

Search query (7): fn=(61284455 or 58189684 or 58189684 or 61646005 or 15325633 or 19159398 or 5160289 or 5160289 or 36351888 or 36351888 or 36410479 or 36410479 or 44129158 or 49007578 or 49007578 or 21719287 or 21790675 or 8629044 or 30141675 or 28673962 or 5105952 or 5105952 or 28673962 or 11174826 or 8446405 or 31959217 or 49007578 or 49007578 or 8446405 or 8446405)

Results: 19

1) Family number: 61646005 (US2018354689A)

© PatBase

Title: A TAMPER-EVIDENT CLOSURE

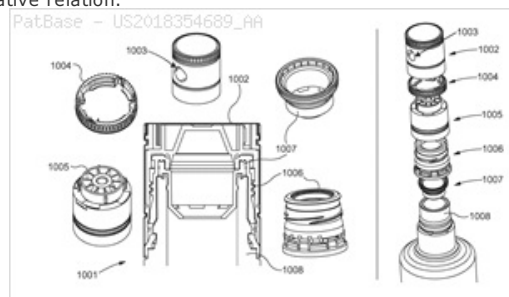
Abstract: A tamper-evident closure (101) comprises a first portion (105, 106) and a second portion (102, 104) comprising a window (103) through which a view of the first portion (105, 106) is visible. The second portion (102, 104) is rotated relative to the first portion (105, 106) upon first opening of the tamper-evident closure (101), from a first position in which the first and second portions (105, 106; 102, 104) are in a first relative relation and a first view of the first portion (105, 106) is visible through the window (103), to a second position in which the first and second portions (105, 106; 102, 104) are in a second relative relation and a second, different view of the first portion (105, 106) is visible through the window (103). A locking mechanism irreversibly locks the first and second portions (105, 106; 102, 104) in the second relative relation.

Classifications:

International (IPC 8-9): B65D41/34 B65D49/02

B65D55/02 (Advanced/Invention)

CPC: B65D2101/0069 B65D2101/0084 B65D55/026 B65D41/34 B65D49/02



Family:

Publication number	Publication date	Application number	Application date
CN108698735 A	20181023	CN201680079885	20161129
CO20180005847 A2	20180620	CO20180005847	20180606
EP3383756 A1	20181010	EP20160808587	20161129
GB201521303 A0	20160113	GB20150021303	20151202
GB201603600 A0	20160413	GB20160003600	20160302
GB201604499 A0	20160427	GB20160004499	20160316
PH2018501130 A	20190121	PH20180501130	20180528
US2018354689 AA	20181213	US20160779950	20161129
WO17093218 A1	20170608	WO2016EP79075	20161129

Priority:

GB20150021303 20151202 GB20160003600 20160302 GB20160004499 20160316
WO2016EP79075 20161129

Probable Assignee: OBRIST CLOSURES SWITZERLAND

Assignee(s): (std): OBRIST ALBERT AG ; OBRIST CLOSURES SWITZERLAND

Assignee(s): OBRIST CLOSURES SWITZERLAND GMBH

Inventor(s): (std): WEIR ALLISON

Inventor(s): ALLISON WEIR

Agent(s): MARGARITA CASTELLANOS ABONDANO; BRYERS LLP

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

2) Family number: 8629044 (US4352436A)

© PatBase

Title: Pilferproof cap

Abstract: A plastic screw-on closure adapted for use with containers and having provision to indicate when the sealed container closure has been tampered with. The closure has a cap, a band for application over the shoulder of a container, means for connecting the cap and band and drive means for controlling relative rotation of the cap and band as the band is applied over a shoulder on a container. The drive means provides engagement between the cap and band during application of the closure, thereby ensuring the integrity of the connecting means during application of the closure. However, the drive means is ineffective during removal of the cap, such that the connecting means fractures due to axial separation of the cap and band.

Classifications:

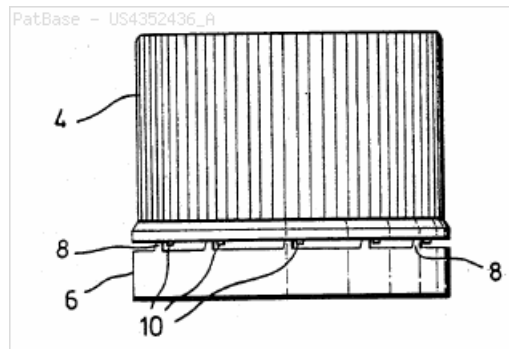
International (IPC 8-9): B65D41/34 (Advanced/Invention);

B65D41/34 (Core/Invention)

International (IPC 1-7): B65D41/34

CPC: B65D41/3452

European: B65D41/34D1A
US: 215/252



Family:

Publication number	Publication date	Application number	Application date
US4352436 A	19821005	US19800211389	19801128

Priority:

US19800211389 19801128

Probable Assignee: CONSUMERS GLASS CO LTD
Assignee(s): (std): CONSUMERS GLASS CO LTD
Assignee(s): CONSUMERS GLASS COMPANY LIMITED
Inventor(s): (std): CHARTIER ROBERT M ; RICHARD JEAN P

3) Family number: 44129158 (US2011024423A)

© PatBase

Title: TAMPER-EVIDENT PACKAGE WITH IMPROVED OPENING PERFORMANCE

Abstract: A tamper-evident package having pressurized contents includes a closure and associated container which cooperate to provide desired tamper-evidence upon initial removal of the closure from the container, while promoting convenient and comfortable removal and use by consumers. In particular, the package is configured such that from a fully applied position of the closure on the container, the closure is movable through a predetermined angle prior to actuation of the tamper-evident feature on the package. In this fashion, the torque which must be applied to the closure for overcoming the static friction at the sealing interface between the closure and the container can be overcome prior to the application of torque required for operating the tamper-evident feature of the package. The present invention contemplates enhancing the opening performance of the package by configuring the package to include certain structure features to facilitate convenient, consistent, and comfortable use by consumers.

