/04 A61L2/16 A01N59/00 A61L2/18 B65D83/202 B05B11/0081 B05B15/652 B65D83/62 B65D83/682

European: A01N59/00 A61L2/16 A61L2/18 A61L2/22 A61L9/14 B05B11/00B11C B05B11/00B3 B05B11/30H1D2 B05B15/06B1 B65D83/20B2 B65D83/68B C01B11/04 L05B1/34A3B4B L05B11/30H3F2 L05B17/06B1 L65D83/62 M02F1/76

US: 210/754 210/754S 210/756



Family:

Publication number	Publication date	Application number	Application date
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JP2005013714 A2	20050120	JP20040138737	20040507
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US2004226894 AA	20041118	US20030730159	20031208
US2004256330 AA	20041223	US20040884190	20040702
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Priority:

JP20030132971	20030512	JP20030204099	20030626	JP20030345020	20030828
JP20030365552	20031027	JP20030371518	20031031	JP20030409515	20031208
US20030730159	20031208	JP20040138737	20040507	WO2004JP06611	20040511
US20040884190	20040702				

Probable Assignee: VIITA KK

Assignee(s): (std): OKAZAKI TATSUO ; VEETA INC ; VIITA KK

Inventor(s): (std): OKAZAKI TATSUO ; TATSUO OKAZAKI

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

158) Family number: 22608723 (US3033407A)

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Title: Bottle closures

Abstract: (Claim 1) 1. I claim: _ I. In combination, a bottle having a neck terminating in a sealing bead, a non-reusable sheet metal crown closure having an upper circular cap portion and having a corrugated sheet metal skirt portion extending downwardly from said upper cap portion and wherein no part of said skirt portion is of smaller internal diameter than said upper circular cap portion, said sheet metal skirt portion 'being mechanically crimped inwardly into locking engagement with said head of the bottle about the bottle mouth, and a seal for the crown closure in the form of an imperforate plastic disc, said sealing disc being symmetrical in relation to both its median plane and its axis, said sealing disc comprising a thin circular central por-, tion, zt thick annular sealing pad integral with the peripheral edge of said central portion and defining an annular sealing surface of small area on opposite sides of said disc engaging, respectively, with the sealing surface of said bead of the bottle and with the inner surface of the upper circular cap portion of said closure, said central portion being of at diameter equal substantially to that of the opening in the bottle, the sealing surfaces on the opposite sides of said pad being of an outer diameter no greater than approximately 90% of the outer diameter of said bead of the bottle, and a thin iiexible outergannular rim integral with said ,sealing disc and with the outer pcripheral edge of the sealing pad, the outer diameter of said thin outer annular rim being greater than the inner diameter of all portions of the depending skirt portion of said closure and htting frictionally therein at its peripheral edge, said sealing disc being insertable in said crown closure with either side thereof exposed for contact with the mouth of the bottle, and said cuter annular rim being sufficiently thin and pliable so that it is always capable of Hexing downwardly intovfrictional clipping engagement with the inner side wall of the depending skirt portion irrespective of which side of the disc is inserted uppermost in the crown closure, the mechanical crimping ,of said sheet metal skirt portion causing thesealing surfaces of said sealing disc to establish and maintain high pres-1 sure sealing engagement per unit area with a limited area of the mouth of the bottle and with the upper inner 'end of said crown closure respectively.

Classifications:

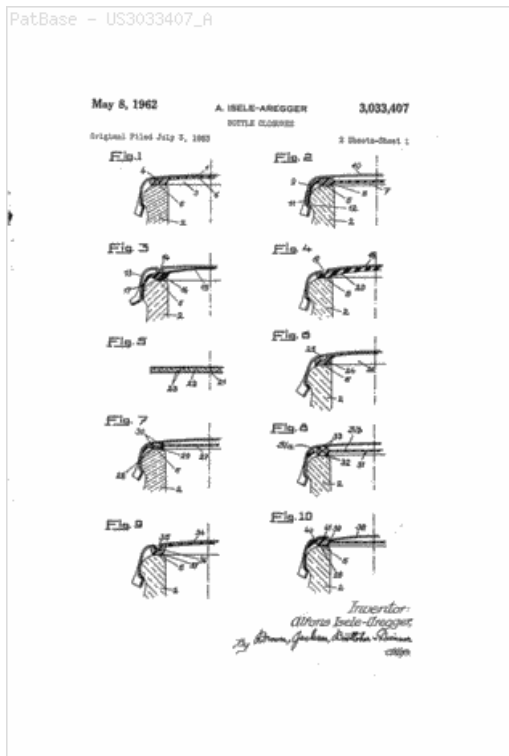
International (IPC 8-9): B65D41/12 (Advanced/Invention); B65D41/02 (Core/Invention)

International (IPC 1-7): B65D41/12

CPC: B65D41/12

European: B65D41/12

US: 215/328 215/343 215/351

**Family:**

Publication number	Publication date	Application number	Application date
US3033407 A	19620508	US19580715170	19580120

Priority:

US19530365842 19530703 US19580715170 19580120

Probable Assignee: UNION CARBIDE CORP

Assignee(s): (std): UNION CARBIDE CORP

Inventor(s): (std): ALFONS ISELE AREGGER

Inventor(s): ISELE AREGGER ALFONS

159) Family number: 20442726 (GB849578A)

© PatBase

Title: Tamper-proof closure for container

Abstract: 849,578. Bottle-caps. FIELDS, M. R. Nov. 18, 1958 [Nov. 18, 1957], No. 37125/58. Class 125(3). A tamper-proof bottle-closure comprises an inner screw-threaded cap 1 engageable with the threaded neck of a bottle and an outer shell 30 which is pressed down over the cap 1. When the latter is on the bottle so as to interlock with the cap to prevent relative movement therewith, the shell having an integral downwardly extending frangible tab 38 which engages an abutment surface 22 formed on the bottle below the threads so that the tab is fractured or deformed when the cap is unscrewed. The abutment surface consists of a cam-like portion 22 formed in the bead 14 below the screw threading on the bottle, the bead being slotted at 16 to allow the tab normally to lie flat against the bottle. The tab has a slit 39 along it, leaving two narrow bridge-ports 40 which will either be ruptured by turning the cap or show signs of distortion. The shell is of plastic, e.g. polystyrene, and the inner cap is of metal but the usual rolled edge at the bottom end 8 of the threading is omitted, leaving a rough or sharpened edge which readily bites into the rim 32 of the shell as the latter is forced home.

Classifications:

International (IPC 8-9): B65D41/34 (Advanced/Invention);

B65D41/34 (Core/Invention)

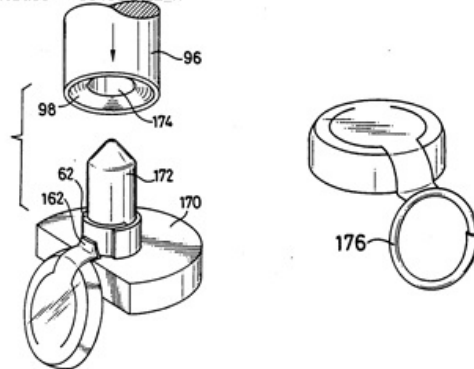
International (IPC 1-7): B65D41/34

CPC: B65D41/34

European: B65D41/34

Assignee(s): (std): MACK ROBERT FIELDS

US: 413/14 413/25 413/66



PatBase PDF Export - Page: 148 28/10/2019

JP59144537 A2	19840818	JP19830013856	19830201
KR19840007671 A	19841210	KR19840000465	19840201
KR840007671 A	19841210	KR19840000465	19840201
SE449452 B	19870504	SE19840000468	19840131
SE449452 C	19870813	SE19840000468	19840131
SE8400468 A	19840802	SE19840000468D	19840131
SE8400468 A0	19840131	SE19840000468	19840131
SE8400468 L	19840802	SE19840000468	19840131
US4569621 A	19860211	US19840574873	19840130

Priority:

JP19830013855 19830201 JP19830013856 19830201

Probable Assignee: WICANDERS AB

Assignee(s): (std): WICANDERS AB

Assignee(s): WICANDERS AB AELVAENGEN SE ; WICANDERS ALVANGEN SWEDEN A CORP AB ; BIKANDERUSU AB ; TOYO SEIKAN KAISHA LTD

Inventor(s): (std): SJOGREN BORGE ; BERGLUND JAN ; BERGLUND J ; SJOGREN B ; SJOEGREN BOERJE ; BERGLUND I ; BORUIE SHIYOGUREN ; YAN BERUGURUNDO

Inventor(s): BORUIE SHOGUREN ; BORGE SJOGREN ; JAN BERGLUND ; BERGLUND JAN VAESTRA FROELUNDA SE ; SJOEGREN BOERJE HUDDINGE SE ; J BERGLUND ; B SJOGREN ; I BERGLUND

161) Family number: 19212733 (US4044637A)

© PatBase

Title: Tool for closing bottles by a crown cap

Abstract: The tool comprises a handle pivotally connected to a head that comprises a tightener composed of a split ring having a diameter sufficiently large to encompass the cap. The handle has a cam arrangement that acts on the ring to contract it when the handle is pivoted, thereby tightening the cap on the bottle. The head also has one or more lips that catch underneath the cap to remove the latter when opening the bottle.

Classifications:

International (IPC 8-9): B67B3/14 B67B5/00

B67B7/16 (Advanced/Invention);

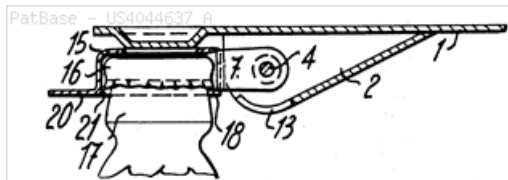
B67B3/00 B67B7/00 (Core/Invention)

International (IPC 1-7): B67B3/02 B67B3/16 B67B5/00 B67B7/16 B67B7/44

CPC: B67B3/14 B67B7/16

European: B67B3/14 B67B7/16

US: 81/3.43 81/3.55



Family:

Publication number	Publication date	Application number	Application date
AT707075 A	19781215	AT19750007070	19750915
BE833769 A	19760116	BE19750160333	19750924
CA1050791 A1	19790320	CA19750235505	19750911
CH580536 A	19761015	CH19740013012	19740926
DE2541063 A1	19760408	DE19752541063	19750915
ES215415 U	19760716	ES19750215415U	19750925
ES215415 Y	19761201	ES19750215415U	19750925
FR2286101 A1	19760423	FR19750029821	19750924
FR2286101 B1	19800125	FR19750029821	19750924
GB1513878 A	19780614	GB19750037780	19750915
IL48075 A0	19751125	IL19750048075	19750910
IL48075 A1	19780831	IL19750048075	19750910
IT1047189 A	19800910	IT19750069330	19750918
SE7510700 A	19760329	SE19750010700D	19750924
US4044637 A	19770830	US19750612032	19750910

Priority:

CH19740013012 19740926

Probable Assignee: SOLICA G

Assignee(s): (std): SOLICA ; SOLICA G ; SOLICA GEORGES

Assignee(s): GEORGES SOLICA

Inventor(s): (std): SOLICA GEORGES

Agent(s): REINHOLD COHN AND PARTNERS

162) Family number: 21285737 (US2212371A)

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Title: BOTTLE CLOSURE

Abstract: 1. The combination with a bottle having a protruding neck, of a closure device including a sheet metal pouring spout having a substantially frusto-conical body with a base of about the same interior diameter as that of said bottle neck so as to provide a substantially unrestricted flow path and air passage therethrough, a lateral flange around said base adapted to overlie the end of said bottle neck, a pouring neck of substantially smaller diameter than said base on the outer end of said spout and having cap engaging means thereon, a cap secured to said pouring neck for closing the same against escape of liquid and having a crown protuberance, an offset shoulder on said spout between the body and said, pouring neck, a member encircling said provided for entry of air to the interior of the P50 veo E5 body including an inwardly extending outer edge with a. turned-over bead engaging said shoulder and being secured near its outer end to said bottle neck so as to connect said spout permanently to said neck, a. gasket between said flange and bottle neck, a rigid disk ring fitting around said body to overlie and reinforce said flange, said member being fashioned intermediate its edges to engage said ring and flange for drawing the same toward said bottle neck to compress said gasket and provide a. liquid tight joint, and a thin

sealing strip having an apertured intermediate portion fitting over said cap with said protuberance fitting therethrough and having a pair of oppositely extending narrow legs clamped between said shoulder and said bead so that said strip must be removed or destroyed in order to remove said cap.

Classifications:

International (IPC 8-9): B65D47/12 B65D55/06

B65D55/08 (Advanced/Invention);

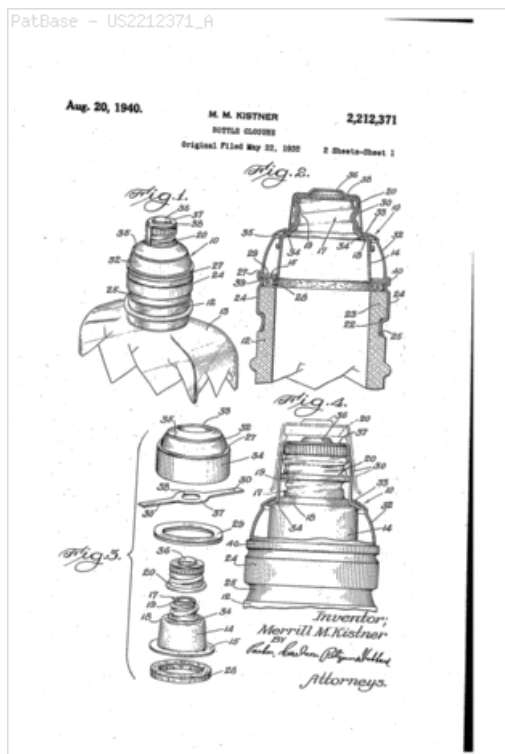
B65D47/12 B65D55/02 (Core/Invention)

International (IPC 1-7): B05B1/00 B65D47/06 B65D55/06

CPC: B65D47/122 B65D55/06 B65D55/0845

European: B65D47/12B B65D55/06 B65D55/08B2A

US: 215/274 215/365



Family:

Publication number	Publication date	Application number	Application date
US2212371 A	19400820	US19350022754	19350522

Priority:

US19350022754 19350522

Probable Assignee:

PAUL PARKER C

Assignee(s): (std):

CHESTER D KERN ; PAUL PARKER C

Assignee(s):

C PAUL PARKER

Inventor(s): (std):

KISTNER MERRILL M

163) Family number: 5174738 (GB2086863A)

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Title: IMPROVEMENTS RELATING TO CAPS FOR CONTAINERS

Abstract: A tear-off metal cap for a bottle has a top with a depressed central area 11, and a peripheral skirt 12 which has an extension part forming a tab 13. A channel 15 on the underside of the cap between the central area 11 and the skirt 12 contains a sealing gasket. Two score lines 17 extend upward from the bottom edge of the skirt at opposite sides of the tab, and two further score lines 18 extend upward from the bottom edge of the skirt at positions diametrically opposite each other and symmetrically disposed with respect to the tab. When the tab is pulled upward the metal tears along score lines 17 and terminates in channel 15, breaking the seal and relieving any internal pressure in the bottle, whereafter the skirt tears at the location of score lines 18, enabling the cap to be removed completely.; The score lines 17 are so positioned that an imaginary line joining the locations in the channel where tearing terminates extends tangentially or chordwise of the central area 11. Score lines 17 are for this purpose spaced apart by an angle in the range 80 DEG to 110 DEG.

Classifications:

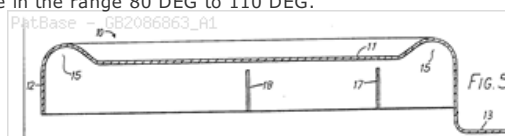
International (IPC 8-9): B65D41/44 (Advanced/Invention);

B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/44

CPC: B65D41/44

European: B65D41/44



Family:

Publication number	Publication date	Application number	Application date
GB2086863 A1	19820519	GB19810029491	19810930
GB2086863 B2	19840510	GB19810029491	19810930

Priority:

GB19800031678 19801001

GB19810010188 19810401

GB19810029491 19810930

Probable Assignee:

METAL CLOSURES LTD

Assignee(s): (std):

METAL CLOSURES LTD

164) Family number: 31165740 (US3923062A)

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Title: THREADED CLOSURE SYSTEM FOR MEDICAL LIQUID CONTAINER

Abstract: A medical liquid bottle having a threaded neck of one thermoplastic material is blow-molded at pressures of 50 to 150 psi (3.52 to 10.1 kg/cm²) so there is a low amount of internal stress in the neck. A cap of a different thermoplastic material is injection molded at pressures of 5,000 to 20,000 psi (352 to 1,410 kg/cm²) producing a very high internal stress in this cap. After liquid has been placed in the bottle and the cap assembled to the neck, the bottle with the combined cap and neck are stress relieved by subjecting to steam sterilization at 240 DEG to 260 DEG F. (116 DEG to 127 DEG C.). This causes the cap to shrink more than the neck and to form a bacteria-tight thermoplastic-to-thermoplastic hermetic seal. Despite this very tight hermetic seal the closure is openable with an unexpectedly low unscrewing torque of 10 to 30 inch-pounds (11.5 to 34.5 centimeter-kilograms) manually applied by a nurse or physician.

Classifications:

International (IPC 8-9): A61J1/00 A61J1/14 B65B53/02 B65D51/18 F16B13/04 F16B19/10 F16B21/02 F16B21/04 (Advanced/Invention); A61J1/00 A61J1/14 B65B53/00 B65D51/18 F16B13/04 F16B19/04 F16B21/00 (Core/Invention)

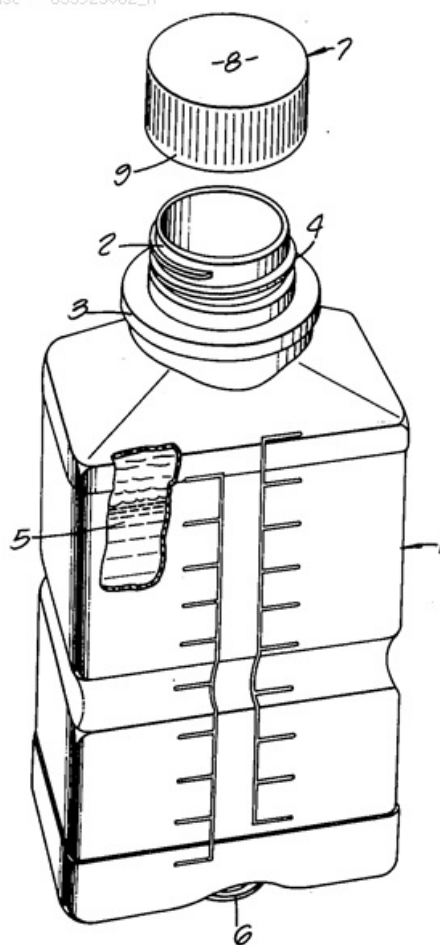
International (IPC 1-7): A61J1/00 B65B43/00 B65B53/06 B65B7/28 B65D41/08 B67B3/20 F16B13/00 F16B13/04 F16B19/00 F16B19/10 F16B21/18 F16B21/02 F16B21/07 F16B21/12 F16B5/06 F16B5/10

CPC: F16B19/1081 F16B21/02 B65D51/18 A61J1/1462 A61J1/18 B65D2203/04 B65D2251/0015 B65D2251/0078 B65D2501/0081 B65B53/02 A61J1/1431 A61J1/1468 A61J1/1418

European: A61J1/00C A61J1/14C A61J1/14H A61J1/18 B65B53/02 B65D51/18 F16B19/10B2D F16B21/02 K61J1/14C2 K61J1/14C6 K61J1/14M L65D203/04 L65D251/00Y2D L65D251/00Y6D L65D501/02Y9

US: 128/272 215/246 411/15 411/349 411/43 53/29 53/425 53/453 53/471 53/487 53/490 604/403 85/72

PatBase - US3923062_A



Family:

Publication number	Publication date	Application number	Application date
BE840788 A	19760802	BE19760166193	19760415
CA1032336 A1	19780606	CA19760248824	19760325
CA1056132 A1	19790612	CA19780299244	19780320
CA1056132 A2	19790612	CA19780299244	19780320
CA1071847 A1	19800219	CA19780299243	19780320
CA1071847 A2	19800219	CA19780299243	19780320
CH609752 A	19790315	CH19760004658	19760413
DE2615701 A1	19761028	DE19762615701	19760409
DE2615701 C2	19860612	DE19762615701	19760409
FR2308006 A1	19761112	FR19760011225	19760415
FR2308006 B1	19800613	FR19760011225	19760415
GB1494726 A	19771214	GB19760012293	19760326
IL49306 A0	19760531	IL19760049306	19760329
IL49306 A1	19830331	IL19760049306	19760329
IT1059167 A	19820531	IT19760022400	19760416
JP1052518 C3	19810630	JP19760043097	19760417
JP51127961 A2	19761108	JP19760043097	19760417
JP55045765 B4	19801119	JP19760043097	19760417
NL181293 B	19870216	NL19760003838	19760412
NL181293 C	19870716	NL19760003838	19760412
NL7603838 A	19761019	NL19760003838	19760412
SE421338 B	19811214	SE19760003929	19760402
SE421338 C	19820325	SE19760003929	19760402
SE7603929 A	19761018	SE19760003929	19760402
SE7603929 L	19761018	SE19760003929	19760402
US3923062 A	19751202	US19730338684	19730307
US3964364 A	19760622	US19750568909	19750417
US4015401 A	19770405	US19750568989	19750417

Priority:

US19730338684 19730307 US19750568909 19750417 US19750568989 19750417
CA19760248824 19760325 CA19780299243 19780320 CA19780299244 19780320

Probable Assignee: MCGAW INC MORaine MONTGOMERY COUNTY A CORP OF OH

Assignee(s): (std): AMERICAN HOSPITAL SUPPLY CORP ; HARTWELL CORP ; HARTWELL TE PLACENTIA CALIFORNIE VER S CORP
Assignee(s): KENDALL MCGAW LABORATORIES INC A CORP OF OH ; KENDALL MCGAW LABORATORIES INC AN OH CORP ; HARTWELL TE PLACENTIA CALIFORNIE VER ST V AM CORP ; WELLS FARGO BANK NA ; MEES PIERSON NV ; MEESPIERSON CAPITAL CORP ; MCGAW INC A CORP OF DELAWARE ; MCGAW INC MORAIN MONTGOMERY COUNTY A CORP OF OH ; POE LLOYD R ; KENDALL MCGAW LABORATORIES INC ; MCGAW INC ; HARTWELL CORP PLACENTIA CALIF US ; GENERAL ELECTRIC CAPITAL A NEW YORK CORP CORP ; GENERAL ELECTRIC CAPITAL CORP ; HAATOUERU CORP
Inventor(s): (std): RUROIDO RICHIYAADO POE ; POE LLOYD R ; LLOYD RICHARD POE ; L R POE ; POE LLOYD RICHARD ; POE L RICHARD ; THORNBURY THOMAS R ; ST AMAND ELMER F ; POE L R
Inventor(s): POE LLOYD RICHARD LONG BEACH CALIF ; RICHARD POE LLOYD ; POE LLOYD RICHARD LONG BEACH CALIF US
Agent(s): REINHOLD COHN AND PARTNERS

165) Family number: 20320744 (US1984752A)

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Title: BOTTLE CAP

Abstract: 1. A bottle can embodying therein a metal shell having a smooth top, and a skirt whereby it may be attached to a bottle, a metallic insert having therein a, formed up ridge providing a recessed central portion and a channel adjacent said skirt, and a rim about the edge thereof engageable with the skirt of said shell, and a sealing ring 'within said channel having its outer edge in frictional contact with the inner surface of said skirt to hold the parts in assembled relation.

Classifications:

International (IPC 8-9): B65D41/12 (Advanced/Invention);

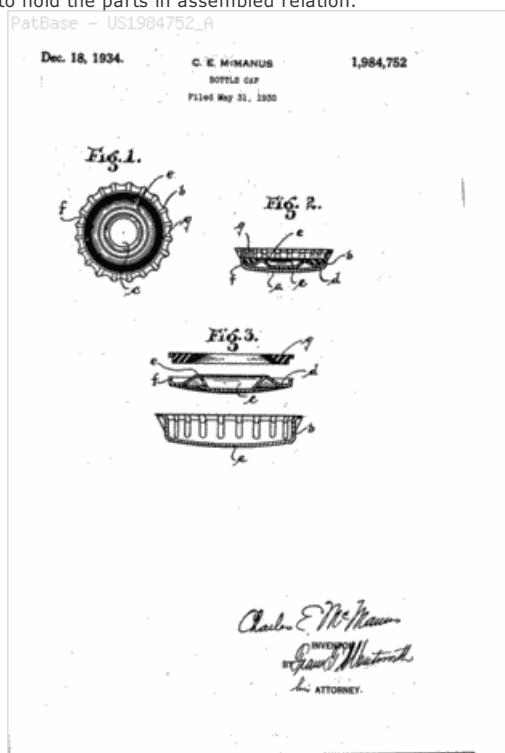
B65D41/02 (Core/Invention)

International (IPC 1-7): B65D53/02

CPC: B65D41/12

European: B65D41/12

US: 215/328 215/351



Family:

Publication number	Publication date	Application number	Application date
US1984752 A	19341218	US19300458167	19300531

Priority:

US19300458167 19300531

Probable Assignee: CROWN CORK AND SEAL CO

Assignee(s): (std): CROWN CORK AND SEAL CO

Assignee(s): CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL COMPANY INC

Inventor(s): (std): MCMANUS CHARLES E

166) Family number: 21449744 (US2073084A)

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Title: BOTTLE CLOSURE AND METHOD OF APPLYING SAME

Abstract: 1. A unitary closure for containers including a cap formed with a skirt portion; a non-resilient locking ring frictionally clamped to the edge portion of said skirt, said ring having interengaging ends for sealing said closure upon a container.

Classifications:

International (IPC 8-9): B65D41/62 B65D55/08 (Advanced/Invention);

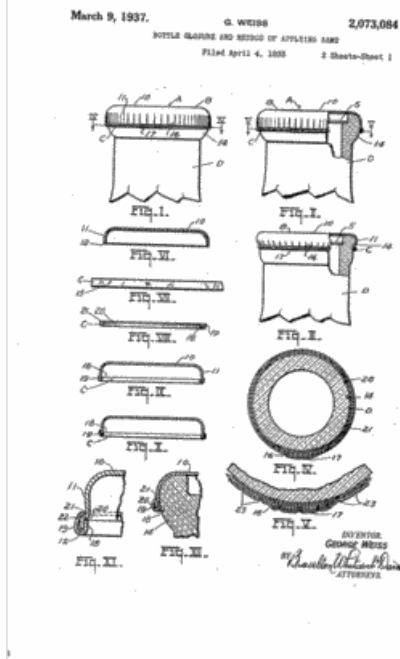
B65D41/00 B65D55/02 (Core/Invention)

International (IPC 1-7): B65D41/10

CPC: B65D41/62 B65D55/0836

European: B65D41/62 B65D55/08B2

US: 215/326

**Family:**

Publication number	Publication date	Application number	Application date
US2073084 A	19370309	US19350014568	19350404

Priority:

US19350014568 19350404

Probable Assignee:

STANDARD CAP AND SEAL CORP

Assignee(s): (std):

STANDARD CAP AND SEAL CORP

Inventor(s): (std):

GEORGE WEISS

Inventor(s):

WEISS GEORGE

167) Family number: 17188752 (ES1007308Y)

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Title: CIERRE PERFECCIONADO PARA BOTELLA.

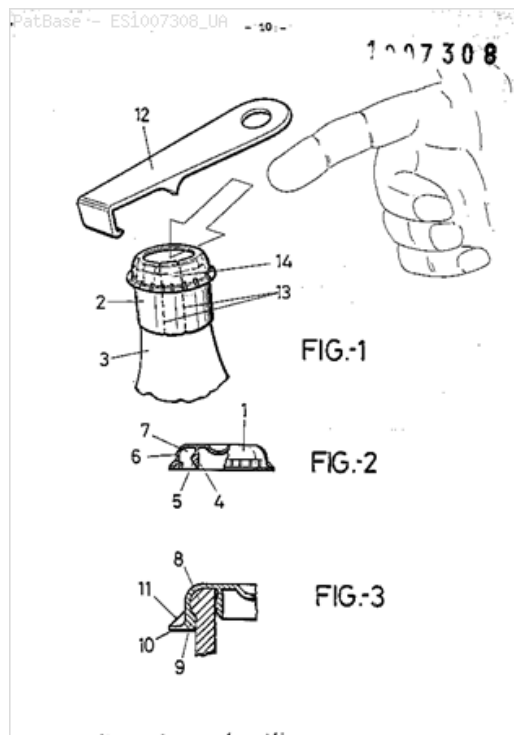
Abstract: Source: ES1007308U [ES] CIERRE PERFECCIONADO PARA BOTELLAS, CONCRETAMENTE PARA BOTELLAS PROVISTAS EN SU EMBOCADURA DE UN BORDON O REGRUESAMIENTO PERIMETRAL EXTERNO CAPACITADO PARA RECIBIR A UN TAPON CORONA, ESENCIALMENTE CARACTERIZADO POR ESTAR CONSTITUIDO MEDIANTE LA COMBINACION FUNCIONAL DE UN TAPON DE CAZOLETA, A BASE DE MATERIAL BLANDO, PREFERENTEMENTE PLASTICO, Y DE UNA CAPSULA O CAMISA TUBULAR EXTERIOR TERMORRETRACTIL, HABIENDOSE PREVISTO QUE EL CITADO TAPON DE CAZOLETA INCORPORA UN APENDICE TUBULAR INTERNO, CILINDRICO, DE ADAPTACION A LA SUPERFICIE INTERNA DE LA EMBOCADURA DE LA BOTELLA Y PROVISTO A TAL EFECTO DE UN LABIO PERIMETRAL EXTERNO QUE ASEGURA LA ESTANQUEIDAD, MIENTRAS QUE ENTRE DICHO APENDICE TUBULAR Y EL FALDON EXTERIOR DEL TAPON SE DEFINE UNA PROFUNDA GARGANTA ANULAR QUE SE ADECUA FORMAL Y DIMENSIONALMENTE A LA EMBOCADURA DE LA BOTELLA QUE HA DE RECIBIR, CON LA PARTICULARIDAD DE QUE DICHO FALDON SE REMATA EN UN TACON ESTRANGULADO ACTUANTE SOBRE EL REBORDE DE LA EMBOCADURA DE LA BOTELLA, Y DE QUEEN CORRESPONDENCIA CON DICHO TACON DE CAZOLETA INCORPORA UN ALA PERIMETRAL EXTERNA, RIGIDA, REFORZADA MEDIANTE CARTELAS O NERVIOS RADIALES Y EXTERIORES, HABIENDOSE PREVISTO ADEMAS QUE LA CITADA CAMISA TERMORRETRACTIL ESTE PROVISTA DE UNA PAREJA DE LINEAS DE TREPADO LONGITUDINALES DETERMINANTES DE UNA ESTRECHA SOLAPA DE RASGADO PARA ELIMINACION MANUAL DE DICHA CAMISA.

Machine translation: Improved closure for bottles, particularly for bottles provided at its mouth with a bead or external perimeter thickened portion capable of receiving a crown cap, essentially characterized by being CONSTITUTED BY THE FUNCTIONAL COMBINATION OF A cup-shaped cap, made of soft material, preferably plastic, and a capsule or a shrinkable OUTER TUBULAR JACKET, BEING PROVIDED THAT SAID plug-SHAPED INCORPORATES A TUBULAR APPENDIX INTERNAL, Cylindrical, OF ADAPTATION TO THE INNER SURFACE OF THE MOUTH OF THE BOTTLE AND PROVIDED FOR THIS PURPOSE WITH A LIP EXTERNAL PERIMETER WHICH ENSURES TIGHTNESS, WHILE BETWEEN SAID TUBULAR APPENDIX AND THE OUTER SKIRT OF THE CAP IS DEFINED A DEEP ANNULAR GROOVE WHICH CONFORMS IN SHAPE AND DIMENSIONS TO THE MOUTH OF THE BOTTLE TO BE RECEIVED, WITH THE PARTICULARITY THAT SAID SKIRT TERMINATES IN A HEEL THROTTLED ACTING ON THE RIM OF THE MOUTH OF THE BOTTLE, AND QUEEN CORRESPONDENCE WITH SAID heel cup incorporates a perimetric wing outer, rigid, reinforced by radial gussets or ribs and exterior, having been FURTHER PROVIDED THAT SAID HEAT SHRINKABLE SLEEVE IS PROVIDED WITH A PAIR OF SCORE LINES DETERMINANTS OF A NARROW LONGITUDINAL TEAR FLAP FOR MANUAL REMOVAL OF SAID jacket.

Classifications:

International (IPC 8-9): B65D39/02 (Advanced/Invention);
B65D39/00 (Core/Invention)

International (IPC 1-7): B65D39/02



Family:

Publication number	Publication date	Application number	Application date
ES1007308 UA	19890116	ES19880002515U	19880812
ES1007308 Y1	19890716	ES19880002515U	19880812
ES1007308 YA	19890716	ES19880002515U	19880812

Priority:

ES19880002515U 19880812

Probable Assignee:

ETINAL S A

Assignee(s): (std):

ETINAL S A

Assignee(s):

ETINAL SA

Inventor(s): (std):

SCHEIDEGGER DE NAC ALBERTO

168) Family number: 3193752 (FR2240058A)

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Title: METHOD OF FORMING TEAR-OFF BOTTLE CAPS - RIBS ON A SLIDING CUTTER FOR LINES OF WEAKNESS ON THE CAPS

Abstract: The caps are out using a sliding tool (13) with an extended rib (16) to form the tongue and cooperating with a ring (12) from a metal strip (11a). Inside the sliding cutter is a moving forming tool (14) which deforms the metal over a former (3) to shape the caps. On the front face of the cutter are ribs (17) to imprint lines of weakness on to the metal. These ribs are arranged so as not to hinder sharpening of the cutter. The lines of weakness extend up the skirt of the cap, or can be extended on to the top surface.

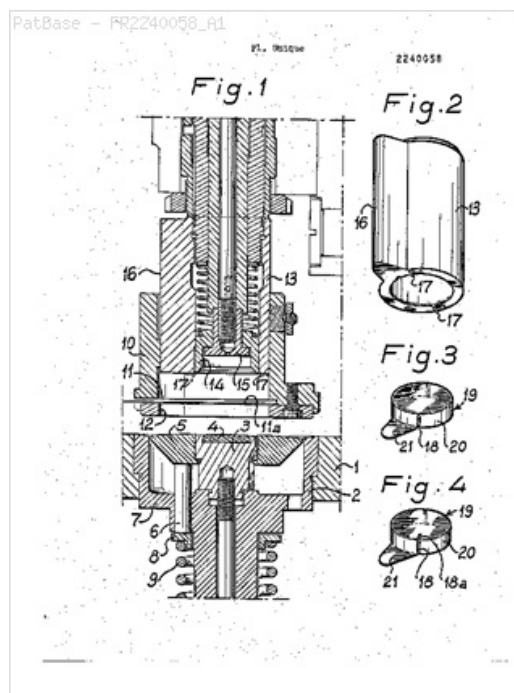
Classifications:

International (IPC 8-9): B21D51/44 B65D41/40 (Advanced/Invention); B21D51/38 B65D41/32 (Core/Invention)

International (IPC 1-7): B21D51/44 B65D41/42

CPC: B21D51/44 B65D41/40

European: B21D51/44 B65D41/40



Family:

Publication number	Publication date	Application number	Application date
FR2240058 A1	19750307	FR19730028781	19730807
FR2240058 B1	19790615	FR19730028781	19730807

Priority:

FR19730028781 19730807

Probable Assignee: CHELLE ETS**Assignee(s):** (std): CHELLE ETS**Assignee(s):** CHELLE ETS FR ; CHELLE FR ETS**169) Family number: 19463755 (GB492393A)**

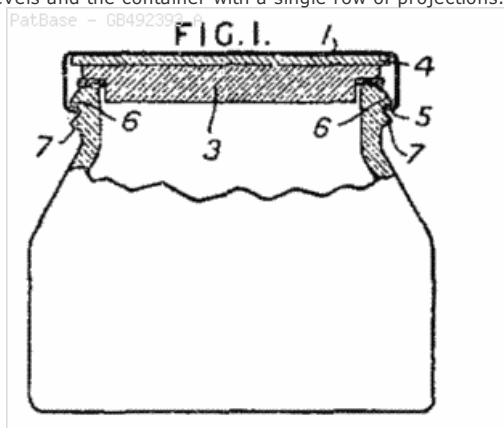
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Title: Improvements relating to bottles, jars, and like containers

Abstract: 9400. [Class 125 (iii)] A bottle, jar, or like container has a number of external projections 6, 7 in circumferentially-spaced relation in at least two individual rows at a distance apart corresponding to the total thickness of the removable sealing closure 3 above the border of the mouth of the container, the closure 3 being covered by a removable skirted cap 1 having a number of inwardly directed spaced lugs 5 adapted by the same partial rotation of the cap to be brought into locking engagement with one or other of the rows of projections 6, 7 according to whether the closure 3 is in place or not; by this means the closure 3, with the aid of the usual packing ring, may be used to preserve the contents of the container and when the closure 3 is removed, after removal of the cap 1, the latter may be used to close the container after use; when the container is empty, it may be used with the closure 3 as a sterilizing vessel and the cap 1 used instead of the usual clamp for holding the closure 3 in place during the sterilizing operation. A disc 4 may be provided beneath the cap 1 and if the disc is unsuitable for use when the container is to be subsequently used for sterilizing, the cap 1 may be made springy and domed so that, when the disc 4 is removed, the cap may be passed inwards to bear directly on the closure 3 or the springy cap 1 may have a central depressed portion which, when the disc is removed, is displaced so as to bear on the closure 3, or the disc 4 may be made with a central aperture through which a central depressed portion of the cap, or a stud or other projection, extends to bear on the closure 3, or a further row of projections on the container or of lugs on the cap may be provided to compensate for the removal of the disc 4. The projections may be arranged parallel to the mouth of the container or inclined thereto and instead of providing two or more rows of projections at different heights on the container, the cap may be provided with two or more rows of lugs at different levels and the container with a single row of projections.

Classifications:**International (IPC 8-9):** B65D51/14 (Advanced/Invention);

B65D51/00 (Core/Invention)

International (IPC 1-7): B65D41/06**CPC:** B65D51/145**European:** B65D51/14B**Family:**

Publication number	Publication date	Application number	Application date
GB492393 A	19380920	GB19370009400	19370402

Priority:

GB19370009400 19370402

Probable Assignee: CARL WILHELM BERLING**Assignee(s):** (std): CARL WILHELM BERLING**170) Family number: 29781756 (US1789857A)**

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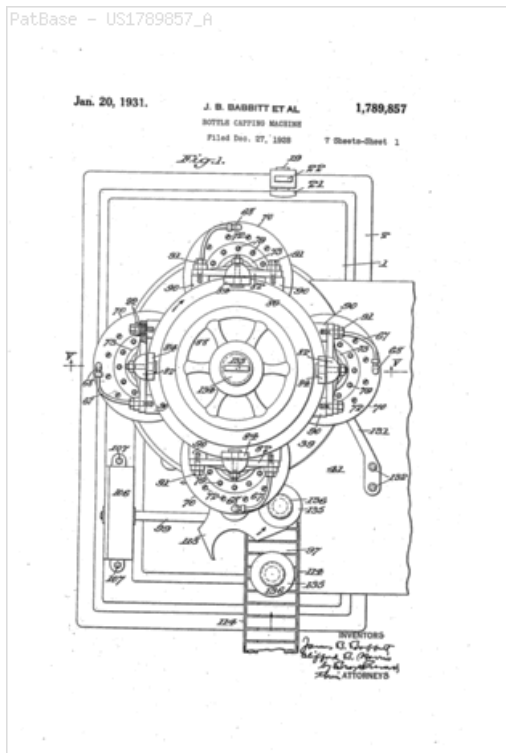
Title: BOTTLE-CAPPING MACHINE

Abstract: 1. In a machine of the character described, means for drawing a cap on to a bottle, and fluid actuated means for urging the drawing means radially inward, said drawing means being mechanically actuated in the reverse direction.

Classifications:**International (IPC 8-9):** B67B3/02 (Advanced/Invention);

B67B3/00 (Core/Invention)

International (IPC 1-7): B67B3/02**CPC:** B67B3/02 Y10T279/1241**European:** 64B23D4D B67B3/02**US:** 279/4.06 53/302 53/348

**Family:**

Publication number	Publication date	Application number	Application date
US1789857 A	19310120	US19280328720	19281227

Priority:

US19280328720 19281227

Probable Assignee: WALKER GORDON LAB CO INC**Assignee(s):** (std): WALKER GORDON LAB CO INC ; WALKER GORDON LAB COMPANY INC**Assignee(s):** WALKER GORDON LABORATORY CO INC ; WALKER GORDON LABORATORY COMPANY INC**Inventor(s):** (std): BABBITT JAMES B ; HARRIS CLIFFORD B**171) Family number: 17204757 (ES1008760Y)**

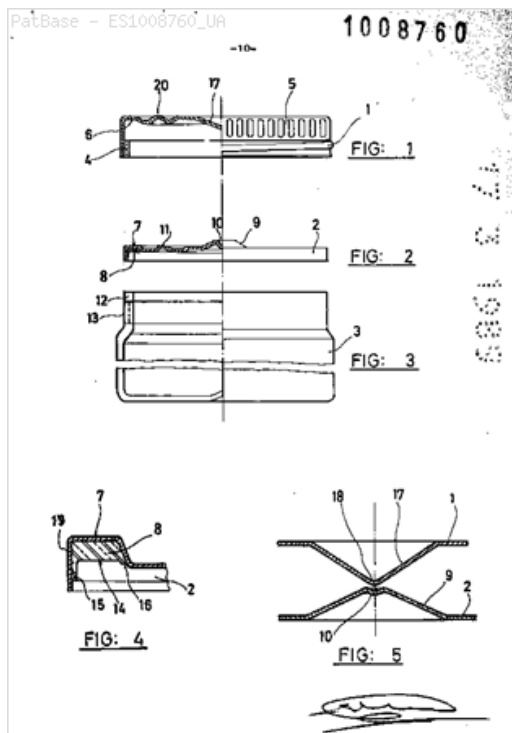
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Title: DISPOSICION PERFECCIONADA PARA ENVASES DE VACIO.

Abstract: Source: ES1008760U [ES] DISPOSICION PERFECCIONADA PARA ENVASES DE VACIO, DEL TIPO DE LOS QUE ESTAN CONSTITUIDOS POR UN FRASCO, GENERALMENTE DE CRISTAL O SIMILAR, SOBRE EL QUE SE DISPONE UNA TAPA DOTADA DE MEDIOS PARA EFECTUAR UN CIERRE SUSCEPTIBLE DE GENERAR UN VACIO SOBRE LOS PRODUCTOS DEPOSITADOS EN EL INTERIOR DEL FRASCO, QUE ESENCIALMENTE SE CARACTERIZA PORQUE SOBRE LA EMBOCADURA DEL FRASCO SE DISPONE UNA CAPSULA O DISCO METALICO DOTADO DE UN PEQUEÑO BORDE O FALDON QUE ABRAZA EL CONTORNO DEL DICHO FRASCO Y DE UNA ZONA INFERIOR EN LA QUE SE SITUA UNA JUNTA ANULAR, DE GOMA O SIMILAR, LA QUE CONTACTA CON EL BORDE FRONTAL DEL FRASCO, EN QUE ESTA CHAPA METALICA SE FIJA AL FRASCO AL REALIZAR EL VACIO EN EL MISMO CON EL PRODUCTO A CONTENER INCLUIDO, Y ESTA DOTADA DE UN SALIENTE CONICO CENTRADO HACIA FUERA Y NERVIOS CIRCULARES EN SU SUPERFICIE, NERVIOS QUE SE CORRESPONDEN CON OTROS REALIZADOS EN UNA TAPA METALICA ROSCADA AL GOLLETE DEL FRASCO Y SOBRE LA PLACA ANTEDICHA, LA CUAL TAPA ESTA DOTADA EN SU ZONA CENTRAL CON UN SALIENTE CONICO HACIA ABAJO EN CORRESPONDENCIA Y CONTACTO CON EL DE LA CHAPA METALICA EN LA POSICION DE CERRADO.

Machine translation: Improved arrangement for vacuum packaging, OF THE TYPE WHICH ARE CONSTITUTED BY A BOTTLE, usually glass or the like, on which a lid is provided with means for effecting a closure capable of generating a vacuum ON THE PRODUCTS DEPOSITED IN THE INSIDE OF THE BOTTLE, essentially characterized in that ON THE MOUTH OF THE BOTTLE IS ARRANGED A CAPSULE OR METAL DISC PROVIDED WITH A SMALL EDGE or skirt which embraces THE CONTOUR OF SAID BOTTLE AND A LOWER ZONE IN WHICH IS PLACED AN ANNULAR GASKET, RUBBER OR THE LIKE, MAKES CONTACT WITH THE FRONT EDGE OF THE BOTTLE, IN WHICH THE METAL SHEET IS ATTACHED TO THE BOTTLE TO PERFORM THE VACUUM IN THE SAME WITH THE PRODUCT TO BE CONTAINED, AND IS PROVIDED WITH A conical projection centered OUTWARD AND CIRCULAR RIBS ON ITS SURFACE, nerves that CORRESPOND WITH OTHER MADE IN A METAL CAP threaded TO THE NECK OF THE BOTTLE AND ON THE PLATE ABOVE, WHICH LID IS PROVIDED IN ITS CENTRAL AREA with a conical projection DOWNWARD IN CORRESPONDENCE AND IN CONTACT WITH THE METAL PLATE IN THE CLOSED POSITION.

Classifications:**International (IPC 8-9):** B65D53/04 F16J13/02 (Advanced/Invention); B65D53/00 F16J13/00 (Core/Invention)**International (IPC 1-7):** B65D53/04 F16J13/02



Family:

Publication number	Publication date	Application number	Application date
ES1008760 UA	19890516	ES19890000224U	19890126
ES1008760 Y1	19891201	ES19890000224U	19890126
ES1008760 YA	19891201	ES19890000224U	19890126

Priority:

ES19890000224U 19890126

Probable Assignee:

OLEA RETOLAZA GABRIEL

Assignee(s): (std):

OLEA RETOLAZA GABRIEL

172) Family number: 19039758 (US1899783A)

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Title: BOTTLE CAP AND METHOD OF MANUFACTURING SAME

Abstract: 36026. [Class 125 (iii).] A bottle cap comprises a metal shell a, a cushion insert of natural or artificial cork and c, and a centre disc of lesser diameter d of hard glazed paper, Express paper, sulphite paper, and c., varnished on the side next the bottle contents with a resistive varnish, a disc of guttapercha e bonding the paper disc and cushion disc together. The paper and guttapercha discs may be cut simultaneously from two separate superposed webs d <1> , e <1> by a heated punch g and die-ring h, the further downward motion of the punch pressing the discs into place within the cap, the heat and pressure bonding the discs into place. If it is desired subsequently to apply a wax coating, a small quantity of Cerasine and c. is run in and a heated plunger j descends into the shell, carried by a carrier i, to spread the wax over the exposed surfaces of the discs. The varnish preferably comprises a resin, chinawood oil, a drier, and a plasticizer and is stated to be resistive to certain acids and to alcohol. The webs d <1> , e <1> may be united preliminary to being fed to the punch. Specifications 359,544 and 366,639 are referred to.

Classifications:

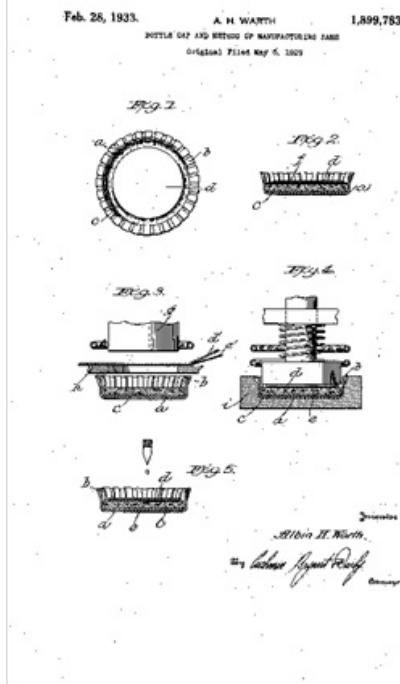
International (ipc 8-9): B65D41/12 (Advanced/Invention); B65D41/02 (Core/Invention)

International (ipc 1-7): B21D51/48 B65D53/04

CPC: Y10S264/76 Y10S425/809 B65D41/12

European: B65D41/12

US: 215/328 264/DIG.76 413/8 425/809

**Family:**

Publication number	Publication date	Application number	Application date
BE375645 A	00000000		00000000
FR707619 A	19310710		00000000
GB368328 A	19320229	GB19300036026	19301129
US1899783 A	19330228	US19300492546	19301031

Priority:

US19290360895 19290505 US19300492546 19301031 GB19300036026 19301129

Probable Assignee: CROWN CORK AND SEAL CO

Assignee(s): (std): CROWN CORK AND SEAL CO

Assignee(s): CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL COMPANY INC

Inventor(s): (std): WARTH ALBIN H

173) Family number: 21758759 (US2514565A)

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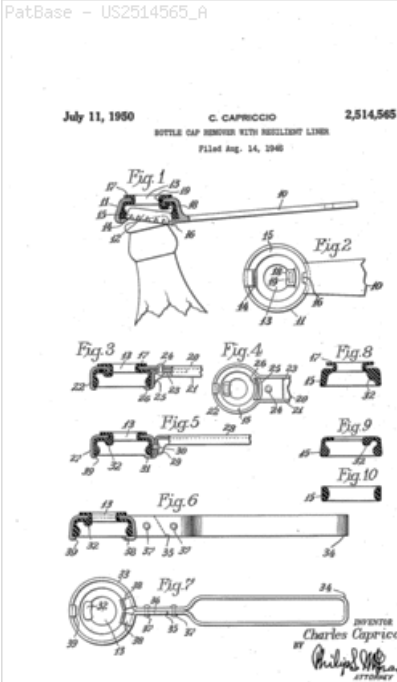
Title: BOTTLE CAP REMOVER WITH RESILIENT LINER

Abstract: The constructions described can be produced at low cost and provide an effective tool for removing bottle caps without injuring the same and for leaving the caps in such condition that they may be re-applied by hand. Fig. 1 shows how the elastic liner may be simply a ring of arcuate or semi-circular cross section; the thickened wall at the center of the ring serving to compressibly hold the skirt of the cap during the cap-lifting operation. While the yielding socket confines the cap sufficiently to normally prevent any appreciable distortion while springing the cap over the flange of the bottle mouth it may be desirable at times to use the socket as a tool for lifting the cap; the cap or top provided with a special socket for the purpose; possibly mounted on the other end of the handle. In such case the lever cap, would be located in the yielding socket and then be forced down into gripping engagement over the bottle neck by applying pressure on the top of the tool; the yielding socket: then serving to eventually confine the skirt of the cap; as it is being sprung back over the lip or beaded of the bottle mouth. When the cap is released: 1. A cap preserving bottle cap remover comprising a lever handle having a bottle cap receiving socket, of larger diameter than at commercial bottle cap and provided with an elastic lining; of smaller diameter than a bottle cap and conformable into resilient confining engagement with the flange of the cap in the act of removal. and a claw carried by said lever handle at the edge of said cap receiving socket, and projecting inward beneath the edge of said elastic lining holding said elastic lining in the socket and extending far enough inward for engagement beneath the edge of the flange of the cap; 2. A cap preserving bottle cap remover comprising a lever handle having a bottle cap receiving socket of larger diameter than a commercial bottle cap and provided with an elastic lining of smaller diameter than such a bottle cap and conformable into resilient confining engagement with the flange of the cap in the act of removal. and a claw carried by said lever handle at the edge of said cap receiving socket and projecting inward beneath the edge of said elastic lining for engagement beneath the edge of the flange of the cap, said lining projecting up through the top of the socket to serve as a cushion for hammering the cap over the mouth of a bottle; 4. A cap preserving bottle cap remover comprising a lever handle having a bottle cap receiving socket of larger diameter than a commercial bottle cap and provided with an elastic lining; of smaller diameter than such a bottle cap and conformable into resilient confining engagement with the flange of the cap in the act of removal. and a claw carried by said lever handle at the edge of said cap receiving socket and projecting inward beneath the edge of said elastic lining for engagement beneath the edge of the flange of the cap, said socket having a cap-ejecting opening up through the center of the same and said elastic lining having a resilient extension projecting up through said opening and flanged over the top of the socket; 5. A cap preserving bottle cap remover comprising a lever handle of flat stock having a circular opening at one end and down-turned edge flanges continued around said end of the handle in the form of a part circular socket, a bracket secured to the under side of the handle between said edge flanges and continuing the part circular flanges at the end of the handle into a substantially completely circular socket; a can lifting claw at the lower edge of said socket and a resilient cap-confining liner within said socket; 6. A cap preserving bottle cap remover comprising a lever handle of flat stock having a circular opening at one end and down-turned edge flanges continued around said end of the handle in the form of a part circular socket bracket secured to the under side of the

handlev betweenmsaid.cdgeilanges and continuing the part circular, iiangesat the- endiof the handle into e substantially completely circular- socket; 3, cap lifting clawatfthe lowerredge of saideocketf and(a_ resilient napa coniining, liner \withilavsaidi~ socket, said claw being carried by said bracket., CHARLES- CAPR.ICG'I0i

Classifications:

International (IPC 8-9): B67B3/02 B67B7/16 (Advanced/Invention);
B67B3/00 B67B7/00 (Core/Invention)
International (IPC 1-7): B67B7/16
CPC: B67B3/02 B67B7/16
European: B67B3/02 B67B7/16
US: 53/341 81/3.55 D8/40



Family:

Publication number	Publication date	Application number	Application date
US2514565 A	19500711	US19460690414	19460814

Priority:

US19460690414 19460814

Probable Assignee: CHARLES CAPRICCIO
Assignee(s): (std): CHARLES CAPRICCIO
Inventor(s): (std): CHARLES CAPRICCIO
Inventor(s): CAPRICCIO CHARLES

174) Family number: 21840767 (US1931377A)

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Title: FIRE EXTINGUISHER

Abstract: Whatss is 'claimed is: _ , 1. Ina fire extinguisher of the character described, an outer container _having a bore, a breaking plunger including a rod slidably mounted in said bore of the container and extending to the exterior thereof , a cap for the rod on the exterior of the outer container, said rod having within the container and exterior screw-threaded portion and a shoulder formed thereon at the outer end of the screw-threaded portion, a rlexible sealing diaphragm mounted for sealingythe bore receiving said plunger rod mounted within said container and 'having its outer portion iixed relative to said container, receiving therethrough the screw-threaded portion of said rod, a washer positioned between said diaphragm and said shoulder and adapted to bear against the interior of said container, a second washer on the opposite side of said diaphragm from said nrst washer threaded. on said screw-threaded portion and clamping said diaphragm firmly between said washers and against said shoulder, and resilient means acting between said container and said cap and rod for normally holding said first mentioned washer in engagement with the interior of said container, so that the said washer extends across from the interior of the container to the shoulder on the rod and effectively closes the said bore receiving the rod, the construction being such that when said plunger is held in its normal inoperative position the said nexible sealing diaphragm is disposed in a substantially flat and untensioned position. - - ' 2. In a ilre extinguisher of the character described, an outer container having a bore, a breaking plunger including a rod slidably mounted in the bore in said container and extending to the exterior thereof, a cap for the rod on the exterior of said outer container, said rod including an outer part extending through said con-__ tainer and having avscREW-threaded bore in the inner -end thereof, and an innervdetachable part having a screw-threaded end received within said bore, said outer part having an exterior. shoulder adjacent its inner end and exterior screw threads on the inner side of said shoulder, a flexible sealing diaphragm mounted for sealing the bore receiving said plunger rod within said container and having its outer portion fixed relative' to said container, said diaphragm receiving therethrough the exteriorly threaded end of said outer plunger part, a washer positioned within the ,container about said plunger between said diaphragm and said shoulder and adapted to bear against the interior of said container, a clamping nut on the' opposite side of said diaphragm threaded on said exterior screw threads and clamping saiddia-i phrag-in iirmly between said washer and nut and against said shoulder, and resilient means acting between said container and said rod for normally holding said first mentioned washer in engagement with the interior 'of said container, so that the said washer extends across from the interior' of the container to the shoulder on the rod and effectively closes the said bore receiving the rod, the construction being such that when said plunger is held in its normal inoperative position the said flexible sealing diaphragm is disposed in a substantially nat and untensioned position, 3. In a fire extinguisher of the character described, a container having a killing opening and Qsn ,oo mo ¥1D ns IZ) id-D f ,Si io is io E5 4 71,931,377 _ adapted to hold e.' quantity of liquidfa frangible disk closure for said nilling opening; and cover means serving to clamp said frangible disk closure in place to hermetically seal said container, said cover means having an orifice of predetermined restricted size through which the liquid within the container is adapted to discha.rge»after breaking of said frangible disk closure to ellect a controlled limiting of the rate of discharge of liquid from the' container, » 4; In a iire extinguisher of the character described, a container adapted to hold a quantity of liquid, a frangible disk closure for said container; a member for fastening said disk in place on the container to hermetically seal the container, and a metering member overlying said first mentioned _member and attached to said container, said metering member having an orifice of predetermined size through which the liquid within said container is adapted to discharge after breaking 'of said frangible disk closure. 5. In a iire extinguisher of the character described, an acid bottle adapted to contain an acid and having a threaded neck portion, a frangible disk closure for said

neck portion, a screw cap for holding said closure in place to hermetically seal said bottle, and a metering member overlying said screw cap and attached to said bottle, said metering member having an orifice of predetermined size through which the liquid within said container is adapted to discharge after breaking of said frangible closure. 6. In a fire extinguisher of the character described, a container adapted to hold a quantity of liquid, a frangible disk closure for said container, a member for fastening said disk in place to hermetically seal said container, and a metering member overlying said first mentioned member and cemented to said container, said metering member having an orifice of predetermined size through which the liquid within said container is adapted to discharge after breaking of said frangible disk. 7. In a fire extinguisher of the character described, an acid bottle adapted to contain an acid and having a threaded neck portion, a frangible disk closure for said neck portion, a screw cap threaded onto said neck portion to clamp said disk in place to hermetically seal said bottle, a metal stamping having a depending skirt surrounding said neck portion and an inverted portion resting upon said bottle top and forming a metering orifice of predetermined size above said frangible disk through which the acid within said bottle is adapted to discharge after breaking of said frangible disk, and a cement positioned between said metal stamping and said neck portion to attach the stamping to the bottle. 8. In a fire extinguisher of the character described, a container adapted to hold a quantity of liquid, a frangible disk closure for said container, a cap member for clamping said frangible disk in place to hermetically seal said container, said cap member having an opening on the outer side of said frangible disk and a metering member overlying said cap member and attached to said container, said metering member having an orifice of predetermined restricted size through which the liquid within said container is adapted to discharge after breaking of said frangible disk closure, said orifice being smaller than said opening in the cap member and smaller than the effective opening of the container that results upon breaking of the frangible disk. 9. A fire extinguisher of the character described, comprising an outer container adapted to receive a liquid, a hermetically sealed frangible inner container adapted to hold a second liquid for reaction with said first mentioned liquid upon operation of the extinguisher, said inner container having a discharge orifice of predetermined restricted size, and a movably mounted breaking plunger adapted to break said frangible container, said inner container being so cooperatively arranged that the plunger is positioned within said orifice of the inner container during the period of liquid discharge therefrom to effect a limiting of the rate of discharge of liquid therefrom. 10. A fire extinguisher of the character described, comprising an outer container adapted to receive a liquid, a hermetically sealed frangible inner container adapted to contain a second liquid for reaction with said first mentioned liquid, said inner container having a metering orifice through which the liquid therein is adapted to discharge after breaking of said frangible container, and a movably mounted breaking plunger adapted to break said frangible container and then cooperate with said metering orifice to restrict the discharge of liquid therefrom, the size of the metering orifice being coordinated with the size of the plunger to effect a controlled limiting of the rate of discharge of liquid from the inner container. 11. An invertible fire extinguisher of the character described, comprising an outer container adapted to receive a liquid, a hermetically sealed frangible inner container having a metering orifice, and a movably mounted member therein and adapted to contain a second liquid for reaction with said first mentioned liquid, a movably mounted breaking plunger adapted to break said frangible container for discharge of the liquid through said metering orifice, the construction being such that upon inversion of the extinguisher and after breaking of said inner container the latter then slides to feeding position about said plunger with the plunger entering within the said metering orifice to provide a restricted channel between the plunger and the wall of the orifice to effect controlled limiting of the rate of discharge of liquid from the inner container. 12. A fire extinguisher of the character described, comprising an outer container adapted to receive a liquid, a hermetically sealed frangible inner container movably mounted therein and adapted to contain a second liquid for reaction with said first mentioned liquid upon inversion of the extinguisher, said container having a metering member with an orifice of predetermined size, a movably mounted breaking plunger operable from the exterior of said extinguisher and adapted to break said frangible container, the construction being such that upon inversion of the extinguisher and after breaking of said frangible container the said container then slides to feeding position about said plunger with the plunger extending within the orifice of said metering member, and means for limiting the sliding movement of said inner container, the size of the plunger being coordinated with the size of the said orifice of the metering member to effect a controlled limiting of the rate of discharge of liquid from the inner container. 13. A fire extinguisher of the character described, comprising an outer container adapted to receive a liquid, a hermetically sealed frangible inner container movably mounted therein and adapted to contain a second liquid for reaction with said first mentioned liquid, a breaking plunger movably mounted within the extinguisher and operable from the exterior to break said frangible container, said container then sliding to feeding position about said plunger on inversion, a sealing diaphragm within said outer container for said plunger, and means for fastening said diaphragm to said plunger, said means having a projection thereon for limiting the sliding movement of said inner container. 14. In a fire extinguisher of the character described, an outer container, a sealed inner container therein, a removable plunger slidably mounted in said outer container and extending to the exterior thereof, said plunger being adapted to effect opening of said inner container, a flexible sealing diaphragm within said outer container having a portion connected to and movable with said plunger and another portion held in fixed position relative to said outer container, means urging said plunger toward an inoperative position, and means carried by said outer container for limiting the said movement of the plunger, the construction being such that when said plunger is held in its normal inoperative position the said flexible sealing diaphragm is disposed in a substantially flat and untensioned position. 15. In a fire extinguisher of the character described, an outer container, a hermetically sealed inner container movably mounted within said outer container, a movably mounted breaking plunger adapted to effect opening of said inner container, guiding means for said inner container arranged so that after movement of the plunger to open said inner container the inner container then slides into feeding position about said plunger with the plunger entering the broken end of said inner container, means for limiting the movement of the plunger, and means for limiting the sliding movement of the inner container whereby the inner container in feeding position is in fixed position relative to said plunger. 16. In a fire extinguisher of the character described, an outer container adapted to receive a liquid, a hermetically sealed inner container movably mounted therein and adapted to contain a second liquid for reaction with said first mentioned liquid upon inversion of the extinguisher, means for supporting said inner container in upright position of the extinguisher and for guiding said inner container in its movement upon inversion of the extinguisher, a breaking plunger movably mounted in said outer container in alignment with said inner container, means for normally maintaining said plunger in position with the breaking end thereof in spaced relation to said inner container, said means serving to return said plunger to said normal position after movement of the plunger to effect opening of said inner container, the construction being such that upon inversion of the extinguisher and after opening of the inner container by the plunger the said inner container then slides into feeding position about said plunger with the plunger positioned within the open portion of said inner container, and means for limiting the said sliding movement of said inner container, whereby the inner container in feeding position is in fixed position relative to said plunger. 17. In a fire extinguisher of the character described, an outer container adapted to receive a liquid, a hermetically sealed inner container movably mounted therein and adapted to contain a second liquid for reaction with said first mentioned liquid upon inversion of the extinguisher, a tube for supporting said inner container, the lower end of said tube being closed and the upper end being open and in communication with the space within said outer container, a breaking plunger movably mounted in said outer container in alignment with the open end of said tube and adapted to effect opening of said inner container, means urging said plunger away from said inner container, means for limiting the said movement of the plunger, said inner container being supported within said tube adjacent the breaking end of the plunger, the construction being such that upon inversion of the extinguisher and after opening of the inner container by the plunger the said inner container then slides down said tube into feeding position about the plunger which has returned to normal retracted position, the plunger being then positioned within the open portion of said inner container, and means for limiting the said sliding movement of said inner container.