Classifications:

International (ipc 8-9): B65D B65D1/02 B65D39/00 B65D41/34

B65D41/36 B65D41/38 B65D41/62 (Advanced/Invention);

B65D41/34 (Advanced/Non-Invention);

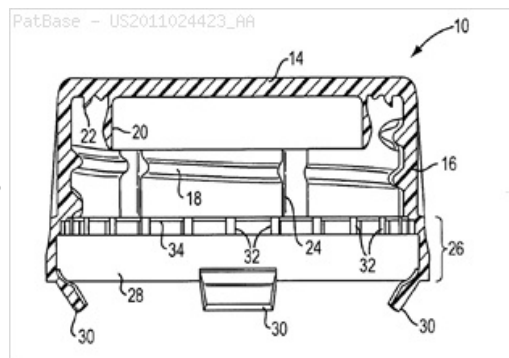
B65D39/00 B65D41/00 (Core/Invention)

International (ipc 1-7): B65D39/00

CPC: B65D41/3428

European: B65D41/34C1

US: 215/252 215/307 215/329 215/336 215/344 215/44 215/902 220/266 220/268 220/276



Family:

Publication number	Publication date	Application number	Application date
AU2009260868 AA	20091223	AU20090260868	20090430
AU2009260868 BB	20150702	AU20090260868	20090430
BRPI0911576 A2	20170620	BR2009PI11576	20090430
CA2721234 AA	20091223	CA20092721234	20090430
CN102015472 A	20110413	CN200980115609	20090430
CN102015472 B	20130828	CN200980115609	20090430
EG26024 A	20121211	EG20100101820	20101028
EP2268554 A2	20110105	EP20090766980	20090430
EP2268554 A4	20111207	EP20090766980	20090430
EP2268554 B1	20180606	EP20090766980	20090430
EP3388358 A1	20181017	EP20180175996	20090430
ES2682462 T3	20180920	ES20090766980T	20090430
IN06911CN2010 A	20110708	IN2010CN06911	20101027
IN201848025858 A	20180720	IN201848025858	20180711
JP2011519330 T2	20110707	JP20110507444T	20090430
MX2010011796 A1	20101130	MX20100011796	20090430
RU2010148807 A	20120610	RU20100148807	20090430
RU2507137 C2	20140220	RU20100148807	20090430
US2011024423 AA	20110203	US20090934916	20090430

US8807360 BB	20140819	US20090934916	20090430
USRE47156 E	20181211	US20090241929	20090430
WO09154666 A2	20091223	WO2009US02632	20090430
WO09154666 A3	20100218	WO2009US02632	20090430
ZA201006949 A	20110629	ZA20100006949	20100929

Priority:

US20080125981P 20080430 EP20090766980 20090430 IN2010CN06911 20090430
US20090934916 20090430 US20090241929 20090430 WO2009US02632 20090430
US20160241929 20160819

Probable Assignee: CLOSURE SYSTEMS INT INC

Assignee(s): (std): CLOSURE SYSTEMS INT ; CLOSURE SYSTEMS INT INC ; CLOSURE SYSTEMS INTERNAT ; CLOSURE SYSTEMS INTERNATIONAL ; CLOSURE SYSTEMS INTERNATIONAL INC ; MCBRIDE STEVE ; SMEYAK LAWRENCE M ; GEVERS DAVE ; ERSPAMER JOHN ; CLOSURE SYSTEMS INTERNTIONAL INC ; KLOUZHER SISTEMZ INTERNEHSHNL INK

Assignee(s): BANK OF NEW YORK MELLON

Inventor(s): (std): DAVE GEVERS ; DZHEVERS DEHJV ; EHRSPAMER DZHON ; ERSPAMER JOHN ; GEVERS DAVE ; JOHN ERSPAMER ; LARRY SMEYAK ; MAKBRAJD STIV ; MCBRIDE STEVE ; MEBRIDE STEVE ; SMEYAK LARRY ; SMEYAK LAWRENCE M ; STEVE MCBRIDE

Agent(s): FB RICE ; FB RICE PTY LTD ; ALGEMEEN OCTROOI EN MERKENBUREAU ; ALGEMEEN OCTROOI EN MERKENBUREAU BV ; ISERN JORGE ; WOOD PHILLIPS KATZ CLARK AND MORTIMER ; NIXON PEABODY LLP ; GEIMER D STEPHEN

Designated states: AE AG AL AM AO 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 ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

4) Family number: 31959217 (US2007090110A)

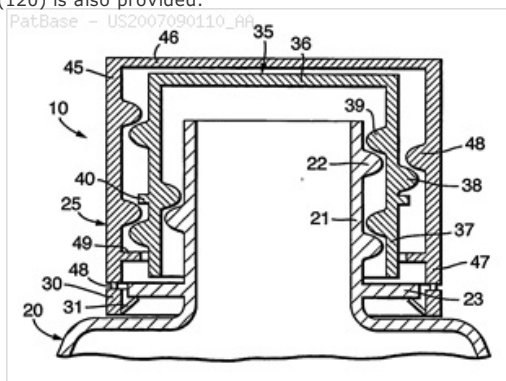
© PatBase

Title: TAMPER EVIDENT CLOSURE

Abstract: A tamper-evident closure (10) for a container (20) is provided. The closure (10) comprises a first portion (25) including inner (35) and outer (45) parts, and a second portion (30). The outer part (45) is movable relative to the inner part (35) from a first position in which the outer part (45) is immediately adjacent the second portion (30) to a second position in which there is an empty unobstructed gap (G) therebetween. The inner (35) and outer (45) parts are adapted to become irreversibly locked in the second position so that the outer part (45) cannot be moved back to the first position to close the gap (G). A combination of such a closure (110) with an in-bore filament (100) connectable to a container (120) is also provided.

Classifications:

International (IPC 8-9): B65D B65D39/00 B65D41/00 B65D41/04 B65D41/34 B65D41/62 B65D43/00 B65D43/18 B65D47/00 B65D49/02 B65D49/06 B65D50/04 B65D51/00 B65D51/18 B65D51/20 B65D55/02 (Advanced/Invention); B65D41/34 B65D50/00 B65D50/04 (Core/Invention); B65D55/02 (Core/Non-invention); B65D (Subclass/Invention)
International (IPC 1-7): B65D41/04 B65D41/34 B65D50/04 B65D51/18 B65D55/02
CPC: B65D41/0478 B65D41/0492 B65D41/3428 B65D49/06 B65D50/041 B65D2251/0015 B65D2251/0078 B65D55/026
European: B65D41/04E1 B65D41/04G B65D41/34C1 B65D49/06 B65D50/04B L65D251/00Y2D L65D251/00Y6D
US: 1/1 215/21 215/252 215/258 215/277 220/254.1 220/254.8 220/254.9 220/254.900 220/256.1 220/257.1 220/259.3 220/259.4 220/290



Family:

Publication number	Publication date	Application number	Application date
AT387382 E	20080315	AT20040790841T	20041026
BRPI0416014 A	20070102	BR2004PI16014	20041026
BRPI0416014 B1	20160823	BR2004PI16014	20041026
DE602004012149 D1	20080410	DE200460012149T	20041026
DE602004012149 T2	20090312	DE200460012149T	20041026
EP1694576 A1	20060830	EP20040790841	20041026
EP1694576 B1	20080227	EP20040790841	20041026
ES2302040 T3	20080701	ES20040790841T	20041026
HK1094438 A1	20080613	HK20070101359	20070205
HK1094438 A1	20070330	HK20070101359	20070205
HK1094438 A3	20070330	HK20070101359	20070205
HK1094438 B	20080613	HK20070101359	20070205
MXPA06004684 A1	20061214	MX2006PA04684	20041026
MY137973 A	20090430	MY20040004392	20041025
PT1694576 T	20080527	PT20040790841T	20041026
SI1694576 T1	20080831	SI20040030703T	20041026
TH39056 B	20140212	TH20041004179	20041026
TH70496 A	20050907	TH20041004179	20041026
TW200519000 A	20050616	TW20040132373	20041026
TWI331118 B	20101001	TW20040132373	20041026