Classifications:

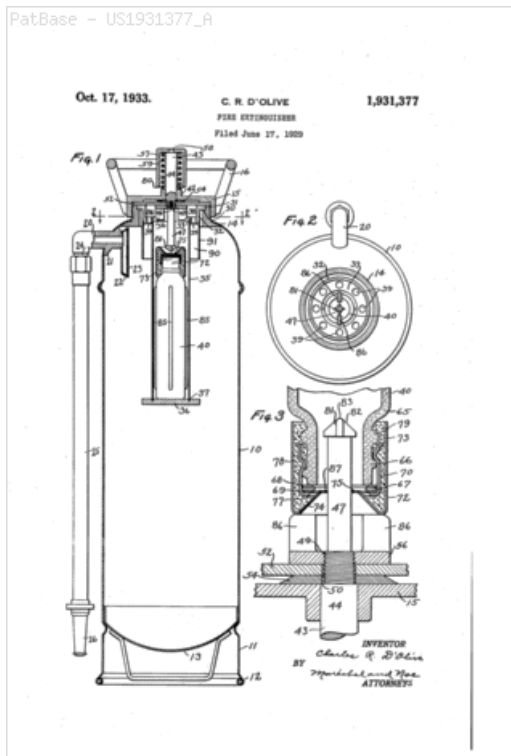
International (IPC 8-9): A62C13/00 (Advanced/Invention);
A62C13/00 (Core/Invention)

International (IPC 1-7): A62C13/14

CPC: A62C13/003

European: A62C13/00B

US: 169/81

**Family:**

Publication number	Publication date	Application number	Application date
US1931377 A	19331017	US19290371408	19290617

Priority:

US19290371408 19290617

Probable Assignee:

FYR FYTER CO

Assignee(s): (std):

FYR FYTER CO

Assignee(s):

THE FYR FYTER COMPANY

Inventor(s): (std):

D OLIVE CHARLES R

175) Family number: 29682767 (GB513830A)

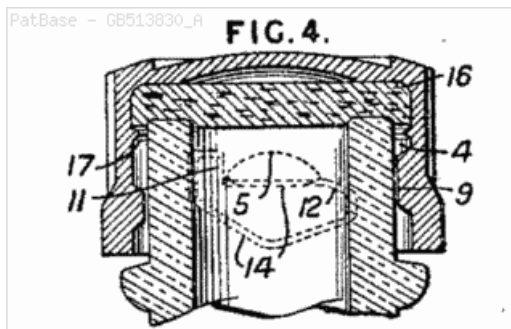
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Title: Improvements in and relating to closure caps and containers

Abstract: [Class 125 (iii)] The invention relates to a closure cap for bottles and c. of the type in which lugs on the skirt of the cap interlock with lugs on the neck of the container. The lugs 9 on the skirt of the cap or on the neck of the container may have a substantially V-shaped guiding face 14 on the side opposite the engaging face, an inclined portion 12 at one end of the engaging face and a projection 11 at the other end, whilst the co-operating lugs 4 on the neck of the container or on the skirt of the cap may have a rounded face 5 whereby the cap lugs readily engage with the container lugs. The caps are adapted to be used with relatively thick, say 2 inch, gaskets 16 of cork or the like which may be held in the cap by a ledge 17.

Classifications:**International (IPC 8-9):** B65D41/04 (Advanced/Invention);

B65D41/04 (Core/Invention)

International (IPC 1-7): B65D41/06**CPC:** B65D41/045**European:** B65D41/04D2**Family:**

Publication number	Publication date	Application number	Application date
GB513830 A	19391023	GB19380000854	19380111

Probable Assignee:

ANCHOR CAP AND CLOSURE CORP

Assignee(s): (std):

ANCHOR CAP AND CLOSURE CORP

176) Family number: 29900769 (US3301426A)

© PatBase

Title: CLOSURE CAP

Abstract: 1,080,403. Caps for bottles c. AMERICAN FLANGE and MANUFACTURING CO. Inc. May 28, 1965 [June 5, 1964], No. 22755/65. Heading B8T. A metal closure cap 1 for a bottle, jar, can c. comprises a flat, circular top portion 2, a tear strip 15 and an annular skirt 3 down which extends a pair of score lines 13, 14, the tear strip having a longitudinally elongated hole 23 and terminating in a gripping ear 6. Notches 21, 22 are formed at the edge 5 of the skirt on either side of the score lines 13, 14, which extend either substantially parallel across the inner surface of the top portion of the cap, or may diverge away from each other in curved or straight lines. Alternatively, the score lines 13, 14 extend across the outer surface of the cap. A lining or gasket (40), Fig. 7 (not shown), is placed over the bottle bead (51) and the metal cap blank, Fig. 1 (not shown), in which the skirt 3 has first been formed is then bent around the bottle c. neck. The parallel sides of the elongated hole 23 are deformed by the bending process, thus preventing damage of the score lines (11, 12), 13, 14 on the inside of the metal cap 1 by strains set up during the bending process. The notches 21, 22 also assist in preventing bending strains damaging the score lines. The ear 6 of the tear strip 15 has embossments 6a which enable the tear strip to be easily gripped when removing the cap 1 from the bottle c. In a modification, Figs. 12-14 (not shown), the score lines are formed on the outside of the cap. Elongated openings 23 of any shape may be used and in a modification illustrated in Figs. 10, 11 (not shown), one end of the opening has a bulbous form (64) to facilitate gripping of the ear 6.

Classifications:

International (IPC 8-9): B65D41/42 (Advanced/Invention);

B65D41/32 (Core/Invention)

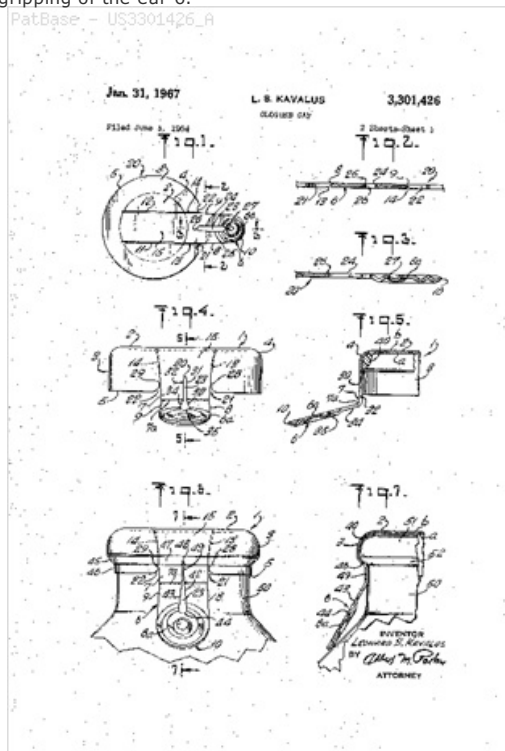
International (IPC 1-7): B65D17/16 B65D41/12 B65D41/40

B65D41/44

CPC: B65D41/42 B65D2101/0053

European: B65D41/42 L65D101/00A3E

US: 215/254



Family:

Publication number	Publication date	Application number	Application date
AT273700 B	19690825	AT19650005105	19650604
BE664988 A	19651001		19650604
CH442053 A	19670815	CH19650007833	19650604
DE1482520 A1	19690213	DE1965A049399	19650604
DE1482520 B2	19730823	DE1965A049399	19650604
DE1482520 C3	19740404	DE1965A049399	19650604
DK142022 B	19800811	DK19650002837	19650604
DK142022 C	19801229	DK19650002837	19650604
ES313833 A1	19660301	ES19650313833	19650604
FI47745 B	19731130	FI19650001346	19650604
FI47745 C	19740311	FI19650001346	19650604
FR1436414 A	19660422	FR19650019588	19650604
GB1080403 A	19670823	GB19650022755	19650528
NL6507146 A	19651206	NL19650007146	19650604
US3301426 A	19670131	US19640373016	19640605

Priority:

US19640373016 19640605 US19640373016 19640605 US19640373016 19640605

Probable Assignee: AMERICAN FLANGE AND MFG

Assignee(s): (std): AMERICAN FLANGE AND MANUF CO INC US ; AMERICAN FLANGE AND MFG

Assignee(s): AMERICAN FLANGE AND MFG CO INC ; AMERICAN FLANGE AND MFG CO INC ; AMERICAN FLANGE AND MANUFACTURING CO INC ; AMERICAN FLANGE AND MANUFACTURING CO INC NEW YORK ; AMERICAN FLANGE AND MANUFACTURING CO INC NEW YORK N Y V ST A

Inventor(s): (std): LEONARD STANLEY KAVALLUS ; KAVALLUS LEONARD STANLEY ; KAVALLUS LEONARD S ; KAVALLUS L US ; KAVALLUS ; KAVALLUS L ; KAVALLUS L S

Inventor(s): STANLEY KAVALLUS LEONARD

177) Family number: 20553781 (GB539599A)

© PatBase

Title: Improvements in or relating to machines for capping bottles or the like

Abstract: 539,599. Machines for capping bottles. CREAMERY PACKAGE MFG. CO. May 17, 1940, No. 8815. Convention date, June 23, 1939. [Classes 125 (ii) and 125 (iii)] In a machine for capping bottles, a stack of caps is supported above a circular series of flexible fingers which are operated to expand and hold expanded a portion of the lowermost cap of the stack so that it can pass over the bottle mouth before the fingers are withdrawn. The machine is shown with two capping stations and each stack of caps 128 rests in a magazine 125 while the filled bottles 175 for capping are carried along by the conveyer 13 to the

point where they reach a recess in the feed wheel 70. A rail 31 at the side of the conveyer can be adjusted in position to fit the conveyer for carrying bottles of quart, pint or half-pint sizes. The leading bottle enters a recess in the feed wheel 70 and is conducted to a table 91, Fig. 7, carried by a vertical rod 90 which can slide in the rotor 86 and is in direct alignment with one of the capping heads. Each head is carried in a frame 100 and has a ring 103 with resilient metal fingers 120 secured at their lower ends to it by a clamping ring 121. These fingers are tapered and arcuate so that they form a dome shaped structure, and they terminate with short straight ends 122 disposed parallel to the axis of the ring 102. The bottle tables 91 and the capping heads are continuously rotating around the spindle 77 and a cam track 94 on the rotor 86 engages cam rollers 93 to cause the tables to make the appropriate up and down motions, while the cam 117 engages rollers on the bell crank levers 114 to raise and lower the stacks of caps. The caps have circular top and bottom portions secured together at the circumference and the bottom portion has a central circular aperture. The lowermost cap in the stack is warmed by a jet of heated air, from the hot air blower 145, which passes through the valve 153 and the nozzle 160. The rotation of the parts then stops the hot air supply and removes the nozzle from between the bottle 175 and the capping head. The movement of the ring 106 and the relative movement of the fingers 120 and the stack of caps 128 causes the finger ends 122 to enter the warmed cap to stretch the opening. In the meantime the bottle has risen and its mouth enters the stretched cap while it engages the fingers to stretch the cap still further. As the bottle continues to rise it strips the cap 128 from the finger ends 122 which then spring outwards until they rest in the groove 105 in the sleeve 104 as shown in the right hand side of Fig. 7. The capped bottle rises still more and strikes the flange 127 at the lower end of the magazine 125 and elevates the magazine until it is held in its upper position by a spring actuated latch 138, Fig. 2. The bottle then descends quickly and the rotor 86 carries it to a point adjacent the inner end of the guard rail 54 by which it is swept off the table 91 and deposited upon the stationary table 48. About midway of the descent of the bottle the cam 117 causes the cap magazine to drop and the nozzle 160 to move back into position beneath the capping head for operations to start again.

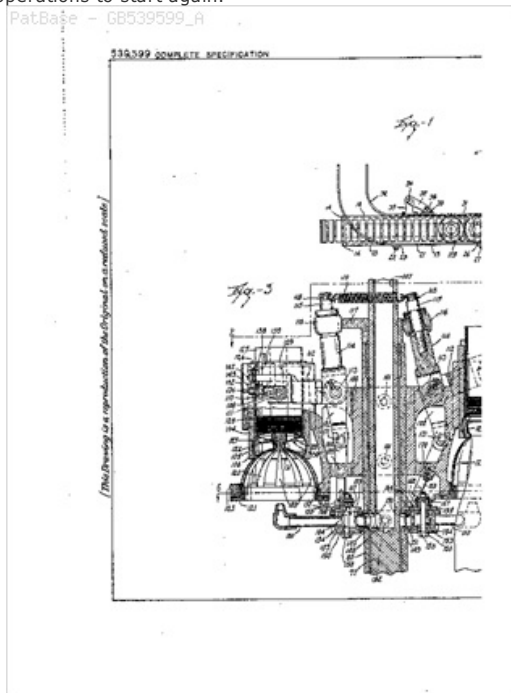
Classifications:

International (IPC 8-9): B67B3/02 (Advanced/Invention)

International (IPC 1-7): B67B3/02

CPC: B67B3/02

European: 64B23F B67B3/02



Family:

Publication number	Publication date	Application number	Application date
GB539599 A	19410917	GB19400008815	19400517

Probable Assignee: CREAMERY PACKAGE MFG CO
Assignee(s): (std): CREAMERY PACKAGE MFG CO
Assignee(s): THE CREAMERY PACKAGE MFG COMPANY

178) Family number: 57897783 (CN104176363A)

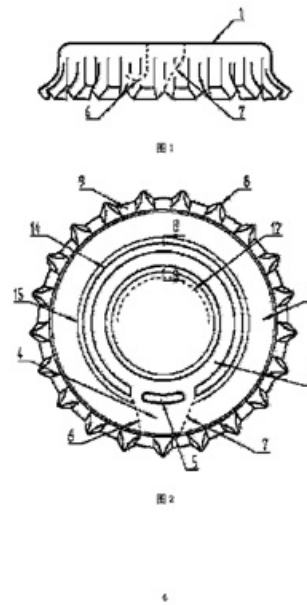
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Title: COMPOSITE ANTI-EXPLOSION POP-TOP BOTTLE CAP

Abstract: The invention discloses a composite anti-explosion pop-top bottle cap. The composite anti-explosion pop-top bottle cap comprises a cap body, an integral pulling ring and a gasket, wherein the cap body is made of a metal plate material; a round pulling ring with a through hole is arranged in the center of the cap body; the inner side and the outer side of the pulling ring are turned to form inverted C-shaped arcs; the pulling ring is hidden in a groove in the gasket riveted in the cap body and is connected with the cap body through a pop-top sheet with an arc reinforcing rib; a long hidden pulling line and a short hidden pulling line which are hopper-shaped and are connected to the skirt teeth of the cap body are arranged on the two sides of the pop-top sheet. When the bottle cap is opened, the pulling ring is lifted, the bottle cap is easily opened along the hidden pulling lines under the prying effect of the arc reinforcing rib of the pop-top sheet, the gasket of the cap body with the pulling ring is integrally disconnected from a bottle mouth, and more importantly, the bottle cap has dual-pressure releasing anti-explosion effect due to the fact that the hidden pulling lines are arranged on the cap body and a semicircular hidden cut mark is formed on the gasket.

Classifications:

International (IPC 8-9): B65D41/32 (Advanced/Invention)

**Family:**

Publication number	Publication date	Application number	Application date
CN104176363 A	20141203	CN201310196153	20130524

Priority:

CN201310196153 20130524

Probable Assignee:

ZHANG HUI

Assignee(s): (std):

ZHANG HUI

Inventor(s): (std):

ZHANG HUI

179) Family number: 28928787 (US2005115916A)

© PatBase

Title: CROWN CAP

Abstract: It is a primary object of this invention to improve the ergonomic properties of crown caps provided with strips detachable with the aid of tag thereof, more specifically to increase the usability and safety of the caps, and to reduce the possibility of self-uncorking of said easy-open closures and the interengagement therebetween during transportation and storage of corked bottles. Several embodiments of said crown caps, i.e. the caps provided with a combined tag, an incorporated tag and a bent tag-strip are also enclosed.

Classifications:

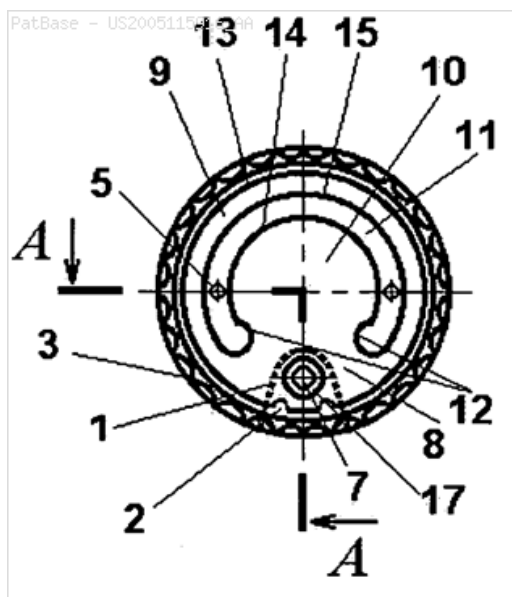
International (IPC 8-9): B65D41/32 B65D41/42 (Advanced/Invention);
B65D41/32 (Advanced/Non-invention);
B65D41/32 (Core/Invention);
B65D (Subclass/Non-invention)

International (IPC 1-7): B65D41/00 B65D41/32 B65D51/00

CPC: B65D41/42

European: B65D41/42

US: 215/254 215/255

**Family:**

Publication number	Publication date	Application number	Application date
AU2002367549 AA	20030902	AU20020367549	20021230
BRPI0215565 A	20041221	BR2002PI15565	20021230
CA2474715 AA	20040728	CA20022474715	20021230
CN2716160 Y	20050810	CN20029000018U	20021230

CO6220976 A2	20101119	CO20040082757	20040824
EA006366 B1	20051229	EA20040000959	20021230
EA200400959 A1	20050630	EA20040000959	20021230
EP1475312 A1	20041110	EP20020806675	20021230
EP1475312 A4	20090805	EP20020806675	20021230
IN02313DN2004 A	20070713	IN2004DN02313	20040810
JP2005047621 A2	20050224	JP20040266893	20040914
KR200371280 Y1	20041230	KR20047000008U	20040721
MXPA04007288 A1	20041029	MX2004PA07288	20021230
RU22936 U1	20020510	RU20020102389U	20020128
RU25494 U1	20021010	RU20020117148U	20020702
UA75806 C2	20050315	UA20040807099	20021230
US2005115916 AA	20050602	US20040502531	20040726
WO03064274 A1	20030807	WO2002RU00572	20021230
ZA200406830 A	20060628	ZA20040006830	20040827

Priority:

RU20020102389 20020128 RU20020102389U 20020128 RU20020117148 20020702
RU20020117148U 20020702 JP20030600072 20021230 WO2002RU00572 20021230

Probable Assignee: ZUBAKHIN OLEG VIKTOROVICH

Assignee(s): (std): OLEG VIKTOROVICH ZUBAKHIN ; SARDIKU WODIMU GENNADIVIC ; SHAIKENKO VADIM G ; SHAIKENKO VADIM GENNADIEVICH ; SHAIKENKO VADYM HENNADIIOVYCH ; VADIM GENNADIEVICH SHAIKENKO ; ZUBAKHIN OLEG VIKTOROVICH ; ZUBAKHIN OLEG VIKTOROVYCH ; WODIMU GENNADIVIC SARDIKU ; ZUBAKHIN OLG V

Inventor(s): (std): VADIM GENNADIEVICH SHAIKENKO ; ZUBAKHIN OLEG VIKTOROVICH ; WODIMU GENNADIVIC SARDIKU ; SHAIKENKO VADYM HENNADIIOVYCH ; SHAIKENKO VADIM GENNADIEVICH ; SARDIKU WODIMU GENNADIVIC ; OLEG VIKTROVICH ZUBAKHIN ; SHAIKENKO VADIM G

Inventor(s): SHAIKENKO VADIM GENNADIEVICH RU RU

Agent(s): GRIFFITH HACK; NA; ERNESTO CAVELIER; ANDREY ERMOLINSKY

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

180) Family number: 42269790 (US2008245822A)

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Title: BOTTLE CAPPING SYSTEMS

Abstract: A pump dispenser has a large ergonomic actuator designed to ergonomically deliver a composition to a substrate in the consumer's hand without the consumer having to pick up the pump dispenser. The ergonomic design allows the composition to be delivered in a proper aspect ratio to the substrate. The composition can be delivered in such a way that the composition is not aerosolized into the air or delivered to an unintended surface. The method of delivery can be made intuitive to the consumer by providing an actuator skirt that suggests the pumping mechanism or by providing a depiction of a hand or substrate over the pump dispenser. The pump dispenser is also useful for compositions or substrates that are not stable together. The pump dispenser may be designed with refill bottle capping systems such that only certain refill bottles may fit into the pump dispenser.

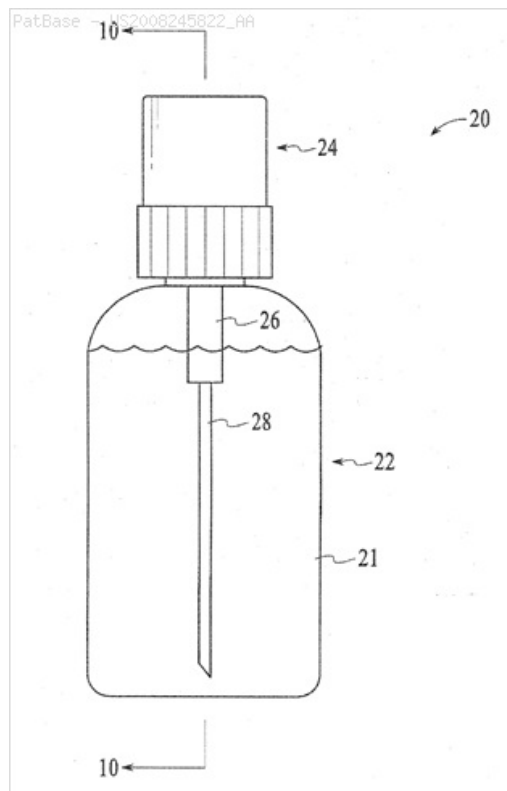
Classifications:

International (IPC 8-9): G05B11/00 (Advanced/Invention); G05B11/00 (Core/Invention)

CPC: A45D34/04 A45D2200/056 A45D2200/1018 B05B11/0054 B05B11/3001 B65D47/42

European: A45D34/04 B65D47/42 K45D200/05H4 K45D200/10B2 L05B11/00B5E L05B11/30C

US: 222/321.9 222/321.900P



Family:

Publication number	Publication date	Application number	Application date
US2008245822 AA	20081009	US20070622776	20070406

Priority:

US20070622776 20070406

Probable Assignee:

CLOROX CO

Assignee(s): (std):

KENNEDY TIMOTHY JAMES

Assignee(s):

CLOROX CO

Inventor(s): (std):

KENNEDY TIMOTHY JAMES

Agent(s):

THE CLOROX COMPANY; CLOROX CO

181) Family number: 746795 (GB1300058A)

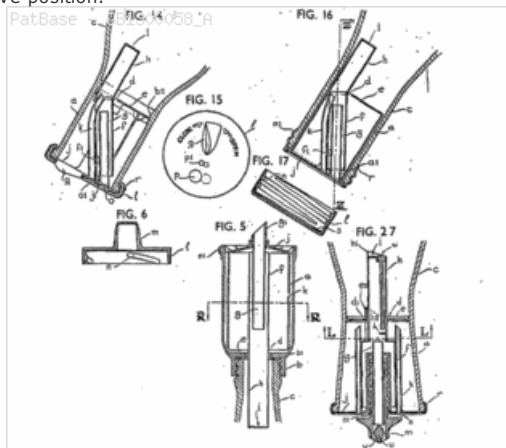
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Title: IMPROVEMENTS RELATING TO APPARATUS FOR DELIVERING MEASURED QUANTITIES OF LIQUID

Abstract: 1300058 Liquid measuring devices J H GAUNTLETT 26 Feb 1970 [26 Feb 1969] 10410/69 Heading B8N A measuring device of the syphon type for dispensing liquid from containers comprises an outlet tube g, a syphon bell f with an aperture i, and at least one passage k for admitting air into a measuring chamber which is defined by a wall a of the device or in part by a wall portion of a container on which the device is mounted. The or each passage k over at least part of its length is substantially parallel with the outlet tube g. Inversion of container or bottle c will cause liquid to flow via opening d into the measuring chamber with the liquid flowing from the bottle being replaced by air passing into the bottle via the aperture i. When the liquid overflows the upper end of the tube g air flow into the bottle will stop and thus liquid flow into the measuring chamber will be terminated. Outflow of liquid from the measuring chamber will continue until the syphon action is ended. Figs. 5 and 6, 14-17 and 27 illustrate alternative forms of the device. In each form the tube g may be integral with part j or may be axially adjustable or replaceable by a different length tube so as to vary quantity of liquid dispensed. The device may include closure caps l as illustrated in Figs. 6 and 17. Alternatively as illustrated in Figs. 14 and 15 the cap l is rotatable between an open position in which openings p, p 1 in the cap register with tube g and passage k respectively, and a closed position in which projections o, o 1 extend into the tube g and passage k respectively. In Fig. 27 rotation of member m in one direction causes part w to extend into and block the outlet end of the tube g. The cap may also be a snap closure, cam release cap (Figs. 50, 51, not shown). The inlet d may comprise a labyrinth (Fig. 50, not shown). The Fig. 5 arrangement may be attached to a bottle by means other than the screw arrangement shown. For example attachment may be by means of a cork plug attached to the device. The part j may be provided with a removable plug, or rupturable means to facilitate draining of the bottle. A one-way gravity operated valve may also be provided for permitting drainage of the measuring chamber when the device is returned after dispensing to an inoperative position.

Classifications:**International (IPC 8-9):** G01F11/26 (Advanced/Invention);

G01F11/10 (Core/Invention)

International (IPC 1-7): G01F11/26**CPC:** G01F11/266**European:** G01F11/26B3**Family:**

Publication number	Publication date	Application number	Application date
GB1300058 A	19721220	GB19690010410	19690226

Priority:

GB19690010410 19690226

Probable Assignee:

GAUNTLETT JOHN HARRY

Assignee(s): (std):

GAUNTLETT JOHN HARRY

Assignee(s):

JOHN HARRY GAUNTLETT

Inventor(s): (std):

GAUNTLETT JOHN HARRY

Inventor(s):

JOHN HARRY GAUNTLETT

182) Family number: 23085809 (FR1323813A)

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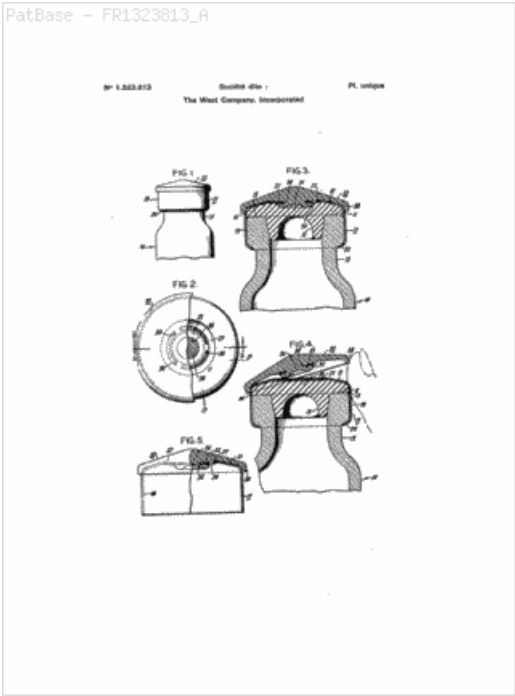
Title: CAPUCHONS POUR FLACONS CAPS BOTTLE (Machine translation)**Abstract:** Source: FR1323813A [FR] (Claim 1) **ATTENTION** debut du champ CLMS peut contenir fin de DESC **.

Il ressort de ce qui precede que la presente invention realise une amelioration des dispositifs de fermeture pour des flacons pharmaceutiques et similaires, dispositif qui est d'une construction unitaire, a l'abri des interventions non autorisees et dans laquelle le disque amovible peut etre facilement enleve avec une main sans exposer aucune partie de la main de l'utilisateur aux aretes tranchantes ou irregulieres risquant de le blesser.

Machine translation: (Claim 1) CAUTION ** ** start of CLMS field may contain end of DESC **. It is clear from the foregoing that the present invention provides an improvement of closures for pharmaceutical vials and similar device which is of unitary construction, has protected from unauthorized interventions in which the removable disk can be easily removed with one hand without exposing any part of the user's hand with sharp edges or irregular at risk of injury.

Classifications:**International (IPC 8-9):** B65D51/00 (Advanced/Invention);

B65D51/00 (Core/Invention)
International (IPC 1-7): A61J1/06
CPC: B65D51/002
European: B65D51/00B



Family:

Publication number	Publication date	Application number	Application date
FR1323813 A	19630412	FR19620893333	19620404

Priority:

FR19620893333 19620404

Probable Assignee:

WEST CO

Assignee(s): (std):

WEST CO

Assignee(s):

WEST CO INC

183) Family number: 3130818 (FR2227187A)

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Title: TEAR-OFF METAL SEALING CAP FOR BOTTLE - HAS ROUND SHAPE WITHOUT PROTRUSIONS TO THUS ENABLE USE IN CAPPING MACHINES

Abstract: Tear-off metal sealing cap for bottles, comprises a top section, and a skirt round the top of the bottle with a lip folded under to hold the cap in place. The cap is removed by pulling on a tongue of metal formed in the skirt, and tearing along a weakened line between the top section and the skirt. There is also a weakened line between the end of the tongue and the lower edge of the skirt, angled in the direction of tearing. The cap has a round shape, without protrusions or lips etc, to facilitate using the cap in automatic capping machines.

Classifications:

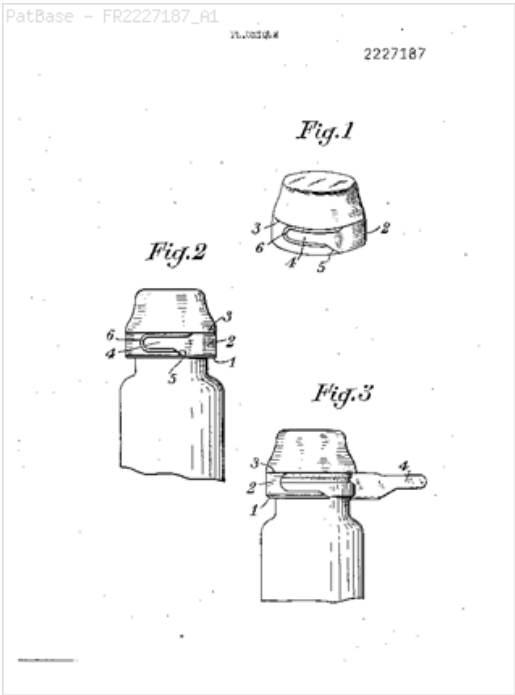
International (IPC 8-9): B65D41/40 (Advanced/Invention);

B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/32

CPC: B65D41/40

European: B65D41/40



Family:

Publication number	Publication date	Application number	Application date
FR2227187 A1	19741122	FR19730014758	19730424

Priority:

FR19730014758 19730424

Probable Assignee: SIGMA TAU IND FARMACEUTI**Assignee(s):** (std): SIGMA TAU IND FARMACEUTI**Assignee(s):** SIGMA TAU IND FARMACEUTICHE RIUN ; SIGMA TAU IND FARMACEUTICHE RIUN IT**184) Family number: 56089819** (US2015232236A)

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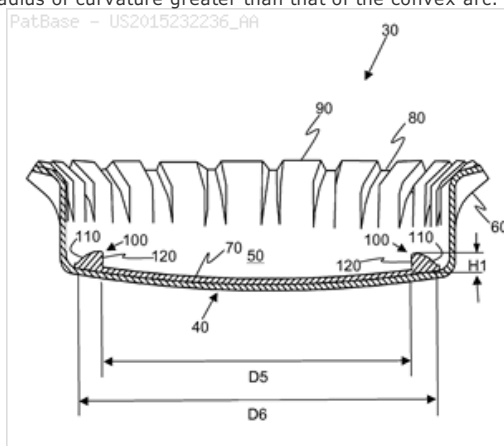
Title: CROWN-TYPE METAL CAP FOR SEALING A METAL BOTTLE

Abstract: A crown-type metal cap for sealing the mouth of a preferably aluminum metal bottle, the cap being formed by a laminar part of circular plan form, including an inner face and an outer face and provided peripherally with a closure skirt and, on the inner face, with a closure gasket including a peripheral lip. The cross-section of the peripheral lip is formed by a convex arc having at least one radius of curvature, adjacent to the closure skirt, the lip also including a side opposite the closing skirt, which can be a straight side or a curved side having a radius of curvature greater than that of the convex arc.