US2007090110 AA	20070426	US20040577575	20041026
US2013206765 AA	20130815	US20130828642	20130314
US8522991 BB	20130903	US20040577575	20041026
US9242768 BB	20160126	US20130828642	20130314
WO05049443 A1	20050602	WO2004EP12056	20041026

Priority:

EP20030257261 20031031 EP20040790841 20041026 WO2004EP12056 20041026
US20060577575 20060905 US20130828642 20130314

Probable Assignee: OBRIST CLOSURES SWITZERLAND GMBH

Assignee(s): (std): CROWN PACKAGING TECHNOLOGY INC ; CROWN PACKAGING UK PLC ; MCCLUSKIE STEVEN A ; MCCLUSKIE STEVEN ALLEN ; MCIVOR CHARLES A ; MCIVOR CHARLES ANTHONY ; RAMSEY CHRISTOPHER ; SKELTON STEVEN ANDREW ; SKELTON STEVEN A ; OBRIST CLOSURES SWITZERLAND

Assignee(s): OBRIST CLOSURES SWITZERLAND GMBHCH ; OBRIST CLOSURES SWITZERLAND GMBH

Inventor(s): (std): ALLEN MCCLUSKIE STEVEN ; ANDREW SKELTON STEVEN ; ANTHONY MCIVOR CHARLES ; CHRISTOPHER RAMSEY ; MCCLUSKIE STEVEN A ; MCCLUSKIE STEVEN ALLEN ; SKELTON STEVEN A ; SKELTON STEVEN ANDREW ; MCIVOR CHARLES A ; MCIVOR CHARLES ANTHONY ; RAMSEY CHRISTOPHER ; RAMSEY CHRISTOPHER PAUL ; MCLVOR CHARLES ANTHONY ; MCCLUSKIE STEVEN ALLAN

Inventor(s): SKELTON STEVEN ; STEVEN ALLAN MCCLUSKIE ; STEVEN ALLEN MCCLUSKIE ; STEVEN ANDREW SKELTON ; MCIVOR CHARLES ; MCCLUSKIE STEVEN ; CHARLES ANTHONY MCIVOR ; CHRISTOPHER PAUL RAMSEY

Agent(s): GREENWOOD MATTHEW DAVID ET AL; CHINA PATENT AGENT HK LTD; KNOBLE YOSHIDA AND DUNLEAVY; BRADLEY ARANT BOULT CUMMINGS LLP; THOMAS G

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 SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

5) Family number: 21719287 (US2141856A)

© PatBase

Title: METHOD OF MAKING RECEPTACLE SEALING CAPS

Abstract: 1. The herein described method of making sheet metal sealing caps for receptacles which consists in first producing a cap structure presenting a substantially cylindrical skirt portion, then cutting a series of slots in said skirt portion between the ends thereof and extending circumferentially thereof in a plane disposed perpendicularly to the axis of said skirt portion whereby to partially separate the lower from the upper skirt portion, expanding and distorting the portions of the said lower skirt portion disposed below said slots to render said lower end portion non-cylindrical in horizontal section and cause the same to define a larger area than is denoted by the upper skirt portion, partially severing the unbroken portions of said skirt lying between said slots and partially severing said lower skirt portion at a point below one of said slots and from its upper to its lower end, to render the latter digitally severable at said last-named point and for weakening said unbroken portions to enable the latter to be digitally severed following severance of said lower skirt portion for detaching the latter from said upper skirt portion.

Classifications:

International (IPC 8-9): B21D51/38 B65D41/04

B65D41/34 (Advanced/Invention);

B21D51/38 B65D41/04 B65D41/34 (Core/Invention)

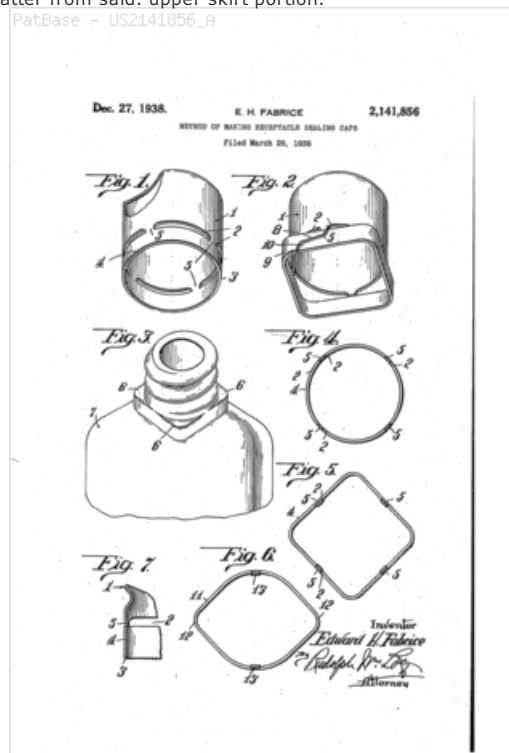
International (IPC 1-7): B65D41/34

CPC: B21D51/38 B65D41/0464 B65D41/34 B65D41/3485 Y10T24/2187

European: B21D51/38 B65D41/04D4 B65D41/34 B65D41/34F2

US: 24/68B 413/12

PatBase - US2141856_A



Family:

Publication number	Publication date	Application number	Application date
US2141856 A	19381227	US19360070959	19360326

Priority:

US19360070959 19360326

Probable Assignee: GUARDIAN SAFETY SEAL CO

Assignee(s): (std): GUARDIAN SAFETY SEAL CO ; GUARDIAN SAFETY SEAL COMPANY

Inventor(s): (std): FABRICE EDWARD H

6) Family number: 5160289 (GB2078689A)

© PatBase

Title: Tamperproof Closures

Abstract: A tamperproof closure comprises the combination of a container and a cap (11) provided with a circumferential line of weakness (18). The upper portion of the cap is screw- threadedly attached to the container, a circumferential portion (20) of the lower portion (16) of the cap being deformed into an annular recess (21) on the container.

Classifications:

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

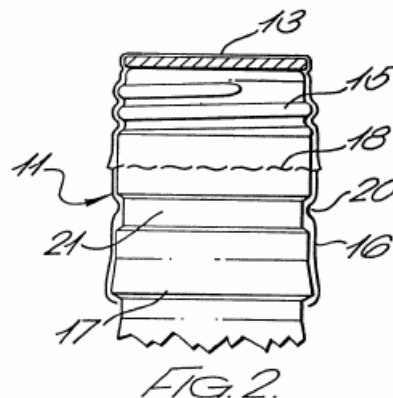
B65D41/34 (Core/Invention)

International (IPC 1-7): B65D55/08

CPC: B65D41/348

European: B65D41/34F

PatBase - GB2078689_A1



Family:

Publication number	Publication date	Application number	Application date
GB2078689 A1	19820113	GB19800013310	19800423

Priority:

GB19800013310 19800423

Probable Assignee: UG CLOSURES AND PLASTICS LTD

Assignee(s): (std): UG CLOSURES AND PLASTICS LTD

7) Family number: 19159398 (FR2744988A)

© PatBase

Title: Plastics stopper

Abstract: The stopper has a cap (5) with a transverse bottom (6) and a peripheral skirt (8) with an internal thread (9). A security collar (1) is connected to the skirt by non-breakable (15a) and breakable (15b) links. The collar has an external ring (12) which extends the skirt. An internal projection (14) engages a sealing rim (4) in the container neck. The external ring has an axially extending zone of weak resistance. This zone facilitates deformation of the security collar during its widening during passage of the projection onto the rim when plugging the container neck.

Classifications:

International (IPC 8-9): B65D39/14 B65D41/00 B65D41/34

B65D41/38 (Advanced/Invention);

B65D39/00 B65D41/00 B65D41/34 (Core/Invention);

B65D (Subclass/Invention)

International (IPC 1-7): B65D B65D39/14 B65D41/00 B65D41/04

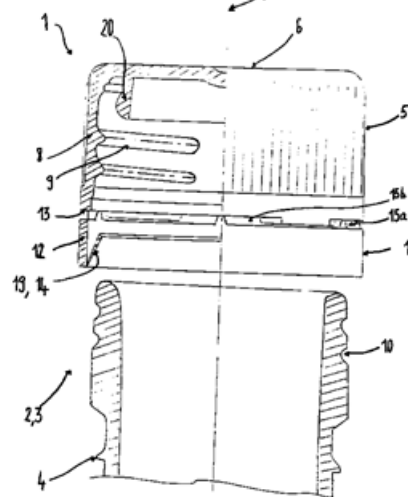
B65D41/34

CPC: B65D41/3428 B65D41/3447 B65D2101/0046 B65D2101/0053

European: B65D41/34C1 B65D41/34D1 L65D101/00A3D

L65D101/00A3E

PatBase - FR2744988_A1



Family:

Publication number	Publication date	Application number	Application date
CL1996001280 A1	19970318	CL19960001280	19960719
CN2256857 Y	19970625	CN19952023327U	19950925
CO4520240 A1	19971015	CO19960038216	19960719
CZ9602156 A3	19970212	CZ19960002156	19960719
ES2142203 AA	20000401	ES19960001620	19960719
ES2142203 BA	20040201	ES19960001620	19960719
FR2736893 A1	19970124	FR19950008889	19950721
FR2736893 B3	19970926	FR19950008889	19950721
FR2744988 A1	19970822	FR19960002141	19960221
FR2744988 B1	19980410	FR19960002141	19960221
HU216148 B	19990428	HU19960001992	19960719
HU9601992 A0	19960930	HU19960001992	19960719
HU9601992 AB	19970528	HU19960001992	19960719
HU9601992 AC	19980428	HU19960001992	19960719
PL315375 A1	19970203	PL19960315375	19960722
RU96115346 A	19981020	RU19960115346	19960719
TR9600598 A2	19970321	TR19960000598	19960722
TR970199 A2	19970321	TR19960000598	19960722

Priority:

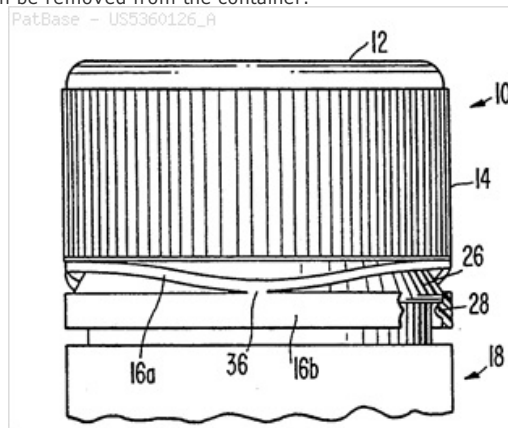
FR19950008889 19950721 FR19960002141 19960221

Probable Assignee: NOVEMBAL SA**Assignee(s):** (std): NOVEMBAL SA ; NORD EST DEV**Assignee(s):** NORD EST DEVELOPMENT ; NORD EST DEVELOPPEMENT PARISZ ; NORD EST DEVELOPPEMENT ; NOVEMBAL ; NOWOINBAO CO**Inventor(s):** (std): JEAN PATRICE RACINE ; JEN PATERIS LACINA ; RACINE JEAN PATRICE**Agent(s):** ALESSANDRI; MARCELA CASTILLO TORRES**8) Family number: 8446405 (US5360126A)**

© PatBase

Title: Tamper-evident plastic closure with 2-tier bridge arrangement

Abstract: A plastic closure has a tamper-evident band with a 2-tier bridge arrangement comprising upper and lower bridges that are staggered circumferentially of the band. The upper bridges are spaced along an upper line of weakness and connect the tamper-evident band to the side wall of the closure, while the lower bridges are spaced along a lower line of weakness and connect a lower portion of the tamper-evident band to an upper portion of the band. The lower portion has an internal locking bead for engaging an external locking shoulder on the neck of a container. When the closure is moved in a direction to remove it from the container, the upper portion of the band is deformed into a zig-zag shape. Eventually upper bridges, which are weaker than the lower bridges, break, so that at least a top part of the closure can be removed from the container.