Classifications:**International (IPC 8-9):** B65D41/00 B65D41/12

B65D53/02 (Advanced/Invention);

B65D41/00 (Core/Invention)

CPC: B65D53/02 B65D41/125 B65D53/04**US:** 215/345**Family:**

Publication number	Publication date	Application number	Application date
DE602013029258 D1	20171214	DE201360029258T	20130918
EP2899134 A1	20150729	EP20130838623	20130918
EP2899134 A4	20160504	EP20130838623	20130918
EP2899134 B1	20171108	EP20130838623	20130918
ES2657637 T3	20180306	ES20130838623T	20130918
MX2012010782 A1	20140324	MX20120010782	20120918
MX349795 B	20170811	MX20120010782	20120918
PL2899134 T3	20180530	PL20130838623T	20130918
US2015232236 AA	20150820	US20130429320	20130918
US10183787 BB	20190122	US20130429320	20130918
WO14046532 A1	20140327	WO2013MX00106	20130918

Priority:

MX20120010782 20120918 EP20130838623 20130918 WO2013MX00106 20130918

Probable Assignee: FABRICAS MONTERREY DE CV SA**Assignee(s):** (std): FABRICAS MONTERREY DE CV SA ; FABRICAS MONTERREY S A DE C V**Inventor(s):** (std): CAMACHO PAREDES JUAN ANTONIO ; ROBLES GONZALEZ GILBERTO ; PAREDES JUAN ANTONIO CAMACHO ; GONZALEZ GILBERTO ROBLES ; JUAN ANTONIO CAMACHO PAREDES ; GILBERTO ROBLES GONZALEZ**Agent(s):** ELZABURU SLP; LIND ROBERT; CARPINTERO MARIO; BAKER AND HOSTETLER LLP; GARCIA CORTEZ CARLOS ADRIAN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

185) Family number: 22784819 (US3198374A)

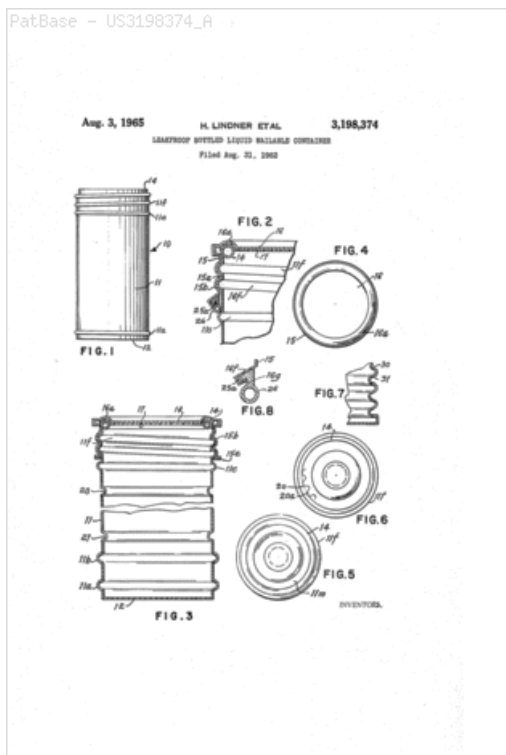
© PatBase

Title: LEAKPROOF BOTTLED LIQUID MAILABLE CONTAINER

Abstract: (Claim 1) 1. In combination, a mailable leakproof container having a cylindrical wall and a bottom wall formed without joining seams and provided with a coupling thread on the upper end portion of the body wall, the upper end edge of the body wall being curled inwardly into pressure contact with the body wall to provide a true circular inwardly rolled edge disposed in a true right angle relation to the major axis of the container, and a closure cap having a skirt formed with a mating coupling thread. threaded thereby on the container, the closure cap having an end wall integral with the skirt thereof and said end wall having a circular groove near its outer edge portions and a sealing gasket engaged with the inner surface of said wall and said groove and said rolled edge being forced against said sealing gasket "into said groove when the closure cap is threaded on said container, whereby a leakless sealing engagement is established between said closure cap and said container, the cylindrical wall having internal beads spaced longitudinally thereon and having approximately g the same internal diameter as the internal diameter of the curled edge of the body to provide a bore diameter of approximately uniform diameter from end to end through which a bottle may freely slide into and out of the container wall.] g

Classifications:

International (IPC 8-9): B65D1/16 B65D41/04 (Advanced/Invention);
B65D1/00 B65D41/04 (Core/Invention)
International (IPC 1-7): B65D8/02
CPC: B65D1/16 B65D41/0435
European: B65D1/16 B65D41/04D
US: 220/304 220/669



Family:

Publication number	Publication date	Application number	Application date
US3198374 A	19650803	US19620220811	19620831

Priority:

US19620220811 19620831

Probable Assignee: ALFRED LINDNER
Assignee(s): (std): ALFRED LINDNER ; HAROLD LINDNER
Inventor(s): (std): ALFRED LINDNER ; HAROLD LINDNER
Inventor(s): LINDNER ALFRED ; LINDNER HAROLD

186) Family number: 29900822 (US2355385A)

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Title: MACHINE FOR APPLYING CLOSURES TO BOTTLES

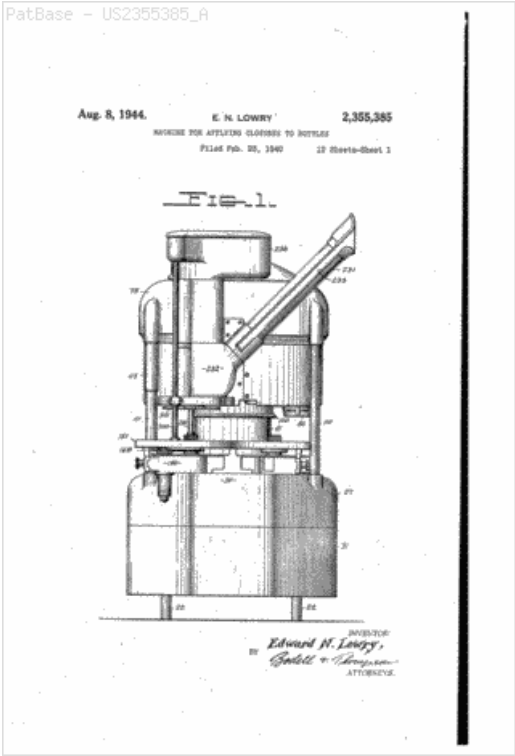
Abstract: What I claim is: 1. A machine for 'applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles comprising a frame, means operable to advance a procession of bottles with caps positioned thereon, a series of cap contracting members arranged above said bottles, and said members being movable in unison with the procession of bottles, each of said members being provided with a heater unit, said cap contracting members being positioned with the heater unit of each of said members in heat exchanging relation with the cap on the bottle below said member for a predetermined distance of the advancement of the bottles to heat the marginal portion of the cap, and means operable after the heating of the cap to effect relative axial movement between the bottles and said contracting members to fold the marginal portion of the cap about the top of the bottle and contract the folded portion against the top of the bottle, and to subsequently move the contracting members out of engagement with the capped bottles. = ~ » ` 2. A machine for applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles, comprising a base, a turret rotatably mounted on the base and operable to advance a procession of bottles with caps positioned thereon, an annular series of cap contracting heads arranged above the turret with each of said heads positioned in alignment with a bottle on the turret, said annular series of heads being movable in unison with said turret and each of said heads being provided with a cap heating unit, and cam means operable to successively move the heads downwardly to fold the marginal portion of the cap about the top of the bottle, each of said heads being provided with a plurality of cap engaging members operable to contract the folded portion of the cap against the bottle, a blower, a duct extending from said blower to the interior of each of said heads and operable to direct a blast of air from said blower through said heads to effect cooling of said cap engaging members. 3. A machine for applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles, comprising a frame, means operable for advancing a procession of bottles with caps thereon, cap contracting members movable in unison with said procession of bottles above the same, said cap contracting members comprising a body, an annular series of jaws arranged in the body to receive the top of the bottle with a cap thereon and being movable radially toward and from the axis of the body to contract the cap about the neck of the bottle, an annular heating unit secured to the lower end of the body and operable to heat the marginal portion of the cap during movement of the bottle and the contracting member, an annular folding member depending from said body and arranged within said heater and being operable upon relative axial movement between the bottle and the cap contracting member to fold the heated portion of the cap about the neck of the bottle, and means operable to direct an air blast about said jaws and folding member. 4. A machine for applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles, comprising a frame, means operable for advancing a procession of bottles with caps thereon, cap contracting members movable in unison with said procession of bottles above the same, said cap contracting members comprising a body, a circular member rotatably mounted in the lower end of the body, a plurality of cap contracting jaws slidably mounted in the body and being movable radially toward and from the axis thereof upon relative rotation between said member and the body, said body being formed with an air duct receiving passage and with an annular passage connecting therewith and arranged above said circular member, said body being formed with a plurality of passages extending from said annular passage outwardly through the body, and said circular member being provided with a plurality of passages extending from said annular passage downwardly to the interior of said member, an annular heating member secured to the lower end of the body and operable to heat the marginal portion of the cap on the bottle positioned below said cap contracting member, an annular folding member depending from the body and arranged within said heater and being operable to fold the heated portion of the cap about the neck of the bottle upon axial movement

of the cap contracting members toward the bottle, means operable to create a blast of air and a duct connected with said means and extending into the duct receiving passage in the body of the cap contracting members. 5. A machine for applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles, comprising a frame, a horizontal turret journaled upon the frame and being provided with a plurality of circumferentially spaced apart bottle supports, an annular series of cap contracting heads arranged above said turret with each of said heads being positioned over a bottle support and said heads being movable in unison with said turret, bottle conveyor means operable to feed uncapped bottles onto said turret and to feed capped bottles off from said turret, each of said heads comprising a body formed with an aperture in the lower end thereof, an annular cap heating member depending from each of said heads and arranged concentrically of said aperture, cap feeding means operable to deposit a cap on the top of each bottle as the same is fed onto the turret, cam means cooperable with said heads to move the same toward the bottles to position said heating member in heat exchanging relation with the cap on the bottle and to subsequently move said heads into engagement with the heated caps to fold the same about the top of the bottle, a blower mounted on the frame having an intake passage and a discharge passage and a duct leading from said discharge passage to the interior of each of said heads and directing an air blast through the cap engaging portion of each head. 6. A machine for applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles, comprising a frame, a bottle support for supporting a bottle with a cap thereon, a cap contracting head formed with a bottle top receiving recess in the lower end thereof, an annular heating member depending from said head and being arranged concentrically with said recess, a plunger slidably mounted in said body and being movable into and out of said recess, means operable to effect relative axial movement between said bottle support and said head to effect engagement between said plunger and the cap on the bottle, and to position said heating member in heat exchanging relation to the cap, said means being operable to subsequently effect further axial movement between said support and head to move the top of the bottle and said plunger into said recess, said head being operable upon engagement with the cap to fold the marginal portion thereof about the top of the bottle, said head being formed with an air duct having an outlet passage opening through the top wall of said recess, blower means operable to direct a blast of air through said duct, and said plunger being operable upon movement thereof into said recess to restrict the flow of air through the recess. 7. A machine for applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles, comprising a frame, a bottle support, a cap contracting head formed with a bottle top SU 'IO receiving recess in the lower end thereof, an annular cap heating member depending from said head and being arranged concentrically with said recess, an annular cap folding member depending from the head and arranged within said heating member, said head being provided with an air duct having an outlet passage opening into said recess, means operable to create a blast of air through said duct and passage, and said cap folding member being formed with an aperture through the side wall thereof, a plunger slidably mounted in the head and movable through said folding member into and out of said recess. means operable to effect relative axial movement between said bottle support and said head to effect engagement between said plunger and a cap on the bottle and to position said heating member in heat exchanging relation to the marginal portion of the cap, and said means being operable to subsequently effect further axial movement between said support and head to move the top of the bottle through said folding member and into said recess, said folding member being operable during such movement to fold the marginal portion of the cap about the top of the bottle and said plunger being operable upon movement thereof into said folding member to direct the air now from said bottle top receiving recess through the aperture in said folding member. 8. A machine for applying hood caps to bottles, comprising a frame, a bottle support, a cap contracting head arranged above said bottle support and formed with a bottle top receiving aperture in the lower end thereof, an annular member rotatably mounted in said aperture, an annular series of pins depending from said head, and a second series of pins depending from said annular member, a guide plate arranged at the lower end of said head and annular member and being formed with a plurality of radially extending slots, a cap contracting jaw slidably mounted in each of said slots, a cam member pivotally secured to each of said jaws and being cooperable with said pins upon relative rotation between said head and annular member to effect sliding movement of said jaws toward and from the axis of the head, means operable to effect relative axial movement between said bottle support and said head to position the top of the bottle with a cap thereon in said annular member, and means operable to subsequently effect relative rotation between said head and said annular member. 9. A machine for applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles, comprising a frame, a turret rotatably mounted upon the frame and operable to carry bottles with caps thereon, a circular head supporting member arranged coaxially above the turret and being rotatable therewith, an annular series of cap contracting heads slidably mounted in said head supporting member toward and from the turret, each of said heads being provided with a cap heating element, cam means carried by the frame and cooperable with said heads to move the same axially toward said turret to position the heating element of each head in heat exchanging relation with a cap on the top of a bottle and to effect further axial movement of said heads into engagement with the caps, and said heads being operable upon such movement to fold the marginal portion of the cap about the top of the bottle and to subsequently move said heads upwardly out of engagement with the bottles, said head supporting member being formed with an annular duct and each of said heads being provided with a conduit extending into said head supporting member and connecting said duct with the interior of the head, and means operable to direct a blast of air through the duct in said head supporting member. 10. A machine for applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles, comprising a frame, a turret rotatably mounted upon the frame, a circular head supporting member arranged above said turret and being rotatable therewith, said head supporting member being mounted upon a vertically extending column arranged centrally of the turret, an annular series of cap contracting heads slidably mounted in said supporting member and being movable toward and from said turret, means operable upon rotation of said turret to feed uncapped bottles thereon and to discharge capped bottles therefrom, cam means carried by the frame and cooperable with said heads to move the same axially toward said turret to position said heating element in heat exchanging relation with a cap on the top of the bottle and to effect further axial movement of said heads into engagement with the caps, and said heads being operable upon such movement to fold the marginal portion of the cap about the top of the bottle, said means being also operable to subsequently move said heads upwardly out of engagement with the bottles, said head supporting member being formed with an annular duct and each of said heads being provided with a conduit extending into said head supporting member and connecting said duct with the interior of the head, a blower mounted on the frame centrally of said head supporting member and operable to direct a blast of air therethrough. 11. A machine for applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles, comprising a frame, a turret rotatably mounted on the frame, a circular head supporting member arranged above said turret and being rotatable therewith, said head supporting member being mounted upon a vertically extending column arranged centrally of the turret, an annular series of cap contracting heads slidably mounted in said supporting member and being movable toward and from said turret, means operable upon rotation of said turret to feed uncapped bottles thereon and to discharge capped bottles therefrom, cam means carried by the frame and cooperable with said heads to move the same axially toward said turret to position said heating element in heat exchanging relation with a cap on the top of the bottle and to effect further axial movement of said heads into engagement with the caps, and said heads being operable upon such movement to fold the marginal portion of the cap about the top of the bottle, said means being also operable to subsequently move said heads upwardly out of engagement with the bottles, said head supporting member being formed with an annular duct, each of said heads being provided with a conduit, the upper ends of said conduits being slidably arranged in said duct and connecting the same with the interior of the heads, a blower arranged centrally of said head supporting member and having an inlet passage connected with said column and having a discharge passage opening into the duct of said head supporting member, and said blower being operable to create a flow of air through said duct and conduits into said heads. 12. A machine for applying hood caps to bottles, the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles, comprising a base, a turret rotatably mounted on the base and operable to advance a procession of bottles with caps thereon, an annular series of cap contracting heads arranged above the turret with each of said heads positioned in alignment with a bottle on the turret, said annular series of heads being movable in unison with said turret and each of said heads being provided with a cap heating unit, and cam means operable to successively move the heads downwardly to fold the marginal portion of the cap about the top of the bottle, each of said heads being provided with a plurality of cap engaging members operable to contract the folded portion of the cap against the bottle, a source of air pressure, a channel leading from said source to each head to direct a blast of air through the same for cooling said cap engaging members, and humidifying means operable to maintain said air blast at a predetermined humidity. 13. A machine for applying hood caps to bottles; the skirt portions of which caps are coated with a substance rendered adhesive by the application of heat to make the caps self-securing on the bottles comprising a base, a turret rotatably mounted on the base and operable to advance a procession of bottles with a cap on the top of each bottle, an annular series of cap contracting heads arranged above the turret with each of said heads positioned in alignment with a bottle on the turret, said annular series of heads being movable in unison with said turret and each of said heads being provided with a cap heating unit, and

cam means operable 'to successively move the heads downwardly to fold the marginal portion of ~the cap about the top of the bottle, each of said heads-being provided with a plurality of cap engaging members operable to contract ,the folded portion of the cap against the bottlega blower, means connected to the intake of said blower-and operable to maintain the air taken in the blower at a predetermined humidity, a duct extending from 'said blower to each of said heads and operable -to directs, blast of air from said .blower through said heads to effect cooling of said -cap engaging members, 14. A machine for applying hood caps to bottles, the skirtportions of which caps arecoated with a substance rendered adhesive by the application of heat _to make the caps self-securing on the bottles, comprising a base, a turret rotatably mounted on the base-and operable to advance a procession of bottles with a cap on the top of each bottle, a head supporting member 'arranged above the base, an annular series of cap contracting heads carried by ,said -supporting member \with each of said heads positioned in alinement with a bottle on the turret and said supporting member being rotatable in unison with the turret, each of said heads being provided with a cap heating unit, said cap contracting members being positioned \with the heater unit of each of said members in heat exchanging relation with the cap on the -bottle below said member for a predetermined distance of the advancement of the bottle by the turret to heat the marginal pm-_ tion 'of the cap, and cam means operable to suc_ cessively move the heads downwardly to fold the marginal portion of the heated cap about the top of the bottle, each of said heads being provided with means operable to contract the folded portion of the cap against the bottle, a blower arranged centrally of said head supporting member, a de~humidifying means arranged in the base and being connected to the intake of said blower. a duct connecting the outlet of said blower with each of said heads and being operable to direct a blast of de-humidified air through each head. 15. A machine for applying closures to bottles, which closures are coated with a substance rendered adhesive by the application of heat, to make the closures self securing on the bottles, comprising a frame, means for supporting a plurality of bottles, a closure magazine for supporting a plurality of closures, closure transfer mechanism operable to transfer closures from said magazine and deposit the same on the tops of the bottles, a plurality of closure contracting members, one of said members being arranged above each of said bottles, a closure heating member carried by each closure contracting member, means operable to maintain said closure contracting members with the heating members thereof in heat exchanging relation to the closures on the bottles below said members for a predetermined time, and means operable to subsequently eiTect relative axial movement between the bottles and said closure contracting members to cause said members to contract the marginal portions of the heated caps about the necks of the bottles, and thereafter move said members out of engagement with the capped bottles. 16. A machine for applying hood caps to bottles, which caps are coated with a substance rendered adhesive by the application of heat to make the closures self-securing on the bottles, comprising a bottle support, a cap contracting head arranged above said bottle support, a cap heating member carried by said head and operable to heat a cap positioned on the bottle, a source of air pressure, a channel leading from said source to each head and operable to direct a blast of air through said head to maintain the same at 9. relatively low temperature during the heating of the cap, humidifying means operable to maintain said air blast at a predetermined humidity, and means operable to effect relative vertical movement between the bottle support and head to fold the marginal portion of the heated cap about the neck of the bottle, and said head being thereafter operable to contract the cap on the bottle top, 17. A machine for applying hood caps to bottles, which caps are coated with a. substance rendered adhesive by the application of heat; to make the caps self-securing on the bottles, comprising a bottle support, a cap{cont1'acting head arranged above said bottle support, a cap heating member carried by said head and operable to heat a cap positioned on the bottle on said support, a source of air pressure, a channel leading from said source to said head and operable to direct a blast of air through the head to maintain the same at a relatively low temperature, means operable to direct said air blast from Contact with the cap while the same is being heated, and means operable to effect relative vertical movement between the bottle support and said head to bring the heated cap and the head into engagement, and to fold the marginal portion of the heated cap about the neck of the bottle, and said head being thereafter operable to contract the cap on the bottle 11013

Classifications:

International (IPC 8-9): B67B3/02 (Advanced/Invention);
B67B3/00 (Core/Invention)
CPC: B67B3/02 B67B3/023
European: B67B3/02 B67B3/02B
US: 221/211 221/36 53/141 53/306 53/344



Family:

Publication number	Publication date	Application number	Application date
US2355385 A	19440808	US19400320366	19400223

Priority:

US19400320366 19400223

Probable Assignee:

OSWEGO FALLS CORP

Assignee(s): (std):

OSWEGO FALLS CORP

Inventor(s): (std):

LOWRY EDWARD N

187) Family number: 21646828 (US2659509A)

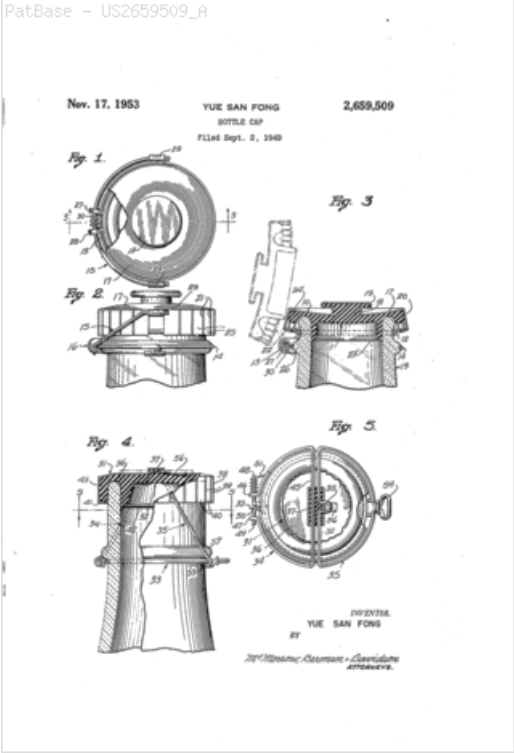
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Title: BOTTLE CAP

Abstract: (Claim 1) What is claimed is: A bottle cap comprising an outer shell of resilient sheet material including a top disk of concavo-convex shape and a skirt including a plurality of spring fingers extending marginally around said disk and substantially perpendicularly from one side thereof, said skirt being circumferentially contracted when the convexity of said disk extends in a direction away from said skirt and circumferentially expanded when the convexity of said disk extends in a direction toward said skirt and said disk being deflected from its skirt contracting to its skirt expanding Shape by pressure on the central portion of the side thereof remote from said skirt and from its skirt expanding to its skirt contracting shape by pressure on the marginal portion of the side thereof remote from said skirt, a hollow knob projecting from the central portion of the side of said disk remote from said skirt to facilitate application of skirt expanding pressure to said disk, and a liner of elastic material secured in said outer shell and including 2, wall disposed against the side of said top disk from which said skirt extends, an annular boss extending from the side of said wall remote from said top disk and adapted to fit into the open end of an associated bottle neck, an annular flange projecting from said wall and circumspatially surrounding said annular boss in engagement with the inner side of said skirt, said flange being adapted to it around the end portion of a bottle neck disposed between said boss and said flange, and an extension on said top wall filling said hollow knob and securing said liner in said outer shell.

Classifications:

International (IPC 8-9): B65D45/08 B65D45/20 (Advanced/Invention); B65D45/00 (Core/Invention)
International (IPC 1-7): B65D45/02
CPC: Y10S48/07 B65D45/20 B65D45/08
European: B65D45/08 B65D45/20
US: 215/235 215/301 48/DIG.7



Family:

Publication number	Publication date	Application number	Application date
US2659509 A	19531117	US19490113743	19490902

Priority:

US19490113743 19490902

Probable Assignee:

SAN FONG YUE

Assignee(s): (std):

SAN FONG YUE

Inventor(s): (std):

SAN FONG YUE

Inventor(s):

FONG YUE SAN

188) Family number: 29681839 (US3372527A)

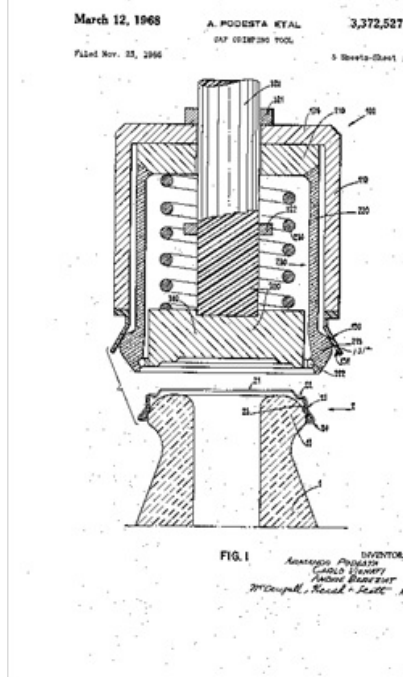
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Title: Cap crimping tool

Abstract: 1,099,728. Capping bottles. L'ALUMINIUM FRANCAIS. Nov. 23, 1965 [Nov. 24, 1964], No. 49732/65. Heading B8T. A tool for crimping a cap 2 on a bottle 1 has a pusher 300 and a number of resilient blades 220 which crimp the cap to the bottle as it moves upwards, its neck engaging the pusher 300 and moving it so that a spring 230 between the pusher head 310 and a support ring 210 of the resilient blades is compressed. The cap 2 on the bottle 1 is engaged by a ring spring 222, which may be of helical form. As the bottle neck advances further upwards, it forces projections 221 on the resilient blades 220 to press against a frusto-conical lip 131 on the end of a fixed sleeve 100. This causes the ring 210 to be pulled downwards as the blades 220 are forced further apart. The upward movement of the bottle 1 causes the spring 222 to contact a lip 24 on the cap 2. A stop 322 on the pusher 300 then engages the support ring 210 of the resilient blades and causes the blades 220 to move up with it. The projections 221 slide inside the frusto-conical lip 131 and press the lip 24 of the cap under the rim of the bottle 1. The bottle 1 is moved downwards and pulls the resilient blades with it, until they reach the edge of the lip 131, Fig. 4 (not shown). The bottle 1 can now be disengaged from the tool, which returns to its original position. In a modification, Fig. 5 (not shown), a frusto-conical lip (130) on a fixed housing, is engaged by slidable projections (221) arranged mid-way along instead of at the end of the resilient blades (220). A device for receiving and positioning the caps before the bottle is introduced to the tool is provided. It comprises three fingers (142) which are urged by springs (144) towards the axis of the tool. Alternatively, the caps 2 may be held in position by other means, e.g. magnetic means. Instead of the bottle 1 moving up with the tool, the tool may move downwards on to the bottle.

Classifications:

International (IPC 8-9): B67B3/14 (Advanced/Invention); B67B3/00 (Core/Invention)
International (IPC 1-7): B65D41/12 B67B3/10 B67B3/14
CPC: B67B3/14
European: 64B23D2B 64B23D2D B67B3/14
US: 53/358

**Family:**

Publication number	Publication date	Application number	Application date
AT269672 B	19690325	AT19650010533	19651123
BE672764 A	19660324		19651124
CH435008 A	19670430	CH19650016086	19651123
ES319904 A1	19660801	ES19650319904	19651123
FR1423880 A	19660107	FR19640996102	19641124
GB1099728 A	19680117	GB19650049732	19651123
LU49904 A	19660523	LU19650049904	19651123
NL6515157 A	19660525	NL19650015157	19651123
SE300932 B	19680513	SE19650015183	19651124
US3372527 A	19680312	US19650509376	19651123

Priority:

FR19640996102 19641124

Probable Assignee: ALUMINIUM FRANCAIS**Assignee(s):** (std): ALUMINIUM FRANAIS L ; ALUMINIUM FRANCAIS**Assignee(s):** L ALUMINIUM FRANAIS ; L ALUMINIUM FRANCAIS**Inventor(s):** (std): PODESTA A ; VIGNATI C ; BEREZIAT A ; PODESTA ARMANDO ; VIGNATI CARLO ; BEREZIAT ANDRE ; ANDRE BEREZIAT ; ARMANDO PODESTA ; CARLO VIGNATI**189) Family number: 29604843** (GB371291A)

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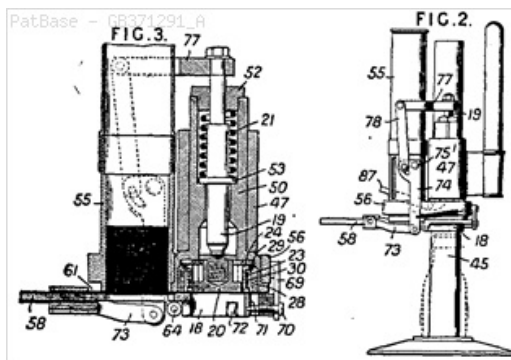
Title: Improvements in or relating to machines for capping vessels with beaded mouths

Abstract: 371,291. Bottle - capping machines. CROWN CORK and SEAL CO., Inc., Highlandtown, Baltimore, U.S.A.- (Assignees of Booth, G. W.; c/o Crown Cork and Seal Co., Inc., Highlandtown, Baltimore, U.S.A.) Nov. 3, 1931, No. 30448. Convention date, July 27. [Class 125 (ii).] A machine for capping bottles and c. comprises an expansible, segmental throat, which irons a substantially flat disc over the bead from the top thereof to its widest part without touching the extreme edge of the disc, which buckles under the bead. Each segment 23 has a flange 24 which rocks about a split ring 29 which may be integral with the flange, resting on housing 28, and the segments are held yieldingly together by a spring 30. In a sleeve 47 carried by an arm clamped on the standard 45 works a tubular member 50 recessed below the sleeve 47 to accommodate the housing 28 and having a collar 56 supporting a supply hopper 55. A presser tool 20 is connected by a ball-and-socket joint to a stem 19 encircled by a spring 21 which presses against a plug 52 in the member 50 and an abutment 53 on the stem. A disc is fed below the tool 20 by a slide plate 61 having a recessed end and being connected to the stem 19 by links 73, levers 74 pivoted at 75, links 78 and a yoke 77. Vertical movement is imparted to the member 50 via a rack and pinion by an arm 18 mounted in the sleeve-carrying arm. In Figs. 2 and 3 the member 50 is shown in its uppermost position. A disc rests on an annular guide 18 hinged at 64 to the slide rest plate 58 and held in position by a hook 69 engaging a projecting screw 70 which supports a plate 71 which limits movement of the disc to the right. When the member 50 is depressed the tool 20 presses the cap on the vessel, which is centred by leaf springs 72, and on further downward movement the throat 23 expands, ironing and buckling the margin of the disc around and under the bead, the stem 19 moving upward relatively to the member 50, thus moving the slide to the left, the stack of discs dropping. When the member 50 is raised the stem moves downward relatively thereto and the slide moves to the right, positioning a disc under the tool 20. When the slide is to the right a lever 87, pivoted on the collar 56 is held as shown by the engagement of its short arm with the sleeve-carrying arm, but when the member 50 is depressed and the slide 61 thus moved to the left the short arm is disengaged and the long arm is spring-pulled down, a shoulder thereon moving into the path of a stud on a lever 74 and locking the slide into the left-hand position. Relative movement between the vessel and the throat may be obtained by moving either, by hand or power.

Classifications:**International (IPC 8-9):** B65D53/04 B67B3/02 B67B3/04 B67B3/10 B67B3/14 (Advanced/Invention);

B65D53/00 B67B3/00 (Core/Invention)

International (IPC 1-7): B65D53/04 B67B3/02 B67B3/10 B67B3/14**CPC:** B67B3/02 B65D53/04 B67B3/14 B67B3/04 B67B3/10



Family:

Publication number	Publication date	Application number	Application date
DE580183 A	19330707	DE1931C045609D	19311113
FR729351 A	19320723		19320107
FR729352 A	19320723		19320107
FR729353 A	19320723		19320107
GB371291 A	19320421	GB19310030448	19311103
GB372233 A	19320505	GB19310030449	19311103
GB374758 A	19320616	GB19310030450	19311103

Priority:

DE1931C045609 19311113

Probable Assignee: CROWN CORK AND SEAL CO

Assignee(s): (std): CROWN CORK AND SEAL CO

Assignee(s): CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL COMPANY INC

190) Family number: 22210847 (US2418723A)

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Title: BOTTLE CLOSURE

Abstract: Having thus described the invention, what is claimed is: ~ V 2,413,723 - f l. A bottle closure comprising a cap having a top and a depending skirt having an opening therein, a resilient liner mounted within said cap and having its lower peripheral edge fastened to the lower peripheral edge of said skirt, a split ring provided with hooked ends mounted within said cap and interposed between said skirt and said liner with its hooked ends projecting through said opening; and a lever having an elongated opening therein receiving and engaging said hooked ends and adapted, when operated in a plane tangential to the skirt of the cap, to force the hooked ends toward each other by the camming action of the edges of the elongated opening on said ends, thereby contracting said ring. 2. A bottle closure, as set forth in claim 1, wherein said skirt and said liner are each provided with an inwardly extending circumferential shoulder and wherein said split ring rests on the shoulder formed on said liner. 3. A bottle closure, as set forth in claim 1, wherein the portion of said skirt surrounding the opening formed therein is pressed outward to form a platform having a hat surface upon which said lever is mounted. 4. A bottle closure, as set forth in claim 1, wherein said elongated opening in said lever is provided with an opposing pair of recesses formed in its upper and lower edges intermediate of the ends thereof, and an opposing pair of recesses formed in its end edges intermediate of the ends thereof, said recesses acting as detents to receive the ends of said split ring and cooperating therewith to hold said lever in a vertical "open" position. and in a horizontal "closed" position. 5. A bottle closure, as set forth in claim 1, wherein the hooked ends of the split ring are each provided with a shoulder adapted to bear against the outer surface of the lever to hold the lever tightly against the cap and wherein the lever is provided with an outwardly turned peripheral flange extending beyond the hooked ends of the split ring. 6; A bottle closure, as set forth in claim 1, wherein the resilient liner interposed between the split ring and the bottle, is constructed and arranged with sufficient compressibility and space for dexting as to afford resilient reaction to the locking combination of the lever and split ring. 7. A bottle closure comprising a cap having a top and a depending skirt portion having an opening therein, a resilient liner mounted within said cap and having its lower peripheral edge fastened to said skirt, a split ring provided with outwardly turned ends mounted within said cap and interposed between said skirt, and said liner with its outwardly turned ends projecting through said opening; and cam means operatively engaged with the outwardly turned ends of the ring for contracting the latter around said liner

Classifications:

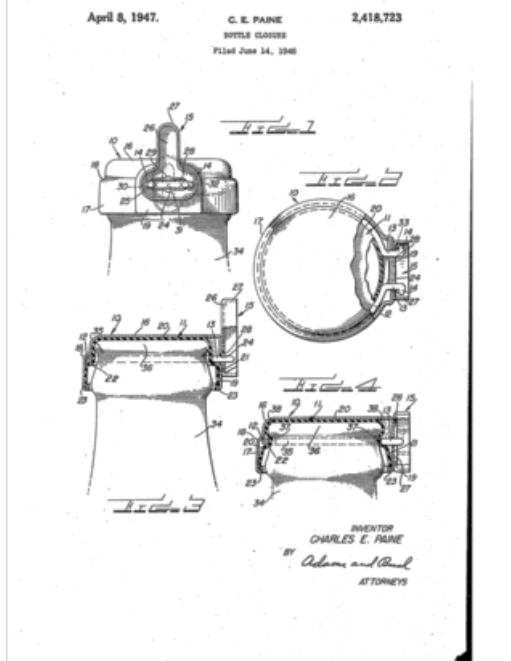
International (IPC 8-9): B65D45/34 (Advanced/Invention);

B65D45/00 (Core/Invention)

CPC: B65D45/34 Y10T292/212

European: B65D45/34

US: 215/272 292/256.65

**Family:**

Publication number	Publication date	Application number	Application date
US2418723 A	19470408	US19460676623	19460614

Priority:

US19460676623 19460614

Probable Assignee:

PAINE CHARLES E

Assignee(s): (std):

PAINE CHARLES E

Inventor(s): (std):

PAINE CHARLES E

191) Family number: 23413848 (US6367895B)

© PatBase

Title: Enhancement to accommodate tall beverage containers in an automatic merchandiser

Abstract: A multiple product merchandising machine of the rotating drum type which is capable of vending large size bottles. It includes a cylindrical merchandise carrying drum mounted within the cabinet for rotation about its central longitudinal axis disposed vertically within the cabinet and having a plurality of annular product supporting shelves at spaced intervals along the drum, concentric with the axis of the drum, a plurality vertical walls extending between adjacent shelves and together with the shelves defining a plurality of individual product compartments, a central column extending the height of the drum and having wall portions adjacent each product compartment with at least one hole defined in at least some of the wall portions, the holes so positioned and arranged that a necked-down portion of a bottle supporting a cap can be inserted into each hole with the remainder of the bottle being disposed within the confines of an associated product compartment.

Classifications:

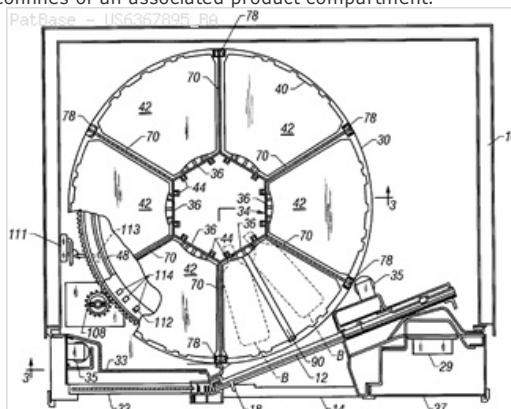
International (IPC 8-9): G07F11/00 G07F11/54 (Advanced/Invention);
G07F11/00 G07F11/46 (Core/Invention)

International (IPC 1-7): A47F3/02 G07F11/00 G07F11/54

CPC: G07F11/54

European: G07F11/54

US: 312/97.1 312/971

**Family:**

Publication number	Publication date	Application number	Application date
AU2001281155 AA	20020304	AU20010281155	20010808
US6367895 BA	20020409	US20000643400	20000822
WO0217249 A2	20020228	WO2001US24754	20010808
WO0217249 A3	20020613	WO2001US24754	20010808

Priority:

US20000096434 20000822

US20000643400 20000822

WO2001US24754 20010808

Probable Assignee: CRANE CO

Assignee(s): (std): CRANE CO
Inventor(s): (std): DUNCAN DAVID W ; HUFFMAN JOHN P ; PETERSEN RONALD P
Inventor(s): RONALD P PETERSEN ; JOHN P HUFFMAN ; DAVID W DUNCAN
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

192) Family number: 22862849 (US3072277A)

© PatBase

Title: BOTTLE STOPPERS

Abstract: (Claim 1) 1. I claim: I, A closure for a bottle having a collar projecting radially outwards from the bottle neck, comprising a sealing member adapted to seal the bottle having an elastic tubular portion adapted to fit into the mouth of the bottle neck, and having a radial flange portion fanned integrally with the tubular portion overlying the top of the mouth of the neck, with said radial flange having an elastic annular rib adapted to engage the top of the bottle neck, a cap integrally formed of hard resilient plastic and comprising a flat annular top portion adapted to overlie the flange of the flange of the sealing member, an uninterrupted skirt portion having an inner diameter greater than the outer diameter of the collar on the bottle neck and depending from the outer margin of the annular top portion, a plurality of locking tags projecting inwardly and upwardly from the inner surface of the lower part of said skirt portion in spaced relation from the annular top portion so as to be able to snap below said collar when the cap is pressed down over the bottle mouth to secure the sealing member thereon, said annular top portion of the closure cap having gaps formed therein always vertically above each of the locking tags and having a width corresponding to the width of the tags.

Classifications:

International (IPC 8-9): B65D41/32 B65D41/58

B65D47/10 (Advanced/Invention);

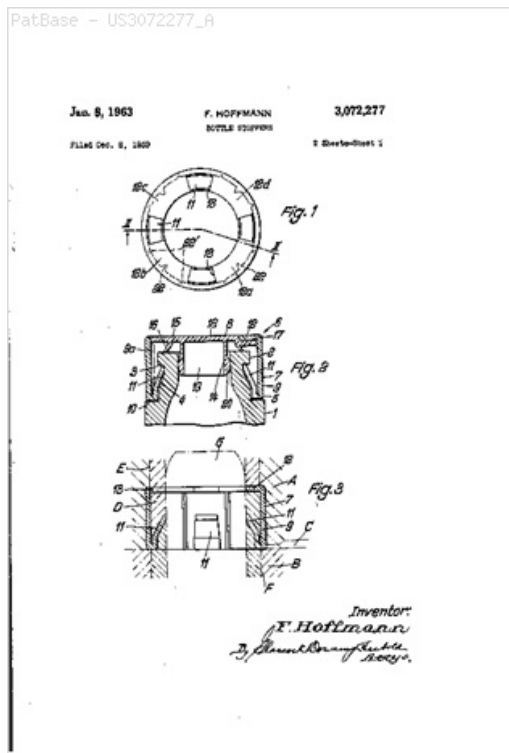
B65D41/32 B65D47/06 (Core/Invention)

International (IPC 1-7): B05B1/00 B65D55/00

CPC: Y10S215/01 B65D41/325 B65D41/58 B65D47/10

European: B65D41/32B B65D41/58 B65D47/10

US: 215/253 215/DIG.1



Family:

Publication number	Publication date	Application number	Application date
FR1241429 A	19600916	FR19590810771	19591120
US3072277 A	19630108	US19590858165	19591208

Priority:

FR19590810771 19591120 US19590858165 19591208

Probable Assignee: HOPF A METALLWERKE KG

Assignee(s): (std): HOPF A METALLWERKE KG ; METALLWERKE ADOLF HOPF K G

Assignee(s): METALLWERKE ADOLF HOPF KG

Inventor(s): (std): FRANZ HOFFMANN

Inventor(s): HOFFMANN FRANZ

193) Family number: 22632851 (US2851183A)

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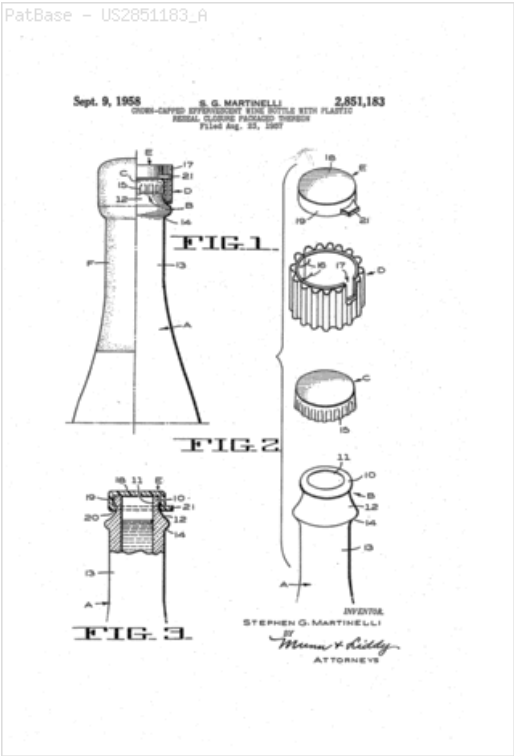
Title: CROWN-CAPPED EFFERVESCENT WINE BOTTLE WITH PLASTIC RESEAL CLOSURE PACKAGED THEREON

Abstract: (Claim 1) 1. The combination with an effervescent wine bottle having a neck provided with an annular bead at its top, and a crown cap removably secured over the bead to close the top of the bottle; of a band removably mounted around the crown cap and extending above the latter; and a reseal closure positioned on the top of the crown cap, and being normally nested within the band, the reseal closure including a disc having a resilient skirt depending therefrom, which is dimensioned to be applied over the annular bead to close the top of the bottle, when the crown cap and the band are removed; the skirt having an inwardly extending flange at its lower end which is designed to snap under the annular bead when the reseal closure is used to close the top of the bottle.

Classifications:

International (IPC 8-9): B65D51/24 (Advanced/Invention);

B65D51/24 (Core/Invention)
International (IPC 1-7): B65D51/18
CPC: B65D51/243
European: B65D51/24D
US: 215/227



Family:

Publication number	Publication date	Application number	Application date
US2851183 A	19580909	US19570679826	19570823

Priority:

US19570679826 19570823

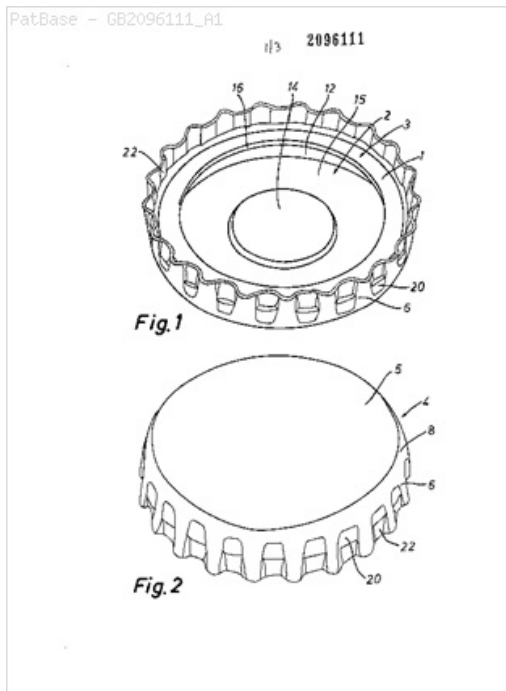
Probable Assignee: MARTINELLI STEPHEN G
Assignee(s): (std): MARTINELLI STEPHEN G
Inventor(s): (std): MARTINELLI STEPHEN G

194) Family number: 17420861 (GB2096111A) © PatBase

Title: A bottle opener

Abstract: A bottle opener for removing caps from bottles comprises a cup- shaped removing member (3) being substantially symmetrical with respect to rotation, e.g. cylindrical or frusto-conical of an inner diameter being greater than the diameter of the cap to be removed. The removing member comprises an annular gripping means (1), which with its inner rim portion (16) may grip under the free rim of the cap during the use so as to loosen said cap from the bottle neck, and a cup- shaped retaining means (2) located substantially centrally relative to the gripping means (1) and capable of being pressed downwards on the top side of the cap during the use. A holding member (4) such as a holding cover surrounds the removing member (3) and keeps the parts (1) and (2) together. In this manner a bottle opener is obtained which is easy to orient and to maintain in the working position, and which is handy and of such a shape that it reliably grips about the rim of the cap when the latter is to be removed. The holding member may be shaped as a drinking cup or bottle stand, the removing member being located in the bottom thereof. The holding member (4) may be omitted, parts (1) and (2) being formed integrally.

Classifications:
International (IPC 8-9): B67B7/16 (Advanced/Invention);
B67B7/00 (Core/Invention)
International (IPC 1-7): B67B7/16
CPC: B67B7/16
European: B67B7/16

**Family:**

Publication number	Publication date	Application number	Application date
AU198282453 A1	19821014	AU19820082453	19820407
AU534796 B2	19840216	AU19820082453	19820407
BE892700 A	19820716	BE19820207713	19820330
BR8202021 A	19830315	BR19820002021	19820407
CH655921 A	19860530	CH19820002176	19820407
DE3123381 A1	19821028	DE19813123381	19810612
DE3123381 C2	19860206	DE19813123381	19810612
DK146650 B	19831128	DK19810001592	19810408
DK146650 C	19840507	DK19810001592	19810408
DK159281 A	19821009	DK19810001592	19810408
GB2096111 A1	19821013	GB19810021890	19810715
IL65362 A0	19820531	IL19820065362	19820326
IT1148922 A	19861203	IT19820048179	19820406
IT8235711 U0	19820406	IT19820035711U	19820406
IT8248179 A0	19820406	IT19820048179	19820406
JP57175594 A2	19821028	JP19810162597	19811012
NL8201428 A	19821101	NL19820001428	19820405
NO155341 B	19861208	NO19820001144	19820405
NO155341 C	19870318	NO19820001144	19820405
NO821144 A	19821011	NO19820001144	19820405
NO821144 L	19821011	NO19820001144	19820405
SE8103704 A	19821009	SE19810003704D	19810612
SE8103704 L	19821009	SE19810003704	19810612
ZA8202125 A	19830223	ZA19820002125	19820329

Priority:

DK19810001592 19810408

Probable Assignee: JENSENS GEORG SOLVSMEDIE

Assignee(s): (std): JENSEN GEORG SOLVSMEDIE ; JENSENS SOELVSMEDIE G ; IERII IENSEN SAASUMEDEI AS ; JENSENS GEORG SOLVSMEDIE ; JENSENS GEORG SOLVESMEDIE ; GEORG JENSENS SOLVSMEDIE AS ; GEORG JENSENS SLVSMEDIE A S ; SOLVSMEDIE G A S ; JENSENS SOLVSMEDIE GEORG A S ; SOLVSMEDIE GEORG J

Assignee(s): JENSENS SOLVSMEDIE AS GEORG ; GEORG JENSENS SOELVSMEDIE A S ; GEORG JENSENS SOELVSMEDIE A S KOEBENHAVN DK ; GEORG JENSENS SOLVSMEDIE A S ; JENSENS SOELVSMEDIE A S GEORG ; GEORG JENSENS SOLVSMEDIE A S TE KOPENHAGEN

Inventor(s): (std): ARUNU PETERUSEN ; ARNE PETERSEN ; PETERSEN A ; A PETERSEN ; PERTERSEN ARNE ; PETERSEN ARNE

Inventor(s): PETERSEN ARNE KOPENHAGEN KOEBENHAVN DK

195) Family number: 14831862 (US5228592A)

© PatBase

Title: SPOUT FOR BOTTLES AND SIMILAR CONTAINERS WITH A PIERCING ELEMENT FOR PIERCING A LID ON RECEPTACLE NECKS

Abstract: PCT No. PCT/FR90/00347 Sec. 371 Date Nov. 12, 1991 Sec. 102(e) Date Nov. 12, 1991 PCT Filed May 17, 1990 PCT Pub. No. WO90/14288 PCT Pub. Date Nov. 29, 1990. A spout and sealing cap assembly for a container which contains a product such as a liquid or pasty product. The container includes a neck closed off by a lid that must be pierced for dispensing the product. The assembly includes a spout with a body that is fixed to the neck. The spout also includes a hollow piercing and dispensing element provided with sharp edges designed to pierce the lid. The element is suspended inside the body by a deformable annular bulged membrane which enables the piercing element to assume an upper position and a lower position wherein the sharp edges extend below the ruptured lid. The spout body is covered by a sealing cap which assumes either an

open or a closed position. The cap includes a sealing member extending from a top section of the cap. When the cap is closed, the sealing member is designed for insertion in sealing fashion within the hollow element or in a fitting and sealing relationship about the hollow element both when the element is in the upper and the lower position.

Classifications:

International (IPC 8-9): B65D47/36 B65D51/22 B65D55/06 B65D85/72 (Advanced/Invention); B65D85/72 (Advanced/Non-invention); B65D47/00 B65D51/18 B65D55/02 B65D85/72 (Core/Invention); B65D (Subclass/Invention)

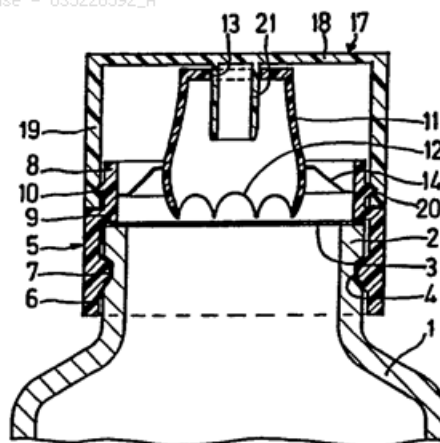
International (IPC 1-7): B65D47/10 B65D47/36 B65D5/22 B65D51/22 B65D55/06 B65D83/00 B65D85/72 B67D5/00

CPC: B65D47/36 B65D51/224 B65D51/226 B65D2251/0025 B65D2251/0056 B65D2251/0093

European: B65D47/36 B65D51/22 B65D51/22A1D B65D51/22A3 L65D251/00Y2J L65D251/00Y4J L65D251/00Y6M

US: 222/83 222/91

PatBase - US5228592_A



Family:

Publication number	Publication date	Application number	Application date
AT113547 E	19941115	AT19900908554T	19900517
AU199057435 A1	19901218	AU19900057435	19900517
AU644368 B2	19931209	AU19900057435	19900517
CA2057889 AA	19911115	CA19902057889	19900517
CA2057889 C	20000613	CA19902057889	19900517
DE69013914 D1	19941208	DE19906013914	19900517
DE69013914 T2	19950309	DE19906013914T	19900517
DK0473678 T3	19950109	DK19900908554T	19900517
EP0473678 A1	19920311	EP19900908554	19900517
EP0473678 B1	19941102	EP19900908554	19900517
ES2063968 T3	19950116	ES19900908554T	19900517
FR2647089 A1	19901123	FR19890006434	19890517
FR2647089 B1	19911115	FR19890006434	19890517
GR1002580 B	19970206	GR19900100375	19900516
GR900100375 A	19911010	GR19900100375	19900516
JP1993500003 U	19930204	JP19910600016U	19900517
JP2513813 Y2	19961009	JP19910600016U	19900517
JP5500003 U1	19930204	JP19910600016U	19900517
NO180006 B	19961021	NO19910004500	19911118
NO180006 C	19970129	NO19910004500	19911118
NO914500 A	19911118	NO19910004500	19911118
NO914500 A0	19911118	NO19910004500	19911118
NO914500 L	19911118	NO19910004500	19911118
PT94062 A	19910108	PT19900094062	19900516
PT94062 B	19970430	PT19900094062	19900516
US5228592 A	19930720	US19910778984	19911112
WO9014288 A2	19901129	WO1990FR00347	19900517
WO9014288 A3	19910207	WO1990FR00347	19900517
ZA9003792 A	19910327	ZA19900003792	19900517

Priority:

FR19890006434 19890517 WO1990FR00347 19900517 WO1990FR00347 19900517

Probable Assignee: RICAL SA

Assignee(s): (std): RICAL SA

Assignee(s): RICAL S A LONGVIC FR ; PELLERANO PIERRE ; RICAL S A

Inventor(s): (std): PELLERANO PIERRE ; PIERRE PELLERANO

Inventor(s): PELLERANO PIERRE F 75009 PARIS FR

Agent(s): COLLISON AND CO; OGILVY RENAULT

Designated states: AT AU BE CA CH DE DK ES FR GB IT JP KR LI LU NL NO SE US

196) Family number: 21646862 (US2659511A)

© PatBase

Title: BOTTLE CAP

Abstract: (Claim 1) 1. A metallic cap for a receptacle closure comprising a crimped depending skirt formed with corrugations consisting of alternately positioned inwardly extending projections for engaging a crown finish on a receptacle and outwardly extending vertical flutes, said flutes having a Vshaped section extending from the lower edge of and each of said flutes having a vertical slit formed therethrough along substantially its entire length at the apex thereof to provide a pair of contiguous, externally exposed sharp edges on each of said flutes.

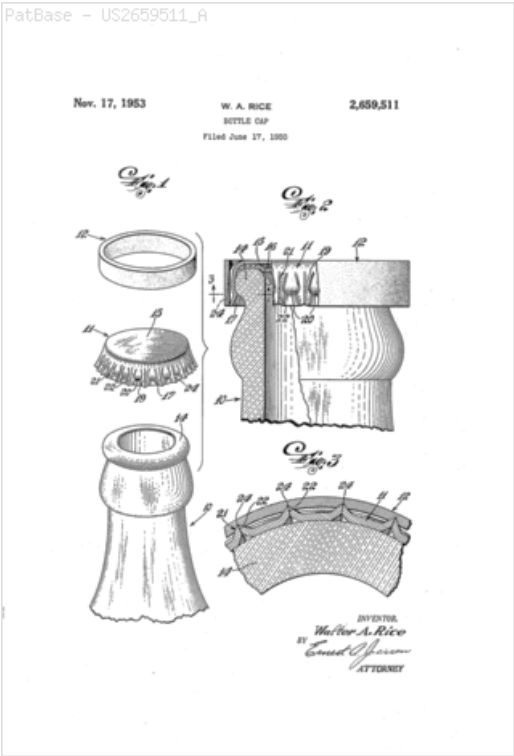
Classifications:

International (IPC 8-9): B65D45/32 (Advanced/Invention); B65D45/00 (Core/Invention)

International (IPC 1-7): B65D55/00

CPC: B65D45/322 Y10T292/205

European: B65D45/32A



Family:

Publication number	Publication date	Application number	Application date
US2659511 A	19531117	US19500168731	19500617

Priority:

US19500168731 19500617

Probable Assignee:

RICE WALTER A

Assignee(s): (std):

RICE WALTER A

Inventor(s): (std):

RICE WALTER A

197) Family number: 21718864 (US2141833A) © PatBase

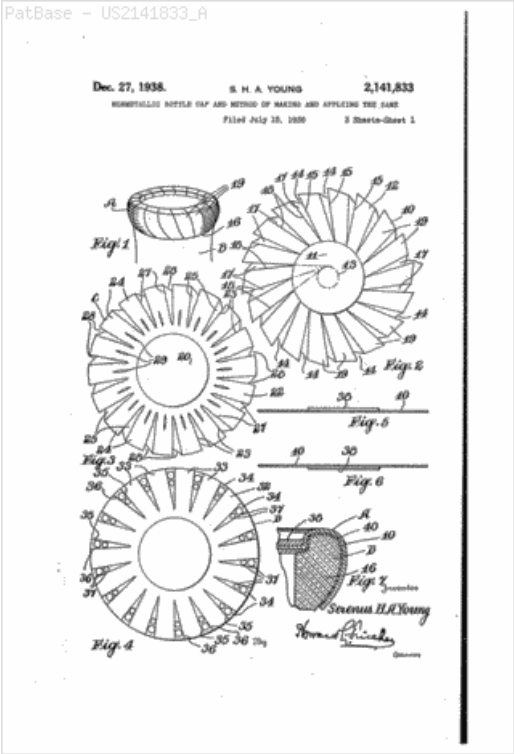
Title: NONMETALLIC BOTTLE CAP AND METHOD OF MAKING AND APPLYING THE SAME

Abstract: 1. The method of forming bottle caps which comprises coating a sheet of nexible material with an adhesive cdmposition whichjia non-tacky atnormal _temperatures and pressures and which is ndhesivgly _sensitive at temperatures slightly 3 z,141,esa _ above normal but distinctly below the melUD8 point of the said composition, cutting from said sheet blanks comprising a top and sldrft portion and pressing the said blanks into a truncated conical shape having a platted skirt portion. _ 2. The method as in claim 1, wherein the adhesive is a. composition mmprising rubber and wax. 3. The method of forming bottle caps which comprises coating a sheet og Ilexlble material with an adhesive composition which is non-tacky at normal temperatures and pressures and which is adhesively sensitive at temperatures slightly above normal but distinctly below the melting point 01' the said composition, applying to said sheet at spaced intervals plug caps, cutting from said sheet blanks comprising a top and skirt portion, the said plug caps being at the center of the top portion, and pressing the said blanks into a substantially truncated conical shape with the said plug cap centered at the apex. ` 4. The method of forming bottle caps which comprises coating a sheet of ileizable material with an adhesive composition comprising rubber and wax which is non-tacky at normal temperatures and pressures and which ls adhesively sensitive at temperatures slightly above normal but distinctly below the melting point of the sald cmIJOsition. cutting from said sheet blanks comprising a top and skirt portion/and pressing the said blanks into a truncated conical shape having a platted skirt portion, in dies which are cooled to _ a temperature at which the adhesive compositionis not adhesively sensitive at the contact surface of the dies. 5. The method of forming bottle caps which comprises coating' a sheet of flexible material with an adhesive composition which - is non-tacky at normal temperatures and pressures and which is adhesively .sensitive at temperatures slightly above normal but distinctly below the melting point of the said composition, applying to said sheet at spaced intervals Plug caps, cutting from said sheet blanks comprising a top and skirt portion, the said plug caps being the _center of the top portion, and pressing the said blanks into a truncated conical shape, in dies wh.1ch` are cooled to a temperature at which the adhesive composition is not adheselvelysensitlva at the contact surface of the dies, the said plug caps being centered at the apex portion of the respective truncated cones. 8. T'h.e method of forming bottle caps which comprises coating a sheet of flexible material with an adhesive composition which is nontscky at normal temperatures and pressures and which is adhesively sensitive at temperatures slightly above normal but distltncty below the melting point of the said composition, cutting from said sheet blanks having s top and skirt portion, and pressing said blanks into a trun- _cated conical shape having a platted skirt portion, In dies cooled to a temperature at which the adhesive composition ls not adhesively Sensi. tlve at the contact surface of the dies. 7. The method which comprises forming, from as sheet of nexible material coated with an adhesive composition comprising rubber and. wax which is non-tacky at normal temperatures and pressures and adhesively sensitive at temperatures slslhtly above normal but distinctly below the melting point of the said composition, a generally circular bottle can blank with V shaped notches ln its periphery, folding said blank to form a cap ol' substantially truncated conical shape having a platted skirt portion, the notches extending into the platted folds. ` 8. The method of producing bottle caps consisting in cutting the caps lrom a sheet of nexible material coated with an adhesive composition which is non-tacky at normal temperatures and pressures and which ls adhesively sensitive at temperatures slightly above normal although distinctly below the melting point of the said composition. partially forming the caps in one operation and completing the formation of the said caps in the second operation as they are applied to the bottle. the said second operation comprising pressing the skirt portion of the cal? to lit the outer contour of the bottle rim, thereby causing the successive segments at their end portions to overlap and adhere to each other, the pressing temperature being suhcient to render the adhesive sensitive. 9. The method which comprises forming a partially formed cap from a sheet of flexible material coated with an adhesive composition comprising rubber and wax and which ls nontacky at normal temperatures and pressures and adhesively sensitive at temperatures r slightly above normal but distinctly below 'the' me1tlng point of the said composition. a generally circular bottle cap blank with V shaped notches in its periphery, folding said blank to form a cal-1 ot substantially truncated corneal shape having a top portion and a platted skirt portion with notches extending into the platted folds, applying

the top of the said partially formed cap to the top of the bottle directly over the bottle bore, pressing the said top portion into the said bore while shaping the skirt over the rim of the bottle at a temperature sufficient to render the adhesive composition sensitive, thereby causing the skirt portion of the cap to assume a snug fit of the bottle contour, each successive segment of the skirt portion overlapping the adjacent segment and adhering to it and thereby completing said cap. » ' ' 10. The method of forming bottle caps made of a partially shaped sheet of flexible material coated with an adhesive composition which is non-tacky at normal temperatures and pressures and which is adhesively sensitive at temperatures slightly above normal but distinctly below the melting point of the said composition, said sheet being preformed into substantially truncated conical shape having a top portion and a skirt portion which comprises pressing the partially, shaped sheet on the top of a bottle, pressing the central portion of said shaped sheet into the bore of said bottle and pressing the skirt portion of said partially shaped sheet against the rim of said bottle to assume the shape of said rim, the pressing temperature being sufficient to render the adhesive composition sensitive. _lt; ; '

Classifications:

International (IPC 8-9): B65D41/14 (Advanced/Invention);
B65D41/02 (Core/Invention)
International (IPC 1-7): B65D41/14
CPC: B65D41/14 Y10S425/809
European: B65D41/14
US: 215/326 425/809 493/109 493/63 53/478 53/488



Family:

Publication number	Publication date	Application number	Application date
US2141833 A	19381227	US19360090675	19360715

Priority:

US19360090675 19360715

Probable Assignee: YOUNG ENGINEERING LAB INC
Assignee(s): (std): YOUNG ENGINEERING LAB INC
Assignee(s): YOUNG ENGINEERING LABORATORIES INC
Inventor(s): (std): YOUNG SERENUS H A

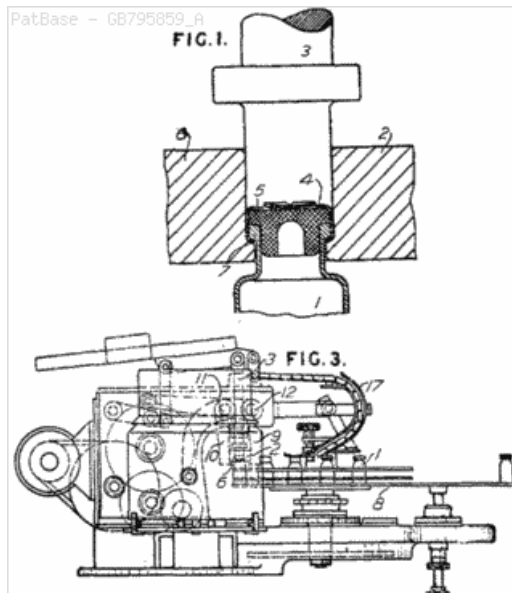
198) Family number: 29704866 (GB795859A) © PatBase

Title: Improvements in or relating to apparatus for sealing bottles by means of a sheet metal closure cap

Abstract: 795,859. Capsuling; container closures. BIENEELD, F. J. Feb. 27, 1957 [March 23, 1956], No. 6610/57. Classes 125(2) and 125(3). Relates to machines in which bottles 1 are carried by a rotating table 8 beneath a cap-feed 17 and then to a sealing head in which jawhalves 2, 6 are moved to embrace the neck and have inturned flanges underlying the neck bulge 7, a pressure ram 3 then descending to cause the cap skirt to move down and be crimped under the bulge by the flanges. According to the invention, the jaw-halves 2, 6 are carried at the lower ends of levers 9, 10 pivoted on horizontal axes 12, 11 extending in the direction in which the bottles are fed, the levers being actuated to open and close the jaws in synchronism with the bottle feed by cams operated directly or indirectly by the main drive of the machine. The pressure ram 3 is also actuated synchronously with the bottle feed. Closures. A rubber stopper 5 is inserted in the bottle neck and a light metal capsule 4, which may have a tear-off part in its upper surface for insertion of a syringe, is crimped over the neck bulge 7.

Classifications:

International (IPC 8-9): B67B3/12 (Advanced/Invention)
International (IPC 1-7): B67B3/12
CPC: B67B3/12
European: 64B23D2D B67B3/12



Family:

Publication number	Publication date	Application number	Application date
GB795859 A	19580528	GB19570006610	19570227
Probable Assignee:		FRANZ JOSEF BIENEFFELD	
Assignee(s): (std):		FRANZ JOSEF BIENEFFELD	

199) Family number: 25389874 (GB191421728A)

© PatBase

Title: Improvements in Bottle Caps.

Abstract: (Claim 1) 1.