Classifications:**International (ipc 8-9):** B65D41/34 B65D50/00 (Advanced/Invention); B65D41/34 B65D50/00 (Core/Invention)**International (ipc 1-7):** B65D41/34 B65D50/00**CPC:** B65D41/3447**European:** B65D41/34D1**US:** 215/252**Family:**

Publication number	Publication date	Application number	Application date
AU199458488 A1	19940719	AU19940058488	19931214
CO4180398 A1	19950607	CO19930423746	19931221
ECSP931013 A	19940627	EC1993SP01013	19931220
US5360126 A	19941101	US19920994299	19921221
WO9414674 A1	19940707	WO1993US12145	19931214

Priority:

US19920994299 19921221 WO1993US12145 19931214

Probable Assignee: ZAPATA INDUSTRIES INC**Assignee(s):** (std): ZAPATA IND INC ; ZAPATA INDUSTRIES INC**Assignee(s):** ZAPATA IND**Inventor(s):** (std): SNYDER WILLIAM J ; SNYDER WILLIAM JOSEPH ; WALKER ROCCO D ; WALKER ROCCO DAVID

Inventor(s): WILLIAM JOSEPH SNYDER ; DAVID WALKER ROCCO ; ROCCO DAVID WALKER
Agent(s): XIMENA CASTELLANOS ABONDANO
Designated states: AT AU BE BR CA CH DE DK ES FR GB GR IE IT JP LU MC NL PT SE

9) Family number: 61284455 (CN204916593U)

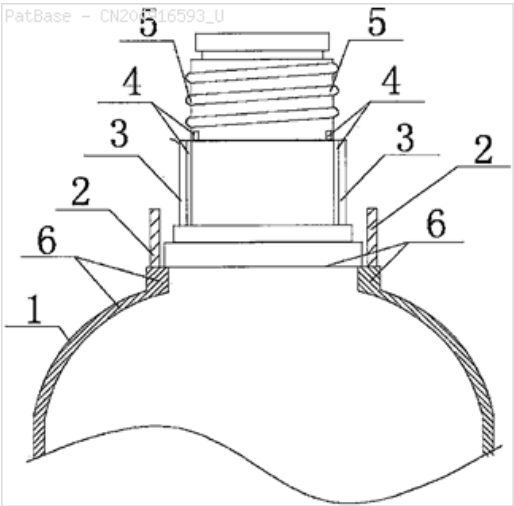
© PatBase

Title: ANTI -FAKE BEVERAGE BOTTLE MOUTH

Abstract: The utility model relates to an anti -fake beverage bottle mouth, including bottle, guard ring, bottleneck, snap ring, screw, bottleneck, its characterized in that and bottle are connected the platform that surrounds the bottleneck on the bottleneck of structure as an organic whole and are provided with the guard ring, and the guard ring is the ring shape, and guard ring and bottleneck are prefabricated integral type structure, and the top of guard ring is higher than the bottom level line of the snap ring on the bottleneck, is provided with the screw on the last bottleneck of the top of bottleneck, and the upper end card income of snap ring is the periphery of bottleneck, the bottom of snap ring and the bottom parallel and level of bottleneck upward. The effect of the convenient multifunctional horizontal discharger is beneficial in that, the utility model discloses the combination is simple, the utility model discloses a guard ring that sets up on the bottleneck can prevent that lawless persons from destroying the snap ring, has avoided only opening the destructiveness of enclosing cover to make the effect of anti -counterfeiting of beverage bottle strengthen, struck lawless persons's the action of manufacturing the fake of making the fake, play good promoting effect for stabilizing the social economic order.

Classifications:

International (IPC 8-9): B65D51/18 B65D55/02 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
■ CN107031979 A	20170811	CN201510470570	20150729
■ CN204916593 U	20151230	CN201520576319U	20150729

Priority:

CN201510470570 20150729 CN201520576319U 20150729

Probable Assignee:

FANG JIA

Assignee(s): (std):

FANG JIA

Assignee(s):

FANGJIA

Inventor(s): (std):

FANG JIA

10) Family number: 36410479 (JP49010954 Y1)

© PatBase

Classifications:

International (IPC 8-9): A45C11/20 (Advanced/Invention);

A45C11/20 (Core/Invention)

International (IPC 1-7): A45C11/20

Family:

Publication number	Publication date	Application number	Application date
■ JP49010954 Y1	19740315	JP19680054997U	19680701

Priority:

JP19680054997U 19680701

11) Family number: 49007578 (US2013001185A)

© PatBase

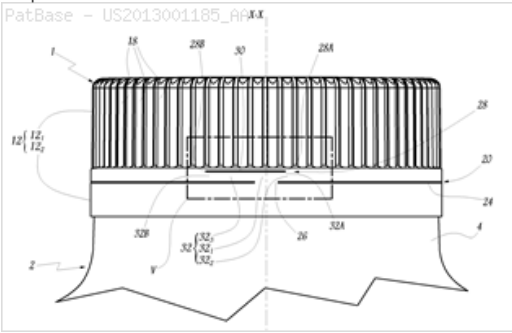
Title: LID HAVING A BREAK LINE

Abstract: The invention relates to a lid comprising a tubular skirt including a non-removable portion permanently retained about

a container neck and a removable portion attached removably to the neck, said non-removable and removable skirt portions being connected by a break line suitable for breaking the first time the lid is opened.

Classifications:

International (IPC 8-9): B65D41/32 B65D41/34 B65D41/48
B65D50/00 (Advanced/Invention);
B65D (Subclass/Invention)
CPC: B65D41/3442 B65D2101/0038 B65D41/3447
European: B65D41/34D B65D41/34D1 L65D101/00A3C
US: 215/252 215/253



Family:

Publication number	Publication date	Application number	Application date
AU2010322960 AA	20110603	AU20100322960	20101119
DE602010023269 D1	20150430	DE201060023269T	20101119
EP2504249 A1	20121003	EP20100805255	20101119
EP2504249 B1	20150318	EP20100805255	20101119
FR2953202 A1	20110603	FR20090058426	20091127
FR2953202 B1	20111230	FR20090058426	20091127
FR2957587 A1	20110923	FR20100052033	20100322
FR2957587 B1	20120713	FR20100052033	20100322
MX2012005807 A1	20120612	MX20120005807	20101119
NZ600144 A	20140725	NZ20100600144	20101119
US2013001185 AA	20130103	US20100512156	20101119
WO11064489 A1	20110603	WO2010FR52462	20101119
ZA201203724 A	20130828	ZA20120003724	20120522

Priority:

FR20090058426 20091127 FR20100052033 20100322 EP20100805255 20101119
WO2010FR52462 20101119

Probable Assignee: TETRA LAVAL HOLDINGS AND FINANCE SA

Assignee(s): (std): ANTIER GREGORY ; FLAMAND FABIEN ; TETRA LAVAL HOLDINGS AND FINANCE ; TETRA LAVAL HOLDINGS AND FINANCE S A

Assignee(s): TETRA LAVAL HOLDINGS AND FINANCE SA ; NOVEMBAL SAS

Inventor(s): (std): FLAMAND FABIEN ; ANTIER GREGORY ; FLAMAND FABIEN

Inventor(s): GREGORY ANTIER ; FABIEN FLAMAND

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; GRAND GUILLAUME; CABINET LAVOIX LYON; GRAND GUILLAUME ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU 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 RO RS RU 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

12) Family number: 15325633 (ZA9301818A)

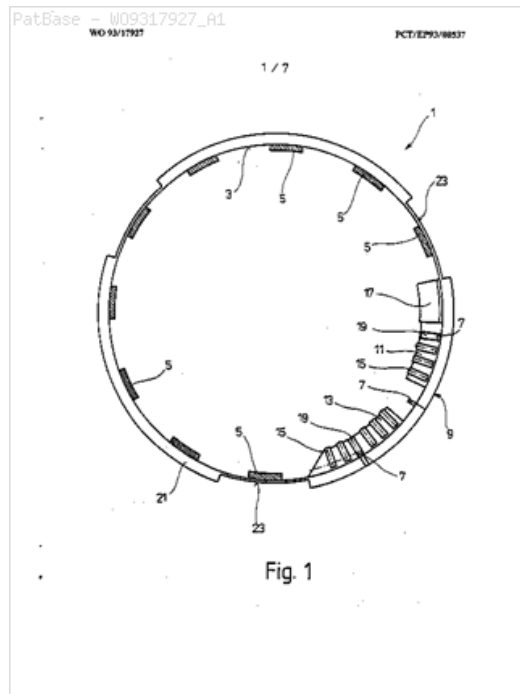
© PatBase

Title: SCREW CAP

Abstract: The proposal is for a screw closure for a container having a male thread at its aperture, especially a bottle, which has a plastic safety ring joined to the closure along a break line bridged by break-off webs which can be broken, at least in regions, when the closure is first opened, said ring having at least one counter-hook projecting from its inside. The closure is distinguished in that the safety ring (9) is continuous with at least one irreversibly deformable region (25) when the closure (1) is first opened.

Classifications:

International (IPC 8-9): B65D41/34 (Advanced/Invention);
B65D41/34 (Advanced/Non-invention);
B65D41/34 (Core/Invention)
International (IPC 1-7): B65D B65D101/00 B65D39/08 B65D41/32
B65D41/34 B65D55/08
CPC: B65D41/3428
European: B65D41/34C1



Family:

Publication number	Publication date	Application number	Application date
AU199337467 A1	19931005	AU19930037467	19930310
BRPI9306077 A	19971118	BR1993PI06077	19930310
CA2131800 AA	19940909	CA19932131800	19930310
CN1078955 A	19931201	CN19931004493	19930313
DE4207996 A1	19930916	DE19924207996	19920313
DE4207996 C2	19950309	DE19924207996	19920313
EP0560051 A1	19930915	EP19930101774	19930205
FI931129 A	19930914	FI19930001129	19930312
FI931129 A0	19930312	FI19930001129	19930312
HU69119 A2	19950828	HU19940002611	19930310
HU9402611 A0	19941128	HU19940002611	19930310
IL105021 A0	19930708	IL19930105021	19930311
JP7504385 T2	19950518	JP19930515342T	19930310
KR19950700199 A	19950116	KR19940703182	19940912
KR19957000199 A	19950116	KR19947003182	19930310
MX9301382 A1	19940831	MX19930001382	19930312
NO930523 A	19930914	NO19930000523	19930215
NO930523 A0	19930215	NO19930000523	19930215
WO9317927 A1	19930916	WO1993EP00537	19930310
ZA9301818 A	19931011	ZA19930001818	19930315

Priority:

DE19924207996 19920313 WO1993EP00537 19930310

Probable Assignee: ALCOA GMBH VERPACKWERKE

Assignee(s): (std): ALCOA DEUTSCHLAND GMBH ; ALCOA GMBH VERPACKWERKE

Assignee(s): ALCOA DEUTSCHLAND GMBH VERPACKUNGSWERKE 67547 WORM ; ALCOA DEUTSCHLAND GMBH VERPACKUNGSWERKE 67547 WORMS DE ; SPATZ GUNTER ; WEISS JURGEN ; PREUSS HANS JOACHIM ; ALCOA DEUTSCHLAND GMBH VERPACKUNGSWERKE ; ALCOA DEUTSCHLAND GMBH VERPACKUNGSWERKE 6520 WORMS ; ALCOA DEUTSCHLAND GMBH VERPACKUNGSWERKE 6520 WORMS DE

Inventor(s): (std): GUENTHER SPATZ ; GUNTER SPATZ ; GUNTHER SPATZ ; HANS JOACHIM PREUSS ; HANSJOACHIM PREUSS ; JUERGEN WEISS ; JURGEN WEISS ; SPATZ GUENTER ; WEISS JURGEN ; SPATZ GUNTHER ; WEISS JUERGEN ; SPATZ GUNTER ; SPATZ GUENTER ; PREUSS HANSJOACHIM ; PREUSS HANS JOACHIM

Inventor(s): GUENTER SPATZ ; VERZICHT DES ERFINDERS AUF NENNUNG

Agent(s): PATENT ATTORNEY SERVICES; KIRBY EADES GALE BAKER

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CZ DK ES FR GA GB GN GR HU IT JP KP KR LI LK LU MC MG ML MN MR MW NL PL RO RU SD SE SK SN TD TG UA US

13) Family number: 30141675 (US4343754A)

© PatBase

Title: PROCESS AND APPARATUS FOR MOLDING LINERS IN CONTAINER CLOSURES

Abstract: A process for making a composite closure having a plastic cap with specially configured pedestals that are interconnected to a plastic liner. In one embodiment, the pedestals are each formed with an overhang, such as a mushroom-shaped overhang, to provide a mechanical interlock with the liner. In other embodiments, the pedestals are each formed with a

fusible heat concentration zone that is fused to the liner as the liner is compression molded and heated in the cap. In one embodiment, each of the fusible pedestals are formed with a cylindrical configuration. In another embodiment, each of the fusible pedestals are formed in the shape of a pyramid.

Classifications:

International (IPC 8-9): B29C33/00 B29C37/00 B29C41/20 B29C43/00 B29C43/02 B29C43/14 B29C43/18 B29C43/36 B29C43/40 B29C43/42 B29C43/50 B29C53/02 B29C55/00 B29C57/00 B29C59/02 B29C63/26 B29C65/00 B29C65/56 B29C67/00 B29C69/02 B29C70/80 B29D99/00 B65D41/02 B65D41/04 B65D41/20 B65D41/34 B65D41/38 B65D41/40 B65D49/12 B65D53/00 B65D53/04 B65D53/06 B65D55/02 B65D55/08 G09F3/03 (Advanced/Invention); B29C33/00 B29C37/00 B29C43/00 B29C43/02 B29C43/18 B29C53/02 B29C55/00 B29C59/02 B29C63/26 B29C65/00 B29C65/56 B29C67/00 B29L31/56 B65D41/04 B65D53/00 G09F3/03 (Advanced/Non-invention); B29C33/00 B29C37/00 B29C43/00 B29C43/02 B29C43/14 B29C43/18 B29C43/32 B29C43/36 B29C55/00 B29C57/00 B29C59/02 B29C63/26 B29C65/00 B29C65/56 B29C67/00 B29C69/02 B29C70/00 B29D99/00 B65D41/02 B65D41/04 B65D41/32 B65D41/34 B65D41/40 B65D53/00 B65D55/02 G09F3/03 (Core/Invention); B29C43/18 B29C53/00 (Core/Non-invention)