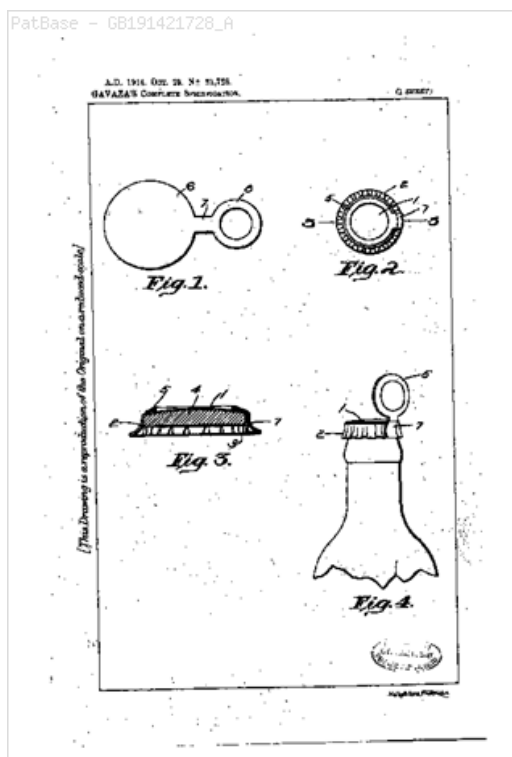
Classifications:

International (IPC 8-9): B65D51/24 (Advanced/Invention)

International (IPC 1-7): B65D41/42

CPC: B65D51/243

European: B65D51/24D



Family:

Publication number	Publication date	Application number	Application date
AT91854 B	19230326		00000000
FR476488 A	19150805		00000000
GB191421728 A	19150624		19141029

Probable Assignee: LORENZ C AG

Assignee(s): (std): GAVAZA GEORGE VICTOR ; GEORGE VICTOR GAVAZA ; LORENZ C AG

Assignee(s): C LORENZ AKTIENGESELLSCHAFT

Inventor(s): (std): GAVAZA GEORGE VICTOR

Inventor(s): GEORGE VICTOR GAVAZA

Title: Interconnected crown caps and methods and apparatus for forming and supplying crown caps

Abstract: 971,647. Making caps; punching; stamping. AUTOCROWN CORPORATION Ltd. Aug. 10, 1962 [June 21, 1961], No. 22391/61. Headings B3A, B3Q and B3W. [Also in Divisions B6 and B8] ' Metal bottle caps are blanked out from a sheet, on which the cap printing may have been lithographed, into portable magazines, the magazines being clipped into forming presses which shape them in three stages by punches and dies. Blanking. (Figs. 3, 13, 14, 15.)-A sheet 50 from a stack 43 is placed manually on a bed 51 beneath a hold-down plate 52 where spring-loaded dogs 56 on two arms 54 of a reciprocating carriage 55 progressively engage its rear edge 50a to feed it forward step-by-step. The blanking means comprises six plungers 85 on a head 71 co-operating with female dies 80, the cup blanks 3011 with finger tab portions 38¹ being accumulated in batches by spring stops (Fig. 17, not shown) prior to entering removable tubular magazines 91, which are stored on a turntable 44, Fig. 15. A kicker 87 forwards the waste sheet. In an alternative arrangement, the blanks are stamped from a continuous band and remain joined by a central strip during the remaining forming processes. This arrangement is not illustrated. Shaping. (Figs. 2, 18, 19.)-Magazines 91 of blanks are removed as required from the turntable 44 and are clipped into a duplex shaping press. The column of blanks 3011 is fed upwardly by a weight-loaded arm 102 and the uppermost is removed by a reciprocating slider 125 having suction gripping means (see also Division B3). Each blank is engaged by gripping bars 143, which are constrained by pins 144 circuiting in slots 145 to follow a closed oblong path, and are fed to the first of three shaping plungers 140, 141, 142, carried on a vertically reciprocating head 46. The plungers co-operate with dies 150, 160, 170 and in operating, depress ejectors 152, 158, 165 which rise with the plungers to present the blank to the bars 143 for transmit to the next stage. The ejectors 158, 165 include suction retaining means or may, according to the Provisional Specification, include magnetic means. The first plunger 140 dishes the cap, the second 141 turns up at right angles the tab flange and corrugates the tab, the third 142 presses downwards the tab flange to the final form. The head 46 also carries a plastics gasket bead injection nozzle 172 (see Division B8) which operates at the next stage of movement of the cap. Specification 971,648 is referred to.

Classifications:

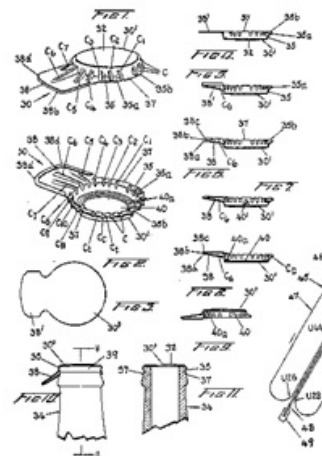
International (IPC 8-9): B21D51/38 (Advanced/Invention)

International (IPC 1-7): B65D41/42

CPC: B21D51/383 B65D41/125 B67B3/061

European: 64B23A7 B21D51/38B B65D41/12B B67B3/06B

PatBase - GB971647_A



Family:

Publication number	Publication date	Application number	Application date
GB971647 A	19640930	GB19610022391	19610621

Priority:

GB19610022391 19610621

Probable Assignee: AUTOCROWN CORP LTD

Assignee(s): (std): AUTOCROWN CORP LTD

Inventor(s): (std): MCLEAN DONALD ERNEST ; INGLIS JOHN CLARK

Title: SECURITY CLOSURE FOR BOTTLES - IS PLASTICS CAP FITTING ON SMOOTH NECK WHICH CAN BE USED FOR RESEALING CONTENTS FOR FURTHER USE

Abstract: The neck (1) has a raised rim (4) around it a short distance below the lip, leaving a smooth band at the top. A plastics sealing cap is fitted into the bottle opening, having deep straight sides (6) and a slightly smaller bottom (7, 8). The top is formed downwards to give a flange (10) and head (11) fitting over the bottle lip. Over this is a metal sealing foil (3), this being compressed onto the bead (11) of the cap, over the raised rim (4) and under the bottom (5) of the neck. At rim level are two lines of perforations (12, 13), spaced apart to form a tear off opening strip (14).

Classifications:

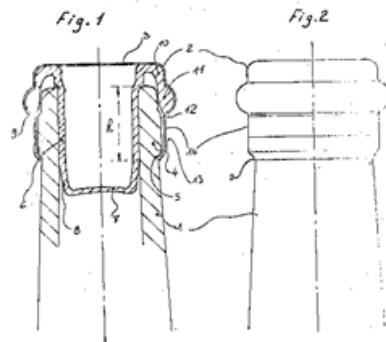
International (IPC 8-9): B65D41/58 (Advanced/Invention); B65D41/32 (Core/Invention)

International (IPC 1-7): B65D41/58

CPC: B65D41/58

European: B65D41/58

PLANCHE I/4



Family:

Publication number	Publication date	Application number	Application date
FR2260509 A1	19750905	FR19740004233	19740208
FR2260509 B1	19770909	FR19740004233	19740208

Priority:

FR19740004233 19740208

Probable Assignee:

BOUCHAGE MECANIQUE

Assignee(s): (std):

BOUCHAGE MECANIQUE

Assignee(s):

BOUCHAGE MECANIQUE FR

202) Family number: 31548884 (AR024789A)

© PatBase

Title: CONJUNTO DE TAPA PARA BOTELLAS DE BEBIDAS ALCOHOLICAS DE ALTO VALOR. SET COVER FOR BOTTLES OF ALCOHOLIC BEVERAGES OF HIGH VALUE. (Machine translation)

Abstract: Source: AR024789A [ES] Tapa para botellas, especialmente para botellas contenedoras de bebidas alcoholicas de alto precio, que se compone de: una abertura exterior de pilfer -proof de aluminio la cual puede presentar su cara externa impresa a 1, 2, o 3 colores acompanandola presentacion exterior de la botella y brindar inviolabilidad exterior; un conjunto plastico dosificador/direccional con valvula instalada que le da caracter de irrellenable a la botella; y un precinto deseguridad de aluminio. Este conjunto se leen trega al cliente como una unidad y se coloca en la botella en una sola operacion por presion, en tanto que lasentalladuras del material laminar de la cobertura y el precinto las realiza por remachado por deformacion la misma maquina colocadora automatica.

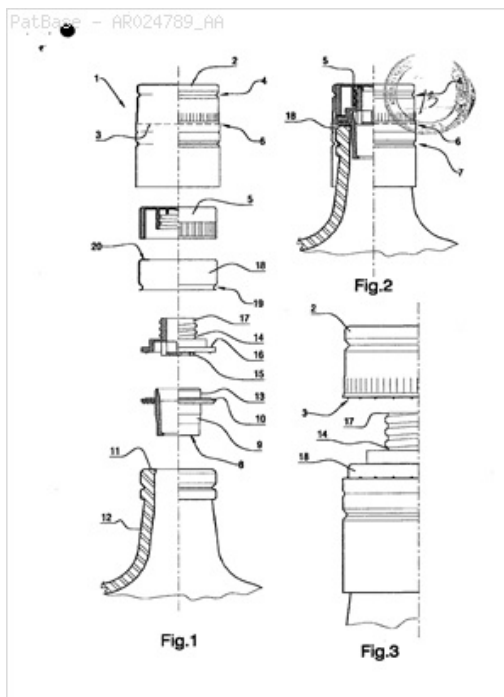
Machine translation: Cap for bottles, especially for container bottles of high-priced alcoholic beverages, which comprises: an outer opening of aluminum pilfer-proof which can present your printed outer 1, 2, or 3 colors accompanying presentation outside of the bottle and outside brindar inviolabilidad; a plastic dispenser assembly / directional valve installed character gives to non-refillable bottle, and an aluminum seal deseguridad. This set is read delivery to the customer as a unit and placed in the bottle in a single operation by pressure, while the laminar lasentalladuras cover and seal the riveting done by the same machine deformacion colocadoraautomatica policy.

Classifications:

International (IPC 8-9): B67D3/00 (Advanced/Invention);

B67D3/00 (Core/Invention)

International (IPC 1-7): B65D41/32 B65D41/62 B67D3/00

**Family:**

Publication number	Publication date	Application number	Application date
AR024789 AA	20021023	AR2000P103698	20000718
BRPI0102898 A	20030114	BR2001PI02898	20010507

Priority:

AR2000P103698 20000718

Probable Assignee:

SUPERTAP S A

Assignee(s): (std):

SUPERTAP S A

Assignee(s):

SUPERTAP SA

Inventor(s): (std):

GARCIA OMAR

Inventor(s):

OMAR GARCIA

203) Family number: 19061886 (GB475439A)

© PatBase

Title: Improvements relating to closure devices for bottles

Abstract: [Classes 125 (i) and 125 (iii)] A cover member 23 of frangible material is secured to a bottle 14 by a metallic ferrule 24 which has a flange 41 so locked in an undercut groove 36 in the cover member that any attempt to remove the ferrule will result in fracture of the cover member or in the leaving of a portion of the ferrule in the groove. The cover is formed in two parts 28, 31 which are connected together to form the undercut groove 36, 37. The ferrule comprises a skirt 39, a top portion 40 weakened by apertures, and the tubular flange 41, which is pressed by a suitable tool into the groove. As shown, a sealing cap 43 for securing a stopper 44 <1> also has its skirt portion 44 irremovably locked in the groove 36, 37, and has a weakened line 46 to facilitate its removal. Means for preventing refilling of the bottle comprises a valve casing 17, a buoyant valve 20, a weight 21 co-operating with the valve, and a guard member 22 positioned by lugs 33 on the member 23. In a modification, the valve for preventing refilling is omitted. In another modification, the member 28 has projections to engage the apertures in the ferrule, the guard member 22 is supported by lugs seated in recesses in the member 23, and the sealing cap, Fig. 9, comprises hooked flanges 57 adapted to be locked in the groove 36, 37, a weakened line 58 above the flanges, a weakened central strip 54 adapted to be torn out, and tearing lugs 59. The flanges may be additionally secured in the groove 36, 37 by cement. The Specification as open to inspection under Sect. 91 states that the cap alone may have its flange locked, as described, in a groove in the cover member or in the bottle. This subject-matter does not appear in the Specification as accepted.

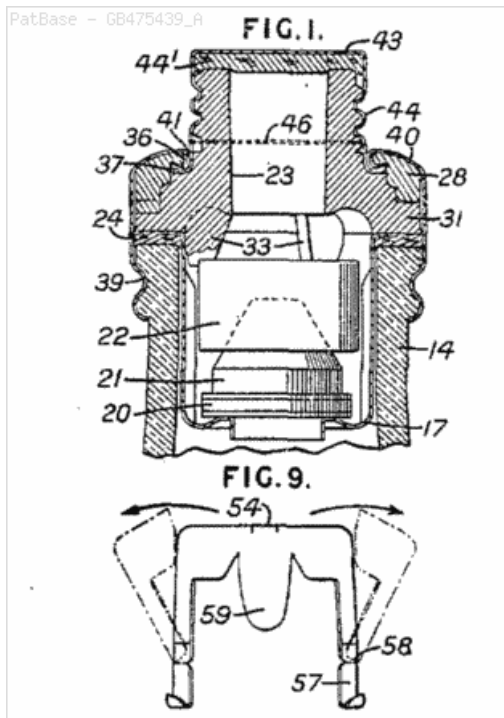
Classifications:

International (IPC 8-9): B65D49/06 (Advanced/Invention);
B65D49/00 (Core/Invention)

International (IPC 1-7): B65D49/04

CPC: B65D49/06

European: B65D49/06

**Family:**

Publication number	Publication date	Application number	Application date
GB475439 A	19371119	GB19360023622	19360828

Probable Assignee:

INTER SEAL CORP

Assignee(s): (std):

INTER SEAL CORP

204) Family number: 31844889 (US2007131638A)

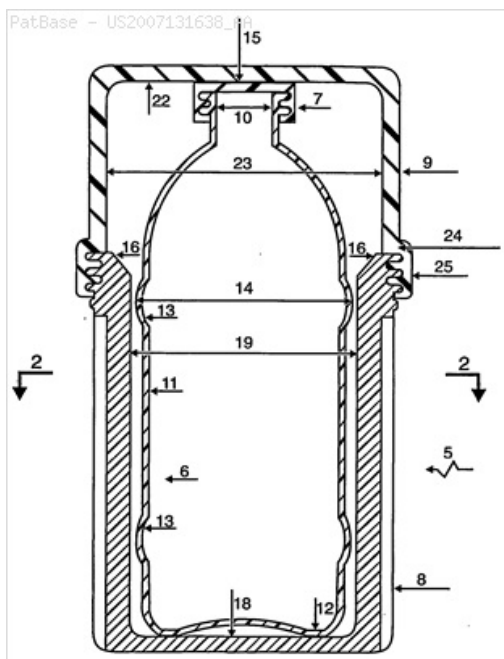
© PatBase

Title: SIMPLIFIED INSULATED BOTTLE

Abstract: A simplified, Insulated Bottle (5), characterized by the combination of a portable, rigid polymer, standable Receptacle enclosing an adapted, removable, reusable, closure-capped polymer Bottle, said Receptacle comprising a single walled, cylindric, hollow, first end open, second end closed, integrally ribbed inwardly vertically, outer formed Body (8), united with an adapted, hollow, single walled, flat based, shorter Upper Cup (9), said Bottle being a blow moulded, narrow neck threaded, horizontally outwardly ribbed Bottle (6) closed with an adapted, top flat, reusable, threaded Closure Cap (7), said closure capped Bottle being stored in a standing, base (12) resting, body (11) mostly spaces apart, top (15) kept down by said Body secured said Upper Cup, horizontal movement restrained manner, said Bottle's maximum external width (14) being less than least internal widths (19) (23) of said Body and said Upper Cup, said Receptacle being fully opaque with incorporated or applied reflectivity or, fully clear, said Body taking alternatively to said Bottle's base to upright body end, an upright, standard 12 oz can (26), said Receptacle alternatively taking within its inner height limits, an upright can of width similar to said 12 oz can but taller (27).

Classifications:

International (IPC 8-9): A47J41/00 A47J41/02 B65D23/00 B65D77/04 B65D81/38 (Advanced/Invention); A47J41/00 B65D23/00 B65D77/04 B65D81/38 (Core/Invention)
International (IPC 1-7): A47J41/00 B65D77/04 B65D81/38
CPC: Y02W30/807 B65D81/3876 B65D77/0493
European: B65D77/04F1A B65D81/38K
US: 215/12.1 215/13.1

**Family:**

Publication number	Publication date	Application number	Application date
AU2003304508 AA	20050505	AU20030304508	20031210

IN01103MU2003 A	20070323	IN2003MU01103	20031020
IN220814 B	20080815	IN2003MU01103	20031020
US2007131638 AA	20070614	US20030575277	20031210
WO05037676 A1	20050428	WO2003IN00386	20031210

Priority:

IN2003MU01103 20031020 WO2003IN00386 20031210

Probable Assignee: THADANI MAHESH

Assignee(s): (std): THADANI MAHESH

Assignee(s): MR THADANI MAHESH

Inventor(s): (std): MAHESH THADANI ; THADANI MAHESH

Inventor(s): MR THADANI MAHESH

Agent(s): MAHESH THADANI

Designated states: AE AT AU BE BF BG BJ BW CF CG CH CI CM CN CY CZ DE DK EE ES FI FR GA GB GH GM GN GQ GR GW HU IE IL IT KE LK LS LU MC ML MR MW MZ NE NL PT RO SD SE SI SK SL SN SZ TD TG TR TZ UG US ZA ZM ZW

205) Family number: 416892 (GB1134178A)

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Title: Method and composition for forming container closures and products so produced

Abstract: 1,134,178. Caps for bottles. J. J. ROSEN and S. W. STRICKMAN, [trading as ROSEN and STRICKMAN]. 12 July, 1966, No. 31286/66. Heading B8T. [Also in Divisions B2, C3 and F1] A cap for a bottle has a gasket 90 formed from a ring of foamed plastics coated around its inner periphery. As shown, a crown cap has an outer lithograph coating, an inner lacquer coating 88, a liner 92 of non-foamed plastisol, and the foamed gasket 90. The liner 92 may extend to the edge 81 of the skirt, Fig. 15 (not shown), or may be omitted, Fig. 14 (not shown). The gasket may be coated directly into the bottle cap, Figs. 12, 13 (not shown). In one modification, a bayonet-type bottle cap, Figs. 18-20 (not shown), has a foamed plastics gasket (316). In another modification, a screwtype bottle cap, Figs. 20-24 (not shown), has a foamed plastics gasket coated adjacent the inner edge of the cap skirt; an inset ring (314) may be formed in the top panel of the cap. Constituents for the foamable plastics are specified (see Division C3). Coating apparatus, and processes for coating the foamable plastics into bottle caps, are described (see Divisions B1-B2).

Classifications:

International (ipc 8-9): B21D51/46 B29C43/18 B29C44/12

B65D41/12 (Advanced/Invention);

B29C43/36 B29C43/42 (Advanced/Non-invention);

B21D51/38 B29C43/18 B29C44/02 B65D41/02 (Core/Invention);

B29C43/36 (Core/Non-invention)

International (ipc 1-7): B21D51/46 B29C13/02

CPC: B29C43/18 B29C43/34 B29C43/361 B29C43/42 B29C44/1271

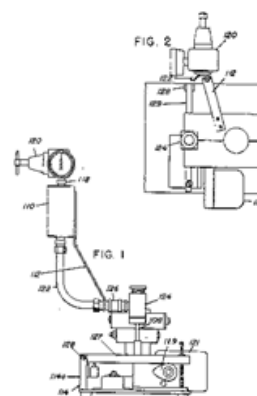
B29C2043/3433 B29K2705/00 B29L2031/56 B65D41/105 B65D41/12

European: B29C43/18 B29C43/34 B29C44/12M B65D41/10B

B65D41/12 L29C43/34B L29C43/36C L29C43/42 L29K705/00

L29L31/56

PatBase - GB1134178_f



Family:

Publication number	Publication date	Application number	Application date
DE1604697 A1	19710304	DE19661604697	19660718
GB1134178 A	19681120	GB19660031286	19660712

Priority:

DE1966R043721 19660718

Probable Assignee: ROSEN AND STRICKMAN

Assignee(s): (std): JACOB JOSEPH ROSEN ; ROSEN AND STRICKMAN ; SAMUEL WILLIAM STRICKMAN

Inventor(s): (std): W STRICKMAN SAMUEL

206) Family number: 21419897 (US2228542A)

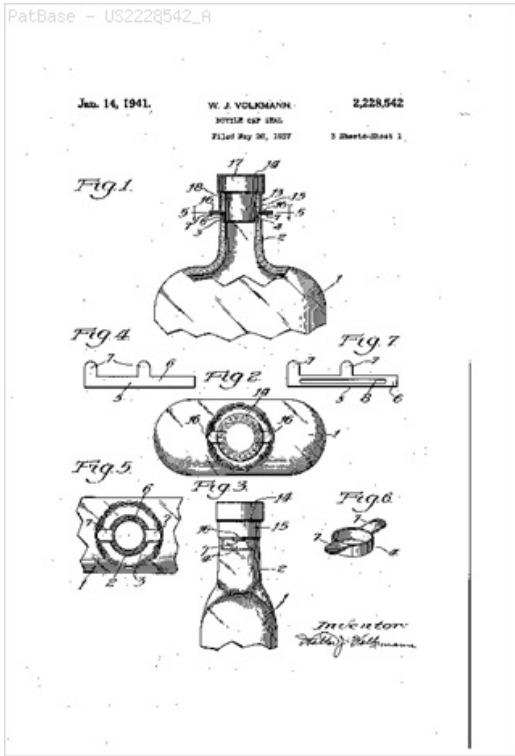
© PatBase

Title: BOTTLE CAP SEAL

Abstract: 1. A glass bottle seal comprising, a sealing ring member formed of metal having substantially the same coefficient of expansion as the glass of which the bottle is formed and pre-molded within the glass wall of the bottle neck, said ring member being permanently embedded circumferentially within said neck wall and having integral portions which protrude laterally through the outer surface of said wall, a metallic cap fitted over the bottle neck, said cap having a skirt encircling

said neck formed with integral laterally-projecting tabs which overlie the projecting portions of said ring member, and means for permanently uniting said cap tabs and ring member projecting portions to provide a sealed engagement of said cap to the glass Wall of said bottle neck.

Classifications:
International (IPC 8-9): B65D55/06 (Advanced/Invention);
B65D55/02 (Core/Invention)
International (IPC 1-7): B65D3/10 B65D49/00 B65D8/02
CPC: B65D55/06
European: B65D55/06
US: 215/251



Family:

Publication number	Publication date	Application number	Application date
US2228542 A	19410114	US19370144887	19370526

Priority:

US19370144887 19370526

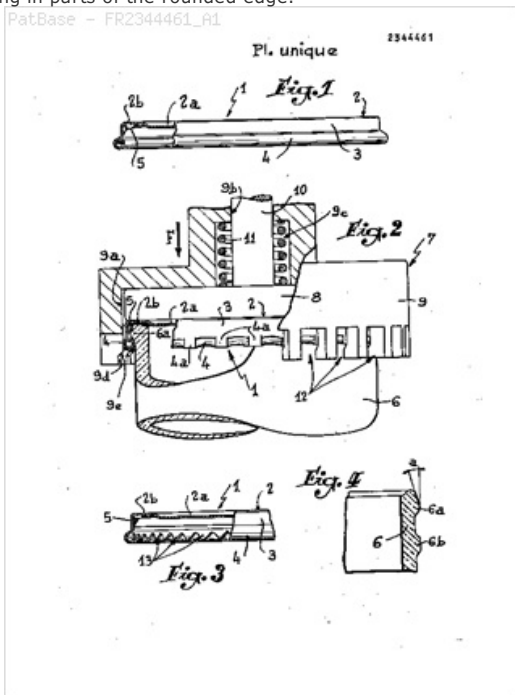
Probable Assignee: VOLKMANN WALTER J
Assignee(s): (std): VOLKMANN WALTER J
Inventor(s): (std): VOLKMANN WALTER J

207) Family number: 3698916 (FR2344461A) © PatBase

Title: METAL CAP FOR BOTTLE - HAS SKIRT WITH ROUNDED EDGE AND TOP WITH ANNULAR PERIPHERAL RECESS RECEIVING SEAL

Abstract: The cap (1) has a top (2) encircled by a short skirt (3) with a rounded edge (4) which projects slightly from the skirt. The top has a central part (2a) which is pressed inwards and leaves an annular recess (2b) around the circumference which is filled with a plastic joint material to ensure the airtightness of the cap. The cap is fixed to the neck of a glass bottle, which has a raised collar (6a), in a press (7) which consists of a pressure plate (8) held against the cap by a spring (11) and a cover with crenels (12) which secure the cap to the bottle by pressing in parts of the rounded edge.

Classifications:
International (IPC 8-9): B21D51/34 B65D1/10
B65D41/14 (Advanced/Invention);
B21D51/30 B65D1/00 B65D41/02 (Core/Invention)
International (IPC 1-7): B65D1/10 B65D41/16 B67B3/10
CPC: B21D51/34 B65D1/10 B65D41/14
European: B21D51/34 B65D1/10 B65D41/14



Family:

Publication number	Publication date	Application number	Application date
FR2344461 A1	19771014	FR19760008596	19760318
FR2344461 B1	19800104	FR19760008596	19760318

Priority:

FR19760008596 19760318

Probable Assignee:

BOUCHAGE MECANIQUE

Assignee(s): (std):

BOUCHAGE MECANIQUE

208) Family number: 20179918 (GB922188A)

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Title: Improvements in or relating to pourer or dropper inserts for bottles

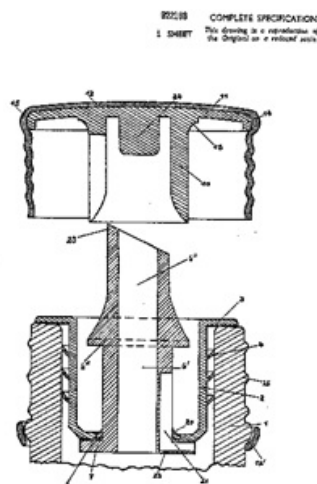
Abstract: 922,188. Stoppers. KORKENFABRIK FRIEDRICH SANNER INH OTTO SANNER G.m.b.H. July 3, 1959 [July 3, 1958], No. 22910/59. Class 125(3). A pourer stopper comprises a plug 2, a spout 6¹ slidable between limiting flanges 7 and 6¹¹¹ in an aperture 5 in the plug, a screw cap 12 and a disc 11 inserted inside the screw cap and which has projections 10 and 24 which serve to push the spout in when the cap is screwed on and to grip the spout to pull it out when the cap is screwed off. The plug 2 has sealing ribs 20 which engage the spout, sealing ribs 4 which engage the neck of the bottle and a flange 3 thick enough to limit the entry of the plug into the neck but not strong enough to enable the plug to be withdrawn therefrom. An air vent 21 may be incorporated in the spout, the annular portion 10 projecting from the disc may be slit along its length and the screw cap is of the tear-off type with tearoff ring 12.

Classifications:**International (IPC 8-9):** B65D47/06 B65D47/12 (Advanced/Invention);

B65D47/06 B65D47/12 (Core/Invention)

International (IPC 1-7): B65D47/26**CPC:** B65D47/061 B65D47/123 B65D2547/066**European:** B65D47/06A B65D47/12B1 L65D547/06Y1

PatBase - GB922188_A

**Family:**

Publication number	Publication date	Application number	Application date
BE580323 A	19591103	BE19590580323	19590703
DE1196089 B	19650701	DE1958K035209	19580703
GB922188 A	19630327	GB19590022910	19590703

Priority:

DE1958K035209 19580703

Probable Assignee: FRIEDRICH SANNER KOMMANDITGESE**Assignee(s): (std):** KORKENFABRIK FRIEDRICH SANNER ; FRIEDRICH SANNER KOMMANDITGESE**Assignee(s):** FRIEDRICH SANNER KOMMANDITGESELLSCHAFT ; FRIEDRICH SANNER KG ; KORKENFABRIK FRIEDRICH SANNER INH OTTO SANNER G M ; KORKENFABRIK FRIEDRICH SANNER INH OTTO SANNER G M B H ; KORKENFABRIK FRIEDRICH SANNER INH OTTO SANNER GMBH**209) Family number: 20599919 (GB541636A)**

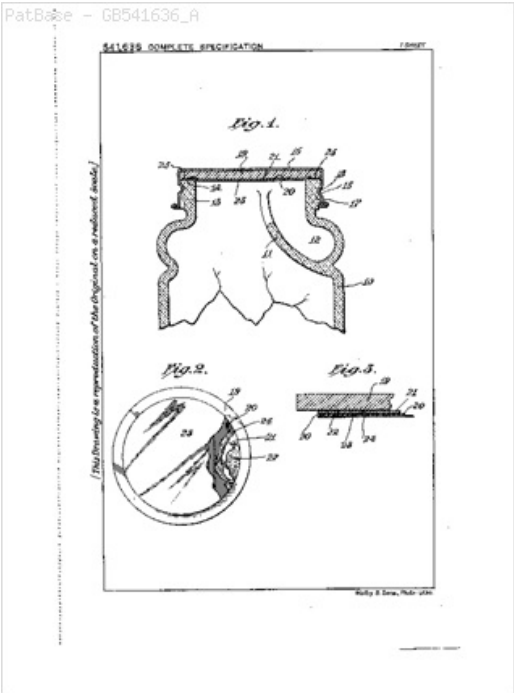
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Title: Improvements in or relating to container closures

Abstract: 119. [Class 125 (iii)] A bottle 10 or similar container has a closure formed by a metal shell 16 with a screw threaded skirt 17. The shell or cap contains a liner disc 19 of absorbent material, and the central part of this is covered by a disc 20 of liquid repellent and acid resistant material; it may be, for instance, a thin layer of chlorinated rubber 20 having a thin paper backing 21 secured by a suitable adhesive to the liner 19. It may also have a protective coating of paraffin 23. The container has a flat topped mouth and when the cap is screwed down for sealing, the disc 20 engages part of the lip to cover the whole of the mouth. The remaining part of the lip engages the absorbent ring formed by the absorbent liner 19 outside the disc 20. The closure is shown applied to a bottle, such as an ink bottle, with a partition 11 forming a well 12.

Classifications:**International (IPC 8-9):** B43L25/00 (Advanced/Invention);

B43L25/00 (Core/Invention)



Family:

Publication number	Publication date	Application number	Application date
GB541636 A	19411204	GB19410000119	19410103

Priority:

GB19410000119 19410103

Probable Assignee: FERDINAND GUTMANN AND CO

Assignee(s): (std): FERDINAND GUTMANN AND CO ; FERDINAND GUTMANN AND COMPANY

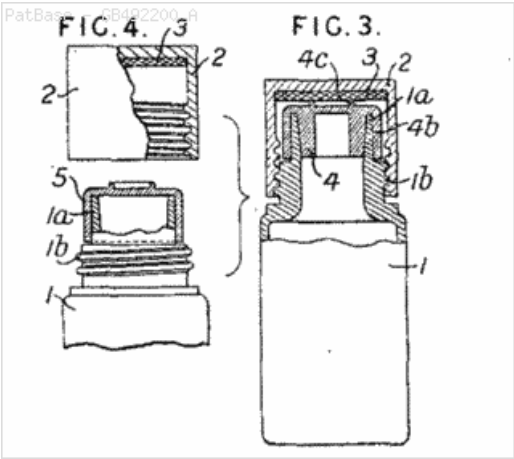
210) Family number: 19457923 (GB492200A) © PatBase

Title: Improvements in and connected with bottles and like containers

Abstract: 10734. [Class 125 (iii)] A closure for a bottle or like container and particularly for bottles containing substances for use in hypodermic syringes, comprises an inner indiarubber cap 4, Fig. 3, and a rigid cap or cover 2, the bottle neck 1 having a threaded portion 1b and a plain portion 1a of smaller diameter, the apron or skirt 4b of the rubber plug 4 being folded down over the part 1a and the cap 2 being screwed down to hold the cap 4 during sterilization and transit. The cap 2 is provided with a pad or washer 3 of felt or like material which may contain disinfectant and a ring 4c may be formed on the cap 4. The inner plug part of the cap 4 may be dispensed with and a plain cap 5 provided, Fig. 4, or the plug may be employed with a separate cap. The mouth of the bottle 1a may be beaded to prevent the cap 4 from slipping off, while the part 1b may be plain, the cap 2 engaging frictionally therewith.

Classifications:

International (IPC 8-9): B65D51/00 (Advanced/Invention);
B65D51/00 (Core/Invention)
International (IPC 1-7): B65D53/04
CPC: B65D51/002
European: B65D51/00B



Family:

Publication number	Publication date	Application number	Application date
GB492200 A	19380916	GB19370010734	19370415

Priority:

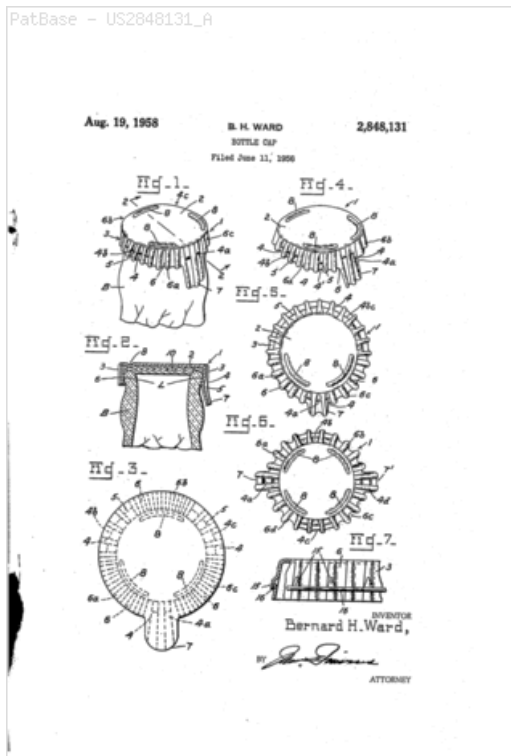
GB19370010734 19370415

Probable Assignee:

ALFRED BROOK BRITTON

Assignee(s): (std):

ALFRED BROOK BRITTON

**Family:**

Publication number	Publication date	Application number	Application date
US2848131 A	19580819	US19560590714	19560611

Priority:

US19560590714 19560611

Probable Assignee:

BUHL CHENOWETH JR

Assignee(s): (std):

BUHL CHENOWETH JR

Inventor(s): (std):

WARD BERNARD H

213) Family number: 23062931 (FR1274225A)

© PatBase

Title: RECIPIENT AVEC DISPOSITIF DE FERMETURE CONTAINER WITH CLOSURE DEVICE (Machine translation)

Abstract: Source: FR1274225A [FR] [Source: Claim 1] 1. Pour ouvrir la fermeture du recipient, il suffit de degager la capsule obturatrice 7 de la douille 3 ou plus exactement de ses surfaces annulaires 5. Des qu'on monte la capsule 7 sur ces dernieres, le recipient est a nouveau ferme hermetiquement. La matiere elastique qui constitue la douille 3 permet a

ses parois de flechir elastiquement par rapport aux surfaces annulaires 5 et assure leur application etanche contre la paroi interne de la capsule 7 et par la meme une fermeture toujours etanche.