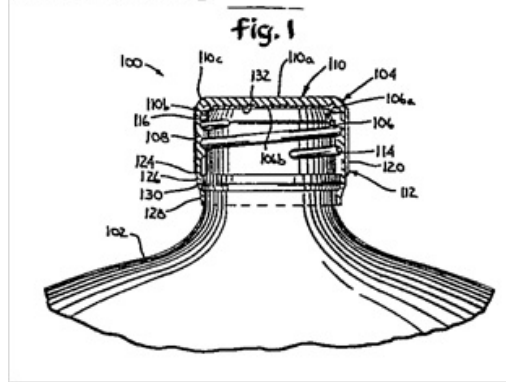
International (IPC 1-7): B29C13/02 B29C27/00 B29C3/00 B29C41/20 B29C43/00 B29C43/10 B29C63/26 B29C67/00 B29D1/00 B29D3/00 B29D31/00 B29D7/16 B29D9/08 B29L31/56 B65D39/00 B65D41/02 B65D41/04 B65D41/20 B65D41/32 B65D41/34 B65D41/38 B65D41/40 B65D49/12 B65D53/00 B65D53/04 B65D53/06 B65D55/02 B65D55/08 B65D55/12 B67B3/02 G09F3/03

CPC: B65D41/3423 Y10S425/809 Y10S425/058 B29C43/361 B65D41/04 B65D41/34 B29C43/146 B26F2210/04 B29C37/0014 B29C37/0017 B29C43/18 B29C43/184 B29C53/02 B29C57/00 B29C69/02 B29C2791/001 B29C2793/009 B29L2031/56 B65D41/0407 B65D41/3428 B65D2101/0046 B65D2101/0053 B65D41/045 B29C37/0082 B29C43/021 B29C43/42 B29C59/022 B29C67/0003 B29C67/0044 B29C70/80 B29L2001/00 B29L2031/565 B65D41/0435 B65D41/3466 B29C2793/0018 B29C2793/0036

European: B29C37/00B3 B29C37/00B4 B29C37/00K2 B29C43/02B B29C43/14C B29C43/36C B29C43/42 B29C57/00 B29C59/02C B29C67/00B B29C67/00K B29C69/02 B29C70/80 B65D41/04 B65D41/04B B65D41/04D B65D41/04D2 B65D41/34 B65D41/34C B65D41/34C1 B65D41/34E1 L26F210/04 L29C37/00K2 L29C43/18 L29C43/18B2 L29C53/02 L29C66/71 L29C791/00B L29C793/001 L29L1/00 L29L31/56 L29L31/56B L65D101/00A3D L65D101/00A3E

US: 215/246 215/252 215/329 215/343 215/350 248/163.2 249/59 264/154 264/230 264/250 264/266 264/268 264/274 264/291 425/110 425/112 425/127 425/291 425/809 425/DIG.58

PatBase - US4343754_A



Family:

Publication number	Publication date	Application number	Application date
AR226863 A1	19820831	AR19800282599	19800919
AR230239 A1	19840301	AR19820290077	19820723
AU198063343 A1	19810414	AU19800063343	19800908
AU198063392 A1	19810414	AU19800063392	19800908
AU198285551 A1	19830127	AU19820085551	19820702
AU198285552 A1	19830127	AU19820085552	19820702
AU538906 B2	19840830	AU19800063343	19800908
AU540432 B2	19841115	AU19800063392	19800908
AU556794 B2	19861120	AU19820085551	19820702
AU560751 B2	19870416	AU19820085552	19820702
BR8008834 A	19810630	BR19800008834	19800908
BR8008835 A	19810630	BR19800008835	19800908
BR8204327 A	19830719	BR19820004327	19820723
BR8204330 A	19830719	BR19820004330	19820723
CA1168812 A1	19840612	CA19800360433	19800917
CA1190519 A1	19850716	CA19820407905	19820723
CA1215206 A1	19861216	CA19820407931	19820723
CA1289104 A1	19910917	CA19820515832	19820723
CA1289104 A2	19910917	CA19860515832	19860812
DE3070670 D1	19850627	DE19803070670	19800919
DE3070923 D1	19850905	DE19803070923	19800919
DE3237764 A1	19830519	DE19823237764	19821012
DE3277686 D1	19871223	DE19823277686	19820720
DE3279680 D1	19890615	DE19823279680	19820720
DE3280195 D1	19900726	DE19823280195	19820720
EP0025991 A1	19810401	EP19800105619	19800919
EP0025991 B1	19850731	EP19800105619	19800919
EP0026405 A2	19810408	EP19800105620	19800919
EP0026405 A3	19811202	EP19800105620	19800919
EP0026405 B1	19850522	EP19800105620	19800919
EP0072924 A1	19830302	EP19820106577	19820720
EP0072924 B1	19890510	EP19820106577	19820720
EP0073334 A1	19830309	EP19820106576	19820720
EP0073334 B1	19871119	EP19820106576	19820720
EP0224649 A1	19870610	EP19860111058	19820720
EP0224649 B1	19900620	EP19860111058	19820720
ES275170 U	19840201	ES19820275170U	19820723
ES275170 Y	19841001	ES19820275170U	19820723
ES275170 Y1	19841031	ES19820275170U	19820723
ES514301 A0	19831201	ES19820514301	19820723
ES514301 A2	19831230	ES19820514301	19820723
ES525302 A0	19841001	ES19830525302	19830901
ES525302 A2	19841031	ES19830525302	19830901

ES840096Z A1	19831201	ES19830514301	19830723
FR2514326 A1	19830415	FR19820017157	19821013
FR2514326 B3	19840817	FR19820017157	19821013
GB2102776 A1	19830209	GB19820021566	19820726
GB2102776 B2	19850320	GB19820021566	19820726
GB2108892 A1	19830525	GB19820021565	19820726
GB2108892 B2	19850918	GB19820021565	19820726
IT1156206 A	19870128	IT19820068197	19821012
IT8253786 U0	19821012	IT19820053786U	19821012
IT8268197 A0	19821012	IT19820068197	19821012
JP1500044 C3	19890628	JP19820127822	19820723
JP1692038 C3	19920827	JP19820127821	19820723
JP1752393 C3	19930408	JP19870063657	19870318
JP3053181 B4	19910814	JP19820127821	19820723
JP4022794 B4	19920420	JP19870063657	19870318
JP56501121 T2	19810813	JP19800502226T	19800908
JP56501315 T2	19810917	JP19800502288T	19800908
JP58030949 A2	19830223	JP19820127821	19820723
JP58051116 A2	19830325	JP19820127822	19820723
JP62122964 A2	19870604	JP19860154307	19860702
JP63044627 B4	19880906	JP19800502288T	19800908
JP63048704 B4	19880930	JP19800502226T	19800908
JP63048705 B4	19880930	JP19820127822	19820723
JP63096052 A2	19880426	JP19870063657	19870318
MX151062 A	19840919	MX19800183841	19800908
MX151733 A	19850218	MX19800183842	19800908
MX156662 A	19880922	MX19820193741	19820726
MX157545 A	19881130	MX19820193643	19820719
US4343754 A	19820810	US19790077584	19790921
US4378893 A	19830405	US19810270241	19810604
US4407422 A	19831004	US19810310769	19811013
US4418828 A	19831206	US19810286375	19810724
US4497765 A	19850205	US19820390346	19820622
US4545496 A	19851008	US19830608318	19831201
WO8100822 A1	19810402	WO1980US01142	19800908
WO8100838 A1	19810402	WO1980US01143	19800908
ZA8204808 A	19830427	ZA19820004808	19820706
ZA8205312 A	19830727	ZA19820005312	19820723