Le goulot verseur il

represente dans la fig. 3 et qui appartient ici a une bouteille en verre comporte un bourrelet annulaire 12 dirige vers l'exterieur entourant l'embouchure de versage du goulot il

a son extremite libre.

Le dispositif de fermeture comprend ici une douille 13 en matiere deformable par elasticite (par exemple une matiere plastique molle). pourvue sur sa paroi interne d'une rainure 14 destinee a rece-

voir le bourrelet annulaire 12 solidaire du goulot
Il en vue d'assurer entre eux l'etancheite requise.

Au-dessus et au-dessous du Bourrelet

annulaire 12, la douille

13 presente sur sa paroi externe des surfaces annulaires 15 qui l'entourent et sont separees entre elles par une creusure 16. Sur ces surfaces annulaires 15 est monte une capsule obturatrice

17 constituee par une matiere plus dure que celle de la douille 13, par exemple une matiere plastique dure, de la

Bakelite

ou un metal ou alliage convenable. La paroi interne de cette capsule porte de facon etanche contre les surfaces annulaires 15. La douille 13 est comprimee elastiquement par sa rainure 14 contre le bourrelet annu-

laire 12. Les surfaces annulaires 15 sont appliquees en meme temps contre la paroi interne de la capsule obturatrice 17.

La douille 13 comporte d'une

part, une jupe 18 s'etendant parallelement a

elle au moyen de laquelle elle s'applique hermetiquement contre la paroi interne du goulot verseur il

et, d'autre part, un col 19 dirige vers le haut et delimitant une ouverture de versage.

La capsule obturatrice 17 est munie d'un noyau creux 20 dirige vers l'exterieur pourvu a son extremite inferieure d'un bourrelet annulaire 21 s'appli.

quant sous l'extremite inferieure de la jupe 18 et s'opposant ainsi a tout degagement intempestif de la capsule 17 par rapport a la douille 13.

Le bourrelet annulaire pourrait egalement se trouver dans une rainure de la jupe 18, le noyau 20 etant alors plus court dans une mesure corres.pondante.

Ou bien le bourrelet annulaire pourrait se trouver au-dessus de l'extremite inferieure de ce noyau 20.

Pour faciliter le degagement de la capsule obturatrice 17 a l'ecart de la douille 13, a l'encontre du bourrelet annulaire 21 qui s'y oppose, il est prevu d'apres ce que montre la fig. 3 sur le bord inferieur evase radialement de la douille 13 des saillies arquees 22 dirigees axialement engagees dans des creusures 23 'a

counbure

correspondante du bord inferieur de la capsule obturatrice 17.

Si l'on

.fait tourner la capsule obturatrice 77

comme on le ait

communement pour la degager, son bord inferieur vient en passant entre les creusures 23 rencontrer les saillies 22, ce qui deplace axialement cette capsule. Le -bou;rrelet

annulaire 21

de la jupe 18 cesse ainsi d'etre en prise avec le bord inferieur du noyau 20 ou plus exactement avec la decoupure de sa paroi, de sorte que la capsule 17 peut etre retiree aisement de la douille 13.

Suivant l'exemple -de

realisation que montre la fig. 4,

les organes semblables a ceux qui sont representes dans la fig. 3 sont designes par les memes numeros de reference, et il est prevu sur la paroi interne de la capsule 17 un epaulement 24 dans lequel sont pratiquees les creusures 23 dirigees axialement. Les saillies 22 qui sont dirigees de meme axialement sont menagees ici sur le bord superieur de la douille 13.

Les details de realisation peuvent etre modi.fies,

sans s'ecarter de l'invention, dans le domaine des equivalences.

RESUME
10

Recipient avec disposi.tif.de

fermeture caracterise en ce que ce recipient comporte a son extremite libre un.goulot

entourant l'orifice de versage et muni d'un bourrelet annulaire dirige radialement vers l'exterieur, tandis que le dispositif de fermeture est pourvu sur sa paroi interne d'une douille a rainure de reception de ce bourrelet annulaire, cette douille presentant deux surfaces annulaires separees l'une de l'autre par une creusure interessant sa paroi externe et s'etendant audessus et au-dessous de cette rainure, ces surfaces annulaires portant de facon etanche contre la paroi interne d'une capsule obturatrice engageable sur la douille.

2"

Modes de realisation de ce recipient avec dispositif de fermeture suivant 1",

caracterises en ce que

a. La capsule obturatrice est munie d'un

noyau creux dirige vers l'interieur et entoure d'un -bourre

let annulaire portant derriere le bord inferieur ou dans une rainure pratiquee dans une jupe encastrable dans l'orifice de versage du recipient et en ce que le bord inferieur ou le bord superieur de la douille est lui-meme.pourvu

de creusures arquees s'etendant axiale-ment

dans lesquelles se logent des saillies arquees egalement dirigees axialement et solidaires du bord inferieur ou d'un epaulement interne de la capsule obturatrice;

b. La douille porte une

jupe encastrable dans l'embouchure de l'orifice de versage et qui est reliee a elle par une partic annulaire surmontant cette embouchure;

c. Cette partie annulaire comporte un element verseur dirige vers le haut;

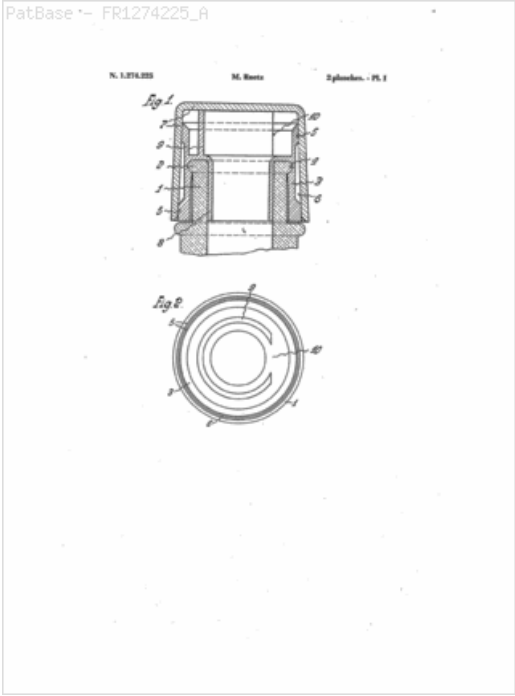
d. La douille ainsi que la jupe encastrable dans l'e,mbouehure

de l'orifice de versage, la partie annulaire et l'element verseur sont etablis en une matiere synthetique apte a s'etendre par elasticite.

Machine translation: [Source: Claim 1] 1. To open the closure of the container, simply clear the capsule obturator 7 of the bush 3 or more exactly its annular surfaces 5. that mounts the capsule 7 of these last, the recipient is a new firm hermetically. The elastic material which constitutes the sleeve its walls bend elastically relative to the annular surfaces 5 and ensures their a.pplication sealed against the inner wall of the capsule 7 and by the same always a waterproof closure. represented in fig. 3 and which here belongs to a glass bottle has an annular bead 12 towards the outside surrounding the mouth of the pouring spout it has its free end. the closure device here comprises a socket 13 in deformable material with elasticity (eg a soft sheet).pourvue on the inner wall of a groove 14 destiny receive a see the annular bead 12 secured to the

neck It to ensure them the required tightness. above and below the Spline ring 12, the. bushing 13 present on the outer wall of the annular surfaces 15 which surround and are separated between them by a hollow 16. of these annular surfaces 15 est.montee a shutter capsule 17 constituted by a harder material than the socket 13, for example a hard plastic material, or a suitable metal or alloy. The inner wall of the capsule door way sealed against the annular surface 15. The sleeve 13 is compressed elastic. ment with its groove 14 against the bead anml- lar 12. The annular surfaces 15 are applied at the same time against the inner wall of the closure cap 17. The bush 13 has. hand, a skirt 18 is etendant.parallelement.a it by which it is applied tightly against the inner wall of the pouring spout it and, second, a neck 19 points up and delimiting a pouring opening. the obturator 17 capsule is fitted with a hollow core 20 towards outside has its lower end provided with an annular bead 21 App. as under the lower end of the skirt 18 and thus opposing any untimely degagement a capsule 17 by report sleeve 13. the annular ring could also be in a groove of the skirt 18, the core 20 while being shorter in corres.pondante measure. Or the annular bead may be above the lower extremity of the core 20. to facilitate Disengagement of the closure capsule 17 has the gap of the bush 13 against al the annular bead 21 that otherwise, it is expected to after that shown in fig. 3 of the flared radially lower edge of the sleeve 13 of the projections 22 being managed arched axially engaged in the recesses 23 ' counbure the corresponding lower edge of the closure capsule 17. If .fait turn the capsule as we have commonly for the develop; its lower edge is passing between the hollows 23 meet projections 22, which moves axially the capsule. The -bou; rrelet ring 21 of the skirt 18 thus ceases to be engaged with the lower edge of the core 20 or more exactly with the opening in the wall so that the capsule 17 can easily be withdrawn from the socket 13. realization that shown in fig. 4 similar bodies to those who are represented in Fig. 3 are designated by the same reference numbers, and it is expected on the inner wall of the capsule 17 a shoulder 24 in which the hollows are practiced 23 axially being managed. The projections 22 which are being managed by the same axially are formed here on the upper edge of the socket 13. The details of realization may be modi.fies, without s' depart from the invention in the field of equivalences. 10 SUMMARY Recipient with disposi.tif.de closure characterizes in that said container comprises at its free end a.Neck surrounding the pouring opening and provided with an annular bead directed radially outward, while the closure device is provided on its inner wall with a socket has reception groove this annular bead, said sleeve having two annular surfaces separated from one another by a recess interesting its outer wall and extending audessus and below said groove, said annular bearing surfaces of sealed manner against the inner wall a shutter engageable capsule on the sleeve. 2 " Methods realization of this next container with closure device 1" characterized in that a. The closure capsule is provided hollow core towards the inside and surrounds a -bourre let annular bearing behind the lower edge or practiced in a groove a built-in skirt in the pouring opening of the container and in that the lower edge or the upper edge of the bush is he meme.pourvu of arched recesses are axially-extending ment where lodge arched projections also being managed and axially fixed to the lower edge or an internal shoulder of the closure capsule; b. The sleeve built in the mouth of the pouring opening and is reliee she has a partic ring surmounting the mouth; c. This annular portion comprises a pouring element points up; d. The socket and the built-in e skirt, mbouehure the pouring opening, the annular portion and the spout element are established in a synthetic material able to be extend by elasticity.

Classifications:
International (IPC 8-9): B65D47/12 (Advanced/Invention); B65D47/12 (Core/Invention)
International (IPC 1-7): B65D47/12
CPC: B65D47/127
European: B65D47/12D



Family:

Publication number	Publication date	Application number	Application date
FR1274225 A	19611020	FR19600844992	19601125

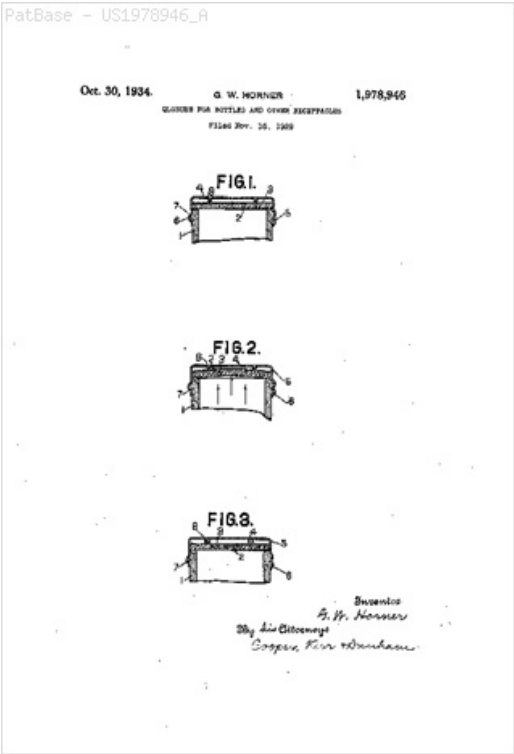
Priority:
FR19600844992 19601125
Inventor(s): (std): RUETZ KARL

214) Family number: 30966933 (US1978946A) © PatBase

Title: CLOSURE FOR BOTTLES AND OTHER RECEPTACLES

Abstract: Stoppers, screw; packing-discs.-A closure for bottles and c. comprises an outer cap secured over the orifice of the bottle and adapted to cover entirely a sealing medium applied across the orifice, the sealing medium being spaced from the cap by a ring-like member and formed of such material that increased pressure in the receptacle causes it to resume a curved or belled form with the whole of its periphery in firm sealing engagement with the edge of the orifice. A disc 2, preferably backed by a metal disc 3, engages a ring-like depression 8, of smaller diameter than the mouth, formed in the screw cap 5 of the closure; increased pressure in the bottle acts directly on the packing disc to cause it to fulcrum about the ring 8 and engage the bottle mouth more tightly. A separate ring may replace the depression 8 or the ring may be integral with the disc 3.

Classifications:
International (IPC 8-9): B65D41/04 (Advanced/Invention); B65D41/04 (Core/Invention)
International (IPC 1-7): B65D41/04
CPC: B65D41/045



Family:

Publication number	Publication date	Application number	Application date
FR684762 A	19300701		19291112
GB324467 A	19300130	GB19280035224	19281129
US1978946 A	19341030	US19290407584	19291116

Priority:

GB19280035224 19281129

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Assignee(s): ALUMINUM COMPANY OF AMERICA
Inventor(s): (std): HORNER GEORGE WALTER ; WALTER HORNER GEORGE

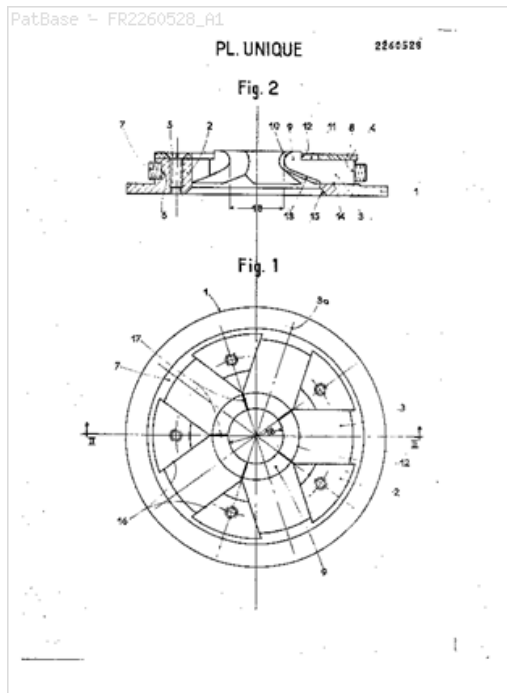
215) Family number: 3293941 (FR2260528A) © PatBase

Title: BOTTLE CAP PRE-FOLDING MACHINE - HAS CONVERGENT SLIDES WITH SEMI-TOROIDAL FACES WORKING IN ANNULAR BODY

Abstract: The machine is for use with skirts of sealing caps of malleable material, and can be mounted on the end of the capping machine, having an annular body with radial chambers equal in number to the number of folds to be produced. Each of teh chambers accommodates a slide working freely in it. The section of this slide towards the centre is semi-toroidal, joining onto the lower face of the slide by a face inclined downwards, and onto the upper ones, above which it protrudes, by a segment of a cylinder. At the sides it has convergent faces, whose angle with teh slide centre line is equal to 360 deg. divided by twice the number of slides.

Classifications:

International (IPC 8-9): B67B5/03 (Advanced/Invention);
B67B5/00 (Core/Invention)
International (IPC 1-7): B21D51/44 B67B3/02 B67B5/00
CPC: B67B5/03
European: B67B5/03

**Family:**

Publication number	Publication date	Application number	Application date
FR2260528 A1	19750905	FR19740004225	19740208
FR2260528 B1	19781229	FR19740004225	19740208

Priority:

FR19740004225 19740208

Probable Assignee:

CEBAL

Assignee(s): (std):

CEBAL

Assignee(s):

CEBAL FR

216) Family number: 19621950 (GB727293A)

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Title: Improvements in and relating to container sealing apparatus

Abstract: 727,293. Applying screw-caps to containers. CROWN CORK and SEAL CO., Inc. May 13, 1953 [June 23, 1952], No. 13430/53. Class 125 (2). [Also in Group II] Relates to a machine, Fig. 1, in which containers such as jars J are advanced by a conveyer 54 through a steam tunnel 55, pick a screw cap from an applicator 58 at the end of a shoot 60 and pass between screwing-up rollers 90 to closure them. According to the invention, the jars and closures before reaching the rollers 90 pass members 86 the cap engaging surfaces of which are inclined downwardly from the vertical axis of the cap and which act to rotate the cap in the unscrewing direction. Any cap which, when picked from the shoot, happens to engage the jar threads, will be at a lower level and will not be engaged by the members 86. Any cap not engaging the threads, will be turned by the member 86 until it can descend into the threads. Machine frame and main drive (Figs. 1 and 2). A motor 96 in a main housing 50 drives through a variable speed connection 110, 102, 103, a vertical shaft 112 including an overload slip clutch 113. Shaft 112 through bevel gears 121, 122; shaft 123 and gear 124 drives the jar conveyer 54 and through shaft 116 and bevel gears 117, 118 drives a horizontal shaft 119 in an upper housing 100. This housing supports the steam tunnel 55, the cap hopper 62 described below and the closing means. It is carried on the casing 50 by pillars 130, 131 which engage at their lower ends screwed shafts 134. A motor 98 through gearing 138, an overload slip clutch 139 and a chain 137 rotates shafts 134 to raise or lower housing 100 when it is desired to adapt the machine to a particular height of jar. A gauge 675, Fig. 2, which can be pivoted out of the way, overlies the conveyer to facilitate this setting. The closing means has a housing 260 in which is a steam diffuser 56 so that the closing is effected in an atmosphere of steam. When passing through the closing means, the jars are guided by side belts 84 driven at the same speed as the conveyer 54. Steam tunnel (Figs. 1 and 8). Steam enters a chamber 202 at the left hand end of the tunnel, Fig. 1, by a pipe 240 and flows to the right hand end above a baffle 204a. It then flows under the baffle towards the left and issues through holes in a plate 203 to impinge on the jar mouths in counterflow to the direction of motion of the jars. The jars pass between side walls 238 supported by the tunnel to confine the steam. Chamber 202 is suspended by hangers 231 from an outer casing 200, loose insulation being interposed. A jar which tilts in the tunnel will force up the plate 203, chamber 202 and hangers 231 relative to the casing 200 so that the jar will not jam. Plate 203 has a handle 239 to facilitate removal. Cap feed (Figs. 11 and 13). An open-topped hopper 62 having a discharge door 306 is supported on the housing 100 and contains the caps. These gravitate into an agitator chamber 285 at the lower end of the hopper and are mixed by blades 301 mounted on shaft 298. The lower end of chamber 285 is closed by a disc 64 rotated through variable drive 294, 295 by a motor 66 and carried on a shaft 290. Shaft 290 is connected by gearing 296 to shaft 298 to drive the agitator blades 301. Magnetic inserts 317 in the disc 64 draw caps up out of chamber 285 under a bar 71 so spaced from the face of the disc that the topmost of two superimposed caps is stripped from the other and returned to the hopper. They are then drawn under a plate 330 until they meet a bar 336 along which they roll under a second plate 331 into the shoot 60. Between plates 330, 331 is a finger 70 having an inturned tip. If a cap has its skirt edge contacting disc 64, then the finger rides over the cap which passes into the shoot. If the cap has its bottom in contact with the disc 64, the finger rides over the leading edge of the skirt and the inturned tip engages the trailing edge of the skirt. The cap then pivots downwardly about the tip away from the magnetic attraction and ultimately falls back into the hopper due to the pressure exerted by succeeding caps. A block 72 under plate 330 prevents caps building up in line with the shoot entrance and exerting such a pressure as would eject a cap from the bottom of the shoot. The upper part of the shoot comprises guides 345, 347, the former being telescopic and having its upper part connected pivotally to a slider 334 and its lower part pivoted to the inner guide 346 of the lower part of the shoot. Slide 334 carries the finger 70 on an arm 335 and can be adjusted in height by a handwheel 395 to vary the width of the shoot entrance to accommodate various cap diameters. The spacing of the guides of the lower part of the shoot can be adjusted by handwheels 389, 390. A resilient finger 364 diverts caps into the downward part of the shoot. The upper part of the shoot has its bottom formed by disc 64 but its lower part curves away from the disc and has a bottom 373. A finger 369 at the upper end of the shoot bottom 373 works in a slot 370 in the disc to remove caps from contact therewith and to guide them on to the shoot bottom. An applicator 58 is mounted by a screw clamp 405 on the bottom of the shoot and has two shoulders to engage the cap skirt and a pivoted member 424 loaded by a spring 427 to keep the cap behind the shoulders. An approaching bottles lifts, the cap off the shoulders forcing

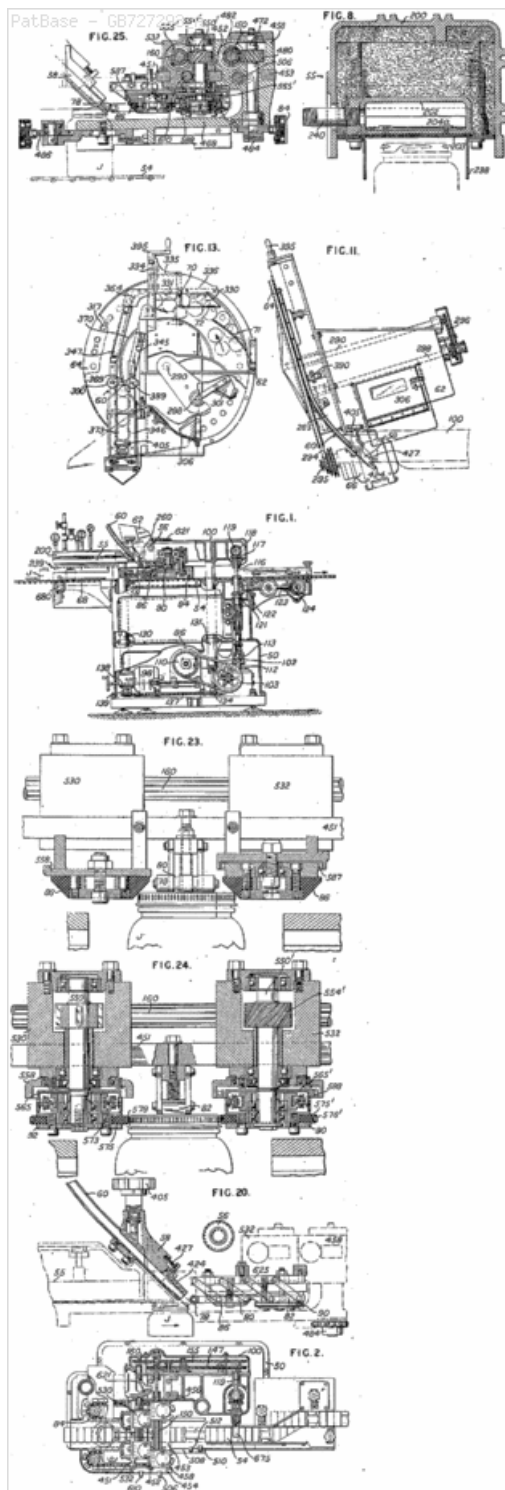
up the member 424 and withdraws it from the shoot. Interchangeable applicators 58 appropriate to various cap sizes are provided. Closures apparatus (Figs. 20, 23, 24 and 25). Extending from the housing 100 and overlying conveyer 54 are three bars 451, 452 and 453 joined at the outer ends by member 454. Slidably mounted on bars 452, 453 are two blocks 456, 458 through which extend vertical shafts 472 having chain wheels 484 at the bottom. The belts 84 pass round these wheels and round idler wheels 486 carried by extensions 468 of the blocks 456, 458. Shafts 472 carry gears 480 meshing with gears 482 splined on shaft 150 extending from housing 100. Shaft 150 is driven from shaft 119, Fig. 2, by chain 147. Blocks 456, 458 are traversed by a left and right threaded rod 506 the end of which can be fitted with a hand crank for moving the belts 84 to and from each other to accommodate different bottle diameters. Indices 510, 512, Fig. 2, are provided on an extension 508 of block 458 adjacent conveyer 54 for this purpose. Mounted on bars 451, 452 are two blocks 530, 532 in which rotate vertical shafts 550, 550¹ carrying at their bottom ends cups 565, 565¹ connected through friction clutches 573 to the screwing up rollers 90, 92. These comprise an outer band 578, 578¹ of rigid milled material carried on a resilient band 575, 575¹, Fig. 24. Shafts 550, 550¹ are driven from shaft 119, Fig. 2, through chain 155, splined shaft 160 and gears 554¹, 555¹. On the inner block 530 is rotatably mounted a bracket 558 which carries a non-rotatable member 88 which is circular in plan and frusto-conical in elevation. The corresponding member 86 on the outer block 532 is rotatably mounted and is driven by the engagement of a gear 587 with a gear 588 formed on inverted cup 565¹. Members 86, 88 from the unscrewing members and they are urged into bottle engaging positions by springs, means being provided to alter their innermost position. Blocks 530, 532 are traversed by a left and right threaded rod 610 rotation of which by a hand crank allows adjustment to suit the cap diameter being used. A pointer 621, Figs. 1 and 2, gives this setting. Between the unscrewing members 86, 88 and the screwing rollers 90, 92 lie respectively bars 80, 82 carried by parallelogram linkages from a bar 625 mounted on bar 451. As the cap is withdrawn from the cap applicator 58 it meets a roller 78 carried by bar 80 which is thus raised. When the cap clears the roller it receives a smart tap from the falling bar which will cause any cap having its skirt resting on the jar's rim to descend. It is then unscrewed if necessary by members 86, 88 while being urged down by the bar 80 which is spring-loaded. It then passes to the screwing rollers 90, 92 while being loaded by bar 82. Other details. In the tunnel 55, the jars actuate a feeler 68 which operates a switch 680 if jars are present to energize the motor 66 driving the cap feed. Any break in the jar supply interrupts the cap feed. The temperature of the steam may be controlled by a temperature-responsive element in contact with the housing 260 of the closing means and controlling an electric superheater in the steam supply. Compressed air may be mixed with the superheated steam. An inert gas may be used instead of steam.

Classifications:

International (IPC 1-7): B67B3/24

CPC: B67B3/2046 F16D57/04

European: B67B3/20G2 F16D57/04



Family:

Publication number	Publication date	Application number	Application date
GB727293 A	19550330	GB19530013430	19530513

Probable Assignee: CROWN CORK AND SEAL CO
Assignee(s): (std): CROWN CORK AND SEAL CO
Assignee(s): CROWN CORK AND SEAL COMPANY INC

217) Family number: 21945950 (US2005753A)

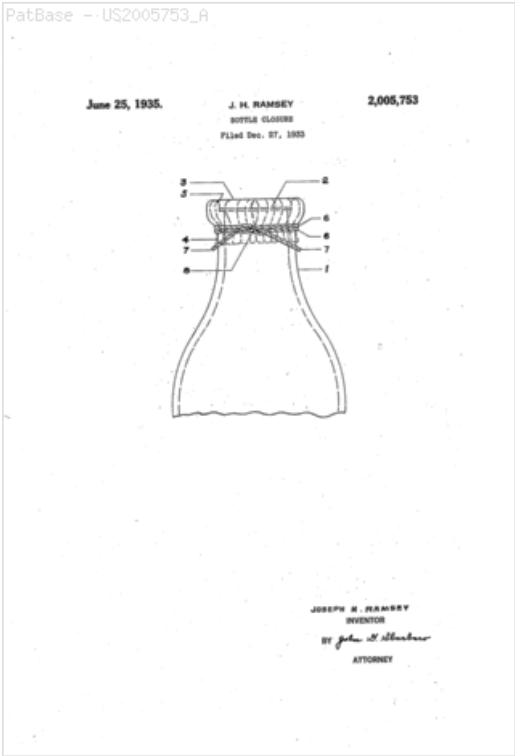
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Title: BOTTLE CLOSURE

Abstract: 1. In combination, a skirted hood cap adapted to be placed over the mouth portion of a bottle, loops of twine in the form of a clove hitch positioned upon and around the skirt of the cap, and a gummy material applied to the twine at the clove hitch so as to secure the loops in assembled position on the skirt of the cap.

Classifications:

International (IPC 8-9): B65D55/08 (Advanced/Invention);
B65D55/02 (Core/Invention)
International (IPC 1-7): B65D41/14
CPC: B65D55/0809
European: B65D55/08A



Family:

Publication number	Publication date	Application number	Application date
US2005753 A	19350625	US19330704156	19331227

Priority:

US19330704156 19331227

Probable Assignee:	RAMSEY JOSEPH H
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Inventor(s): (std):	RAMSEY JOSEPH H

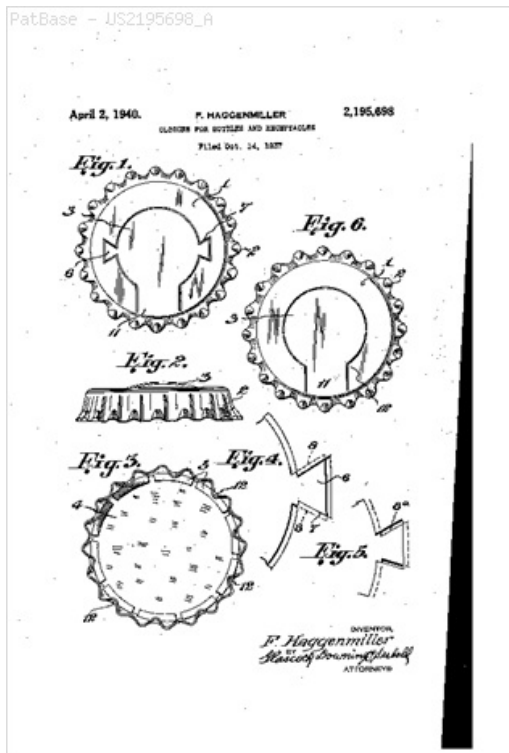
218) Family number: 30989951 (US2195698A) © PatBase

Title: CLOSURE FOR BOTTLES AND RECEPTACLES

Abstract: 442,792. Closures for bottles and c. HOCHSTADTER, O., 33, Tengstrasse, Munich, Germany. Oct. 19, 1934, No. 30008. Convention date, Oct. 20, 1933. [Class 125 (iii)] In a closure for bottles and like containers consisting of two caps 1, 3, Figs. 1 and 4, fitting one within the other, the outer cap 1 has the form of a crown cork which is capable of being torn open to permit removal thereof, and the inner cap 3 consists of a spreading cap having marginal gripping members 10 adapted to engage the ridge round the container opening and a resilient bulged central portion which on being depressed causes the members 10 to spread, thereby enabling the cap to be removed. The two caps are secured together by holding members 8, 9, Fig. 1, the short members 8 engaging the edge or claws 10 of the cap 3, the longer members 9 enclosing the edge 10. The caps are pressed on the container in one operation, the inner part 11 of the marginal portion of the securing cap 1 being pressed tightly on to the members 10 of the closure cap. The closure is opened by tearing the part 5, Fig. 2, through the perforations 7, thus removing the strip 6. The securing cap 1 can then be removed and thereafter the closure cap 3. One member 9 is preferably attached to the strip 6 and inserted under the edge of the inner cap to serve as a lever to lift both caps when the part 5, 6 is removed. The cap 1 may be slotted at 12 to facilitate bending after the strip 6 is removed. The Specification as open to inspection under Sect. 91 comprises also a double closure consisting of two crown corks while a form of double closure is described for application to a rectangular sheet metal box comprising a closure cover and a securing cap having tearing strips. This subject-matter does not appear in the Specification as accepted.

Classifications:

International (IPC 8-9): B65D41/42 (Advanced/Invention);
B65D41/32 (Core/Invention)
International (IPC 1-7): B65D41/42 B65D55/00
CPC: B65D41/42 B65D2101/0053
European: B65D41/42 L65D101/00A3E
US: 215/251 215/254 215/277 215/328

**Family:**

Publication number	Publication date	Application number	Application date
BE423444 A	19371030		00000000
DE620859 A	19351028	DE1933H137820D	19331021
DE633751 A	19360805	DE1933H143797D	19331021
DE689119 A	19400311	DE1936H149284D	19361025
FR779925 A	19350415		00000000
FR826164 A	19380324		19370901
GB442792 A	19360217	GB19340030008	19341019
GB494283 A	19381024	GB19370026255	19370928
NL45798 C	00000000		00000000
US2069410 A	19370202	US19340748935	19341018
US2195698 A	19400402	US19370169033	19371014

Priority:

DE1933H137820 19331021 DE1933H143797 19331021 DE1936H149284 19361025

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Assignee(s): DIPL ING OTTO HOECHSTAEDTER

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219) Family number: 67957 (GB1178447A)

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Title: Gasketed Closures for Containers.

Abstract: 1,178,447. Caps for bottles and c. W. R. GRACE and CO. 29 Sept., 1967 [29 Sept., 1966], No. 44488/67. Heading B8T. [Also in Division C3] A thermoplastic bottle closure contains a gasket formed from resin composition comprising (a) 50-100 percent of a dispersion grade vinyl chloride copolymer containing at least 5 percent of an ethylenically unsaturated comonomer and (b) 0-50 percent of a suspension grade vinyl chloride polymer and/or copolymer, the latter containing not more than 15 percent of an ethylenically unsaturated comonomer, together with a liquid non-volatile plasticizer having a #CED (cohesive energy density) of at least 8.6. Exemplified comonomers are for (a) vinyl acetate and maleic anhydride and for (b) vinyl acetate and vinylidene chloride. The plasticizer may be di-n-butyl adipate, di-2-ethylhexyl phthalate, di-isodecyl phthalate, di-n-butyl phthalate, butyl benzyl phthalate, tricresyl phosphate, octyl diphenyl phosphate, di-n-hexyl adipate or acetyl tributyl citrate. Also added in the examples are titanium dioxide, paraffin wax and calcium/zinc stearates. The gaskets formed from these compositions are used in screw cap bottle closures made from polystyrene, polypropylene or other thermoplastic material. They are formed in situ, preferably being shaped by spinning to distribute the composition, then fluxed by heating to 79-82 C.

Classifications:

International (IPC 8-9): B65D41/04 B65D53/04 C08K5/00

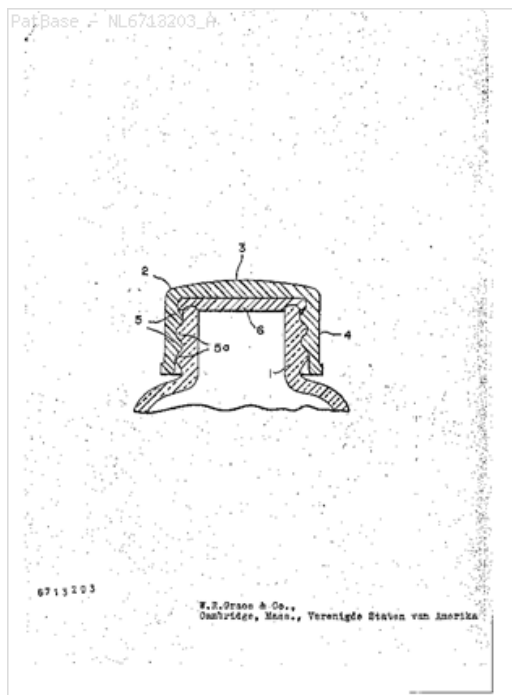
C08L27/06 (Advanced/Invention);

B65D41/04 B65D53/00 C08K5/00 C08L27/00 (Core/Invention)

International (IPC 1-7): B29C13/02 B65D C08F29/18 C08L27/00 C08L27/06

CPC: C08K5/0016 B65D41/045 B65D53/04 C08L27/06

European: B65D41/04D2 B65D53/04 C08K5/00P1 C08L27/06



Family:

Publication number	Publication date	Application number	Application date
BE704453 A	19680201		19670928
DE1694341 A1	19710729	DE19671694341	19670927
FR1545793 A	19681115	FR19670122758	19670929
GB1178447 A	19700121	GB19670044488	19670929
NL6713203 A	19680401	NL19670013203	19670928

Priority:

US19660582945 19660929 FR19670122758 19670929

Probable Assignee: GRACE W R AND CO

Assignee(s): (std): GRACE W R AND CO

Assignee(s): W R GRACE AND CO ; WR GRACE AND CO

Inventor(s): (std): S HOLDSWORTH ROBERT ; W NYE JOHN

220) Family number: 1654968 (US4205754A)

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Title: CONTAINER CLOSURE AND A METHOD OF MAKING THE SAME

Abstract: A closure, preferably for pharmaceutical containers or bottles, and composed by a metal cap member with a central opening and a depending skirt, and a cover member closing the central opening of the cap member and sealingly engaging with the inner rim portion thereof. According to the invention the inner rim portion of the cap member is inclined inwardly at an acute angle, and when the cover member is later removed the rim portion is deformed or bent outwardly. The inner rim portion of the cap member is preferably bent to its inclined position when the cover member is mounted in the central opening of the cap member.

Classifications:

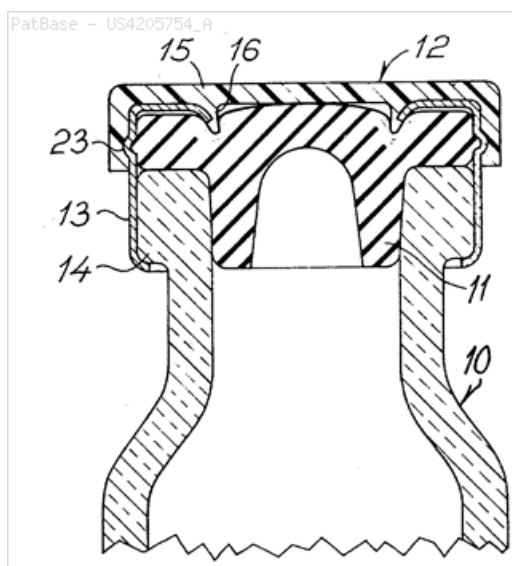
International (IPC 8-9): B65D41/30 B65D51/00 (Advanced/Invention); B65D41/02 B65D51/00 (Core/Invention); B21D (Subclass/Invention)

International (IPC 1-7): A61J1/00 B21D B65D41/20 B65D41/28 B65D41/30 B65D41/62 B65D51/18 B65D55/02

CPC: Y10S215/03 B65D51/002

European: B65D51/00B

US: 215/249 215/251 215/364 215/DIG.3



Family:

Publication number	Publication date	Application number	Application date
DE2820207 A1	19781221	DE19782820207	19780509

DK202077 A	19781110	DK19770002020	19770509
DK98578 A	19790904	DK19780000985	19780303
FI66807 B	19840831	FI19780001438	19780508
FI66807 C	19841210	FI19780001438	19780508
FI781438 A	19781110	FI19780001438	19780508
FR2390341 A1	19781208	FR19780013660	19780509
FR2390341 B1	19831223	FR19780013660	19780509
GB1602865 A	19811118	GB19780018391	19780509
NO150234 B	19840604	NO19780001616	19780508
NO150234 C	19840912	NO19780001616	19780508
NO781616 A	19781110	NO19780001616	19780508
NO781616 L	19781110	NO19780001616	19780508
SE433069 B	19840507	SE19780005247	19780509
SE433069 C	19840816	SE19780005247	19780509
SE7805247 A	19781110	SE19780005247D	19780509
US4205754 A	19800603	US19780904308	19780509

Priority:

DK19770002020 19770509 DK19780000985 19780303

Probable Assignee: ASICOMO AS

Assignee(s): (std): ASICOMO AS ; ONIBA I S

Assignee(s): ASICOMO A S

Inventor(s): (std): JARSSKOV E T ; JARSSKOV EJVIND THEODOR ; JARSSKOW EJVIND THEODOR ; NIELSEN O S M ; NIELSEN OLE SIMONNI MUNDELING ; NIELSEN OLE S M ; JARSSKOV EJVIND T

Inventor(s): E T JARSSKOV ; O S M NIELSEN ; OLE SIMONNI MUNDELING NIELSEN ET EJVIND THEODOR JA ; OLE SIMONNI MUNDELING NIELSEN ET EJVIND THEODOR JARSSKOV ; THEODOR JARSSKOW EJVIND ; OLE SIMONNI MUNDELING NIELSEN ET EJVIND... ; MUNDELING NIELSEN OLE SIMONNI

221) Family number: 707976 (GB1175428A)

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Title: IMPROVEMENTS IN SELF-SEALING PIERCEABLE MEMBRANES AND APPLICATIONS THEREOF

Abstract: 1,175,428. Junction pieces; valves. H. LUHLEICH. 30 March, 1967, No. 14429/67. Headings F2G and F2V. [Also in Division B8] A diaphragm of rubber and c. has a biconvex shape which can be pierced by an hypodermic and c. needle, withdrawal of the needle allowing the pierced hole to seal. Junction pieces.-An elbow-shaped junction piece connecting two tubes 5, Fig. 12, has a biconvex shaped diaphragm 1 which may be pierced by a needle. In a modification, a straight junction piece, Fig. 13 (not shown), connecting in-line tubes (5), has across its centre a biconvex diaphragm (1) which can be pierced by a needle introduced down one of the tubes. In another form, a straight junction piece, Figs. 16, 17 (not shown), has four biconvex diaphragms (1) disposed equiangular around its wall. In yet another modification, two hollow needles are put in communication by inserting them through biconvex diaphragms (1), Figs. 18-20 (not shown), on opposite sides of an entirely enclosed hollow rubber connector. Valves.-A valve connecting pipes 5b, 5c has a body 13, Fig. 24, of rubber and c. with a biconvex diaphragm 1c which can be pierced by a hollow needle 17 having side ports 18a, 18b. The needle 17 is lowered through a guide 16 to shut the valve. Index marks 19a, 19b are aligned with the top of the guide 16 and show when the valve is closed and opened, respectively. In a modification, a hollow needle (17a), Fig. 25 (not shown), is used to pierce two biconvex diaphragms (1c 1d) in a rubber and c. valve body interconnecting three pipes (5b and c.) and movable to various positions connecting the pipes in pairs and c. In another modification, a hollow needle (13), Fig. 23 (not shown), is used as a valve, being inserted through a diaphragm (1b) in an elbow-shaped junction piece, and raised and lowered to pierce and c. adiaaphragm (1c) across the centre of a straight-through junction piece to which it is connected through a short pipe (5a). The diaphragms may be coated or laminated. Biconvex diaphragms in rubber and c. caps for bottles and in stoppers (see Division B8) are also described.

Classifications:

International (IPC 8-9): A61J1/00 A61J1/14 A61M39/04

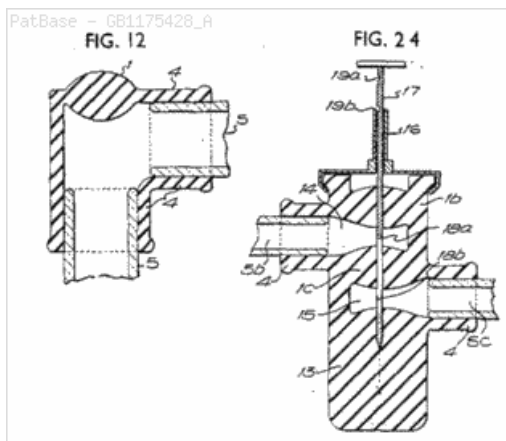
B65D51/00 (Advanced/Invention);

A61J1/00 A61J1/14 A61M39/02 B65D51/00 (Core/Invention)

International (IPC 1-7): B65D1/00

CPC: A61M2039/0217 A61J1/1406 A61M39/04 A61M2039/0072 B65D51/002

European: A61J1/00C2 A61J1/14B A61M39/04 B65D51/00B K61M39/00S9



Family:

Publication number	Publication date	Application number	Application date
GB1175428 A	19691223	GB19670014429	19670330

Priority:

GB19670014429 19670330

Probable Assignee:

LUHLEICH HARTMUT

Assignee(s): (std):

LUHLEICH HARTMUT

Assignee(s):

HARTMUT LUHLEICH

Inventor(s): (std):

LUHLEICH HARTMUT

Inventor(s):

HARTMUT LUHLEICH

Title: Television camera system having improved temperature control

Abstract: 985,829. Non-refillable containers. PERNOD. June 6, 1962 [June 6, 1961], No. 21879/62. Heading B8D. A stopper for a non-refillable container comprises a tubular member insertable into the neck 12 of the container, its recess being divided into two channels 6 and 7 by a partition 8, each channel having a valve member 9 and 10 respectively, at its base which by means of gravity closes the channel when the container stands upright and uncovers it when the container is in a pouring position, means in each channel for limiting the displacement of the valve member, and means overlying the valve members for preventing the members being tampered with but allowing the free flow of the contents from the container. The tubular member comprises a tubular body 1 connected by a flange 3 to a cylindrical member 2 which has a bottom 2a formed with apertures 4 and 5 on which seat ball valves 9 and 10. A cross wall 11 partially covering the circular crosssection of the casing 2 prevents the balls escaping when the container is inverted and together with the flange 3 forms a baffle to prevent insertion of a tool into the device to dislodge the balls. Bars 13 restrict lateral movement of the balls. A compressible sleeve 14 surrounds the tubular body 1 being spaced therefrom at its upper end to accommodate a screw cap 16 covered by a tearable capsule 17 which is surrounded by a jacket 15. In another embodiment the tubular member is adapted for direct insertion into the neck of a bottle and has at its upper end an outer flange for engaging the bottle neck, its lower end being open to receive a plastics moulded insert member comprising a circular base with two apertures for seating ball valves, a diametric partition wall extending upwards from the base and three vertically-spaced baffle elements, the base being forcibly engaged in a groove in the lower end of the tubular member.

Classifications:

International (IPC 8-9): B65D49/04 H01J7/24

H04N5/225 (Advanced/Invention);

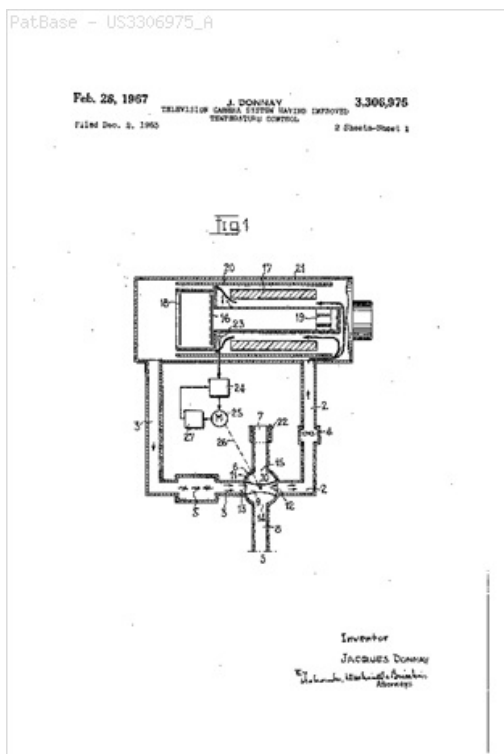
B65D49/00 H01J7/00 H04N5/225 (Core/Invention)

International (IPC 1-7): B65D49/02 B65D49/04 B65D49/10 B67B F16K19/00 F28F27/00 G05D23/13 H01J19/74 H04N5/26

CPC: H01J7/24 H04N5/2252 B65D49/04

European: B65D49/04 H01J7/24 H04N5/225C2

US: 313/12 313/13 313/17 313/22 313/35 315/112 348/243 348/244 348/E05.026 348/E5.026 348/E50.26 62/3.2



Family:

Publication number	Publication date	Application number	Application date
AT244409 B	19660110	AT19630009610	19631202
AU3839063 A1	19650603	AU19630038390	19631203
BE618520 A	19621001	BE19620618520	19620605
BE640668 A	19640401	BE19630640668	19631202
CH381547 A	19640831	CH19620006793	19620605
CH406449 A	19660131	CH19630014840	19631204
DE1233297 A	00000000		00000000
DE1233297 B	19670126	DE1962P029576	19620606
DE1240920 B	19670524	DE1963C031547	19631129
DK115302 B	19690922	DK19620002514	19620606
ES277979 A1	19621201	ES19620277979	19620605
FR1299001 A	19620720	FR19610863991	19610606
FR1352182 A	19640214	FR19620917900	19621207
FR81736 E	19631102	FR19620899067	19620529
FR82595 E	19640306	FR19620915603	19621116
GB985829 A	19650310	GB19620021879	19620606
GB993823 A	19650602	GB19630048084	19631205
LU41833 A	19620806		19620605
MC367 A	19630219	MC19620000393	19620605
NL301327 A	19650927	NL19630301327	19631204
OA1098 A	19680807	OA19640051221	19641230
OA51 A	19660115	OA19640050157	19640624
OA51 E	19680807	OA19640051222	19641230
US3306975 A	19670228	US19630327184	19631202

Priority:

FR19610863991 19610606

FR19620899067 19620529

FR19620915603 19621116

FR19620917900 19621207

Probable Assignee: PERNOD

Assignee(s): (std): PERNOD ; PERNOD FA ; PERNOD MONTREUIL SOUS BOIS ; PERNOD SA ; PERNOD ; THOMSON HOUSTON COMP FRANCAISE

Assignee(s): SOCIETE ANONYME DITE PERNOD ; ANONYME PERNOD SOC ; CIE FRANCAISE THOMSON HOUSTON ; COMPAGNIE FRANCAISE THOMSON HOUSTON ; COMPAGNIE FRANCAISE THOMSON HOUSTON HOTCHKISS BRANDT ; FA PERNOD ; FRANCAISE THOMSON HOUSTON COMP ; PERNOD SOCIETE ANONYME ; PERNOD S A ; PERNOD SOC ANONYME ; FRANCAISE THOMSON HOUSTONHOTCHKISS BRANDT COMP

Inventor(s): (std): BICHON R ; BICHON RENE ; DONNAY JACQUES ; RENE BICHON ; JACQUES DONNAY

Inventor(s): JACQUES DOLINAY

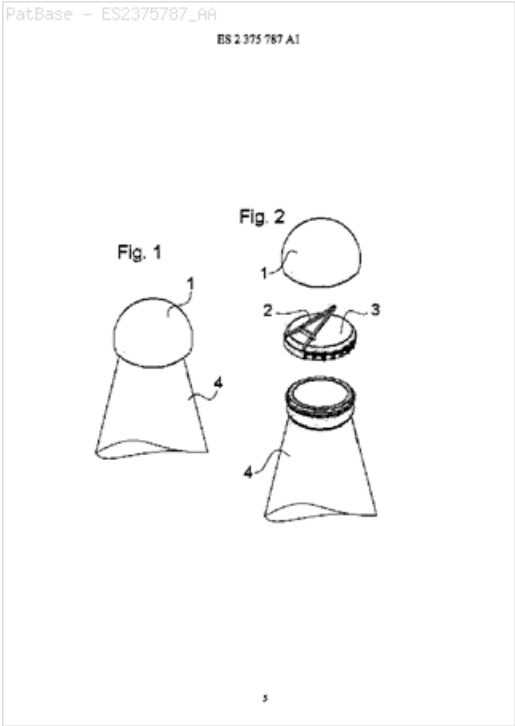
223) Family number: 50755982 (ES2375787B) © PatBase

Title: Dispositivo de auto-apertura para botellas con tapon corona Self-opening device for bottles with crown cap (Machine translation)

Abstract: Source: ES2375787B [ES] Dispositivo de auto-apertura para botellas con tapon corona, constituido por un elemento a modo de cazoleta hueca, semi-esferica (1), que se coloca sobrepuesta a dicho tapon e incluye interiormente el mecanismo de apertura, que consiste en un vástago (2), a modo de palanca, que se fija lateralmente en el faldon periferico del tapon (3) y emerge divergentemente por encima del tapon, manteniendose en posicion inclinada apoyado en un pie intermedio (24) y con su extremo libre (23) topando contra la pared interior de la cazoleta, en la zona opuesta a la cara exterior del tapon (3). La apertura del tapon, que se retira de la botella conjuntamente con la cazoleta (1) se efectua al presionar o golpear exteriormente dicha cazoleta.

Machine translation: Self-opening device for bottles with crown cap, consisting of a cup-like element hollow semi-spherical (1), which is placed overlying said stopper includes inwardly opening mechanism, which consists of a rod (2), as a lever, which is fixed laterally on the peripheral skirt of the cap (3) and divergently emerges above the cap, keeping in an upright position supported in a middle foot (24) and with its free end (23) abutting against the inside of the bowl wall, in the area opposite the outside of the cap (3). The opening of the cap, which is removed from the bottle along with the bowl (1) is effected by pushing or hitting outwardly said bowl.

Classifications:
International (IPC 8-9): B67B7/16 (Advanced/Invention)
CPC: B67B7/162



Family:

Publication number	Publication date	Application number	Application date
ES2375787 AA	20120306	ES20120030182	20120208
ES2375787 BA	20130123	ES20120030182	20120208

Priority:
ES20120030182 20120208

Probable Assignee: CARO MORALES FRANCISCO
Assignee(s): (std): CARO MORALES FRANCISCO
Assignee(s): FRANCISCO CARO MORALES
Inventor(s): (std): CARO MORALES FRANCISCO
Inventor(s): FRANCISCO CARO MORALES
Agent(s): URIZAR JESUS MARIA

224) Family number: 3801983 (GB1353406A) © PatBase

Title: BOTTLE CAP

Abstract: 1353406 Caps for bottles CONTINENTAL CAN CO Inc 15 July 1971 33396/71 Heading B8T A cap for use with bottles having screwthreaded necks or screw-thread equivalents such as cam lugs, is formed from metal sheet material and comprises a top panel 13 and a generally cylindrical skirt 11. Corrugations are formed in the skirt which define closely

spaced ridges 16 and flutes 17. The flutes extend inwardly and the crests of the ridges are on a level with the surface of the skirt. The cap is applied by a normal crowning machine, being constricted about the neck 23 of a bottle 20 so that portions of the flutes bend over the threads 21 and form thread engaging portions 22. The depth of the flutes is chosen to be the same as the depth of the threads so that portions 22 are level with the ridges and skirt surface. The form of the cap lends itself to use of light gauge tin plate or tin-free steel but in a tamper-proof modification (Fig. 10, not shown) in which the cap is frangibly connected to a constructed lower skirt edge, a preferred material is aluminium.

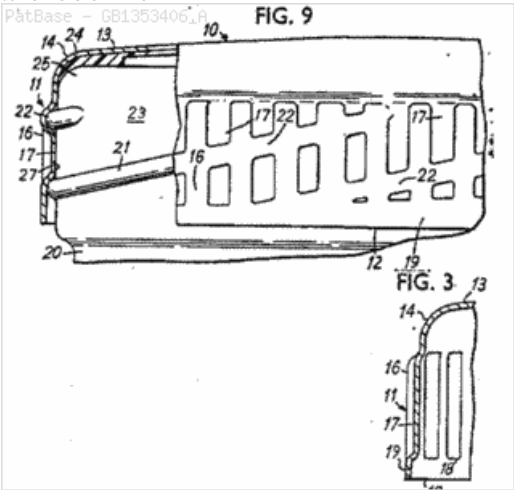
Classifications:

International (IPC 8-9): B65D41/04 B65D41/34 (Advanced/Invention);
B65D41/04 B65D41/34 (Core/Invention)

International (IPC 1-7): B65D41/04 B65D41/34

CPC: B65D41/0464 B65D41/348

European: B65D41/04D4 B65D41/34F



Family:

Publication number	Publication date	Application number	Application date
GB1353406 A	19740515	GB19710033396	19710715

Priority:

GB19710033396 19710715

Probable Assignee: CONTINENTAL CAN CO

Assignee(s): (std): CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC

225) Family number: 22850984 (US3122255A)

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Title: SEALING CLOSURE

Abstract: (Claim 1) 1. A sealing device for a crown-type bottle having an overhanging lip adjacent its mouth presenting an annular shoulder facing oppositely from the top of said lip, comprising: a cap formed of a thin workable material and having a central closure portion, a peripheral raised groove portion defining a continuous groove, and a depending skirt adapted for locking engagement with said shoulder; and a resilient, deformable sealing-lining element carried by said cap and including a central liner portion, a continuous projecting seal portion comprising a downwardly extending concavo-convex bead initially carried adjacent the mouth of and extending oppositely from said groove, and a peripheral liner portion extending outwardly from said seal portion in substantial coplanar relationship with said central liner portion, said seal portion being adapted to be confined within said groove and sealingly deformed against said lip during said locking engagement of said skirt with said Shoulder.

Classifications:

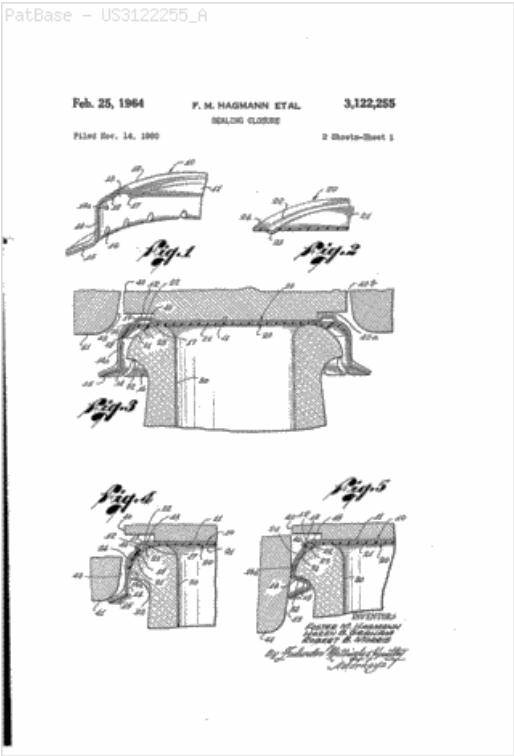
International (IPC 8-9): B65D41/12 (Advanced/Invention);
B65D41/02 (Core/Invention)

International (IPC 1-7): B65D53/04

CPC: B65D41/12 Y10T29/49918

European: B65D41/12

US: 200/16A 215/328 215/343 29/511



Family:

Publication number	Publication date	Application number	Application date
US3122255 A	19640225	US19600068759	19601114

Priority:

US19600068759 19601114

Probable Assignee: HAGMANN

Assignee(s): (std): HAGMANN ; WANDA L PRATT

Inventor(s): (std): GRAHAM HAZEN B ; HAGMANN FOSTER M ; MORRIS ROBERT B

226) Family number: 42022996 (US2008169264A)

© PatBase

Title: BOTTLE CAPPING SYSTEMS

Abstract: A pump dispenser has a large ergonomic actuator designed to ergonomically deliver a composition to a substrate in the consumer's hand without the consumer having to pick up the pump dispenser. The ergonomic design allows the composition to be delivered in a proper aspect ratio to the substrate. The composition can be delivered in such a way that the composition is not aerosolized into the air or delivered to an unintended surface. The method of delivery can be made intuitive to the consumer by providing an actuator skirt that suggests the pumping mechanism or by providing a depiction of a hand or substrate over the pump dispenser. The pump dispenser is also useful for compositions or substrates that are not stable together. The pump dispenser may be designed with refill bottle capping systems such that only certain refill bottles may fit into the pump dispenser.

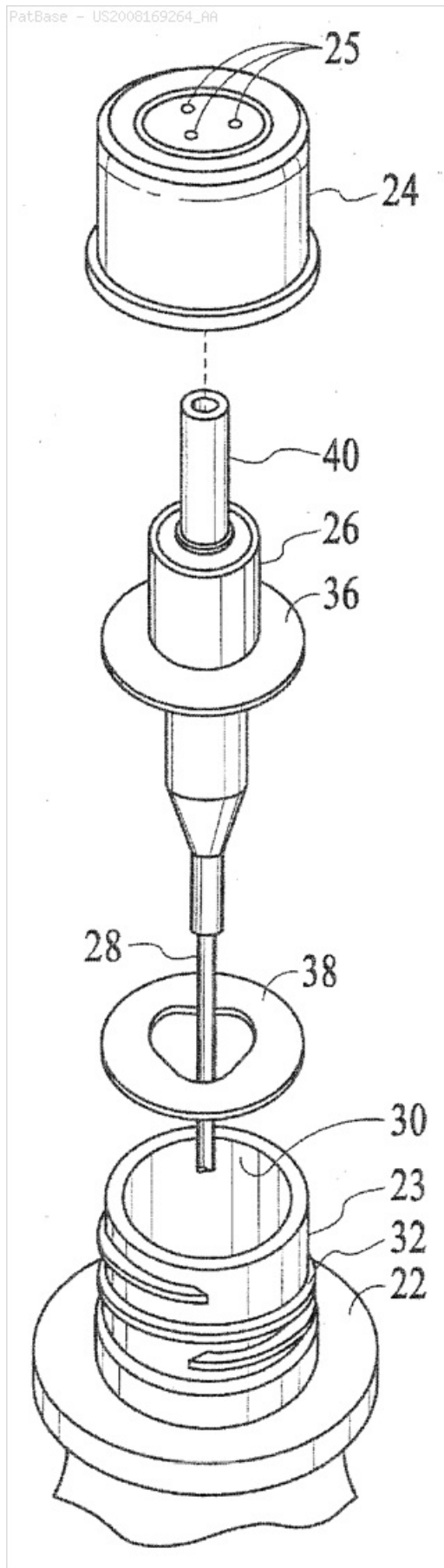
Classifications:

International (IPC 8-9): B65D41/00 B65D41/04 (Advanced/Invention);
B65D41/00 B65D41/04 (Core/Invention)

CPC: B05B1/16 B05B11/0005 B05B11/3001 B05B11/3047
B05B11/3052 B05C17/002 B65D41/0471 B65D41/06 B65D41/17

European: B05B11/00B B05B11/00P9B4B B05B11/00P9H
B05B11/30H1D2 B05B11/30H3 B65D41/04E B65D41/06 B65D41/17
L05B1/16 L05B11/30C L05C17/00B

US: 215/316 215/329

**Family:**

Publication number	Publication date	Application number	Application date
US2008169264 AA	20080717	US20070622756	20070112

Priority:

US20070622756 20070112

Probable Assignee:

CLOROX CO

Assignee(s): (std):

KENNEDY TIMOTHY JAMES

Assignee(s):

CLOROX CO

Inventor(s): (std): KENNEDY TIMOTHY JAMES
Agent(s): THE CLOROX COMPANY; CLOROX CO

227) Family number: 7266997 (US3724700A) © PatBase

Title: CONVENIENCE OPENING CLOSURE

Abstract: The invention disclosed is related to scored tear strips in convenience type ("Easy-open") bottle closures. To prevent complete tear out of the tear strip on removal of the cap, the present invention halts the tearing of one of the side scores so that the closure and tear strip remain in one piece and are removable from the container as a unit. In the path of one of the legs of the tear strip is an obstruction, i.e., a folded tab integral with the skirt, which stops the tearing action in the one leg while the other opposite leg continues to tear through the edge of the skirt.

Classifications:

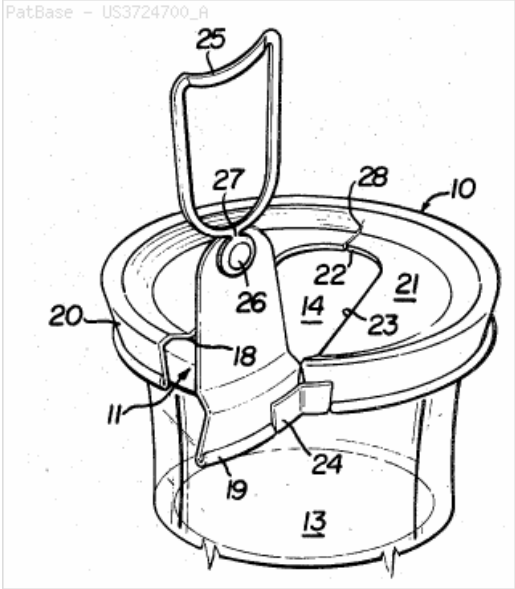
International (IPC 8-9): B65D43/02 (Advanced/Invention);
B65D43/02 (Core/Invention)

International (IPC 1-7): B65D17/16 B65D43/02

CPC: B65D17/4012

European: B65D17/16B2

US: 215/255 215/4.6A



Family:

Publication number	Publication date	Application number	Application date
US3724700 A	19730403	US19710117426	19710222

Priority:

US19710117426 19710222

Probable Assignee: OWENS ILLINOIS INC

Assignee(s): (std): OWENS ILLINOIS INC

Assignee(s): OWENS ILI INC US ; OWENS ILLINOIS GLASS CONTAINER INC

Inventor(s): (std): HEFFRAN V

Inventor(s): HEFFRAN V US