Priority:

US19790077566	19790921	US19790077584	19790921	JP19800502288	19800908
WO1980US01143	19800908	WO1980US01142	19800908	CA19800360433	19800917
US19810270241	19810604	US19810286375	19810724	US19810286375	19810726
US19810310769	19811013	US19820390346	19820622	EP19820106577P	19820720
EP19820106577	19820720	EP19820106577	19820720	CA19820407905	19820723
CA19820407931	19820723	CA19820515832	19820723	JP19820127821	19820723
US19830608318	19831201	CA19860515832	19860812		

Probable Assignee: H C IND INC AN CORP

Assignee(s): (std): HC IND

Assignee(s): H C PLASTIC INC ; HC IND INC ; H C PLASTIC INC A DE CORP ; H C INDUSTRIES INC CRAWFORDSVILLE IND US ; WILDE SHELDON L ; MCCANDLESS THOMAS J ; SAUNDERS ROBERT M ; EICHI SHII IND INC ; ETSUCHI SHII IND INC ; H C IND ; H C IND INC ; H C IND INC A CORP INDIANA ; H C IND INC A CORP OF IN ; H C IND INC A CORP OF IND ; H C IND INC AN CORP ; H C INDUSTRIES INC

Inventor(s): (std): MACCANDLESS T ; MATSUKANDORESUS TOOMASU JEI ; MATSUKANDORESUS TOOMASU JIEI ; MCCANDLESS T ; MCCANDLESS T J ; MCCANDLESS THOMAS ; MCCANDLESS THOMAS J ; SAUNDERS R ; SAUNDAAZU ROBAATO EMU ; SAUNDERS R ; SAUNDERS R M ; SAUNDERS ROBERT ; SAUNDERS ROBERT M ; SAUNDERS SHELDON L WILDE THOMA ; SHELDON L WILDE ; RM SAUNDERS ; ROBAATO EMU SAUNDAAZU ; ROBERT M SAUNDERS ; SHERUDON ERU WAIRUDO ; SHIERUDON ERU WAIRUDO ; SL WILDE ; SOUNDERS ROBERT M ; THOMAS J MCCANDLESS ; TJ MCCANDLESS ; TOOMASU JEI MATSUKYANDORESUS ; TOOMASU JIEI MATSUKIYANDORESUS ; WAIRUDO SHERUDON ERU ; WAIRUDO SHIERUDON ERU ; WAIRUDO TSUERUDON ERU ; WILDE S ; WILDE S L ; WILDE S L MCCANDLESS T J SAUND ; WILDE SHELDON ; WILDE SHELDON L ; WILDE SL MCCANDLESS TJ SAUNDERS RM

Inventor(s): L WILDE SHELDON ; M SOUNDERS ROBERT ; WILDE S L MCCANDLESS T J SAUNDERS R M ; T J MCCANDLESS ; S L WILDE ; SHELDON L WILDE THOMAS J MCCANDLESSROBERT M SAUNDE ; SHELDON L WILDE THOMAS J MCCANDLESSROBERT M... ; SHELDON WILDE THOMAS MCCANDLESS ET ROBERT SAUNDERS ; R M SAUNDERS

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; FETHERSTONHAUGH AND CO

Designated states: AU BR DE FR GB IT JP NL SE

14) Family number: 21790675 (US2643015A)

© PatBase

Title: TAMPERPROOF CONTAINER CLOSURE

Abstract: (Claim 1) 1. A closure for a container having a lip extending outward from its mouth, comprising a cap formed of tliin br.,ttle material havin.a a depending skirt portion ambient such lip, a plurality of vertical ribs extendin.- inward from said _ 0 skirt and adapted to align said cap in spaced relation to said annular lip, a plurality of teeth extending inward from said skirt beneath such lip, the lower surfaces of said teeth being cammed to provide outward elastic deflection i5 in capping, a tab extending

outward from one of said teeth and upward beyond said skirt, a line of franaibility in said skirt circumscribing said tooth and tab and a stop molded integral with and extending above said skirt and ad- jacent said tab adapted to limit inward movement of sail tab.

Classifications:

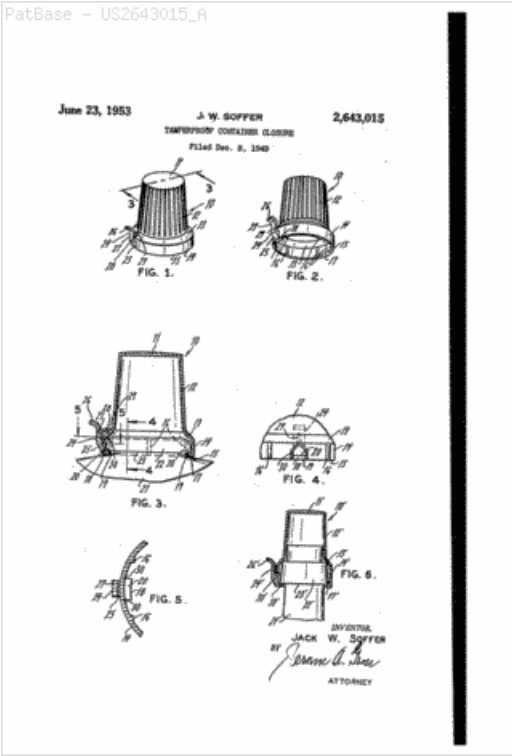
International (IPC 8-9): B65D41/48 B65D83/14 (Advanced/Invention);
B65D41/32 B65D83/14 (Core/Invention)

International (IPC 1-7): B65D35/44 B65D83/14

CPC: B65D41/48 B65D83/40

European: B65D41/48 B65D83/14R

US: 215/253



Family:

Publication number	Publication date	Application number	Application date
US2643015 A	19530623	US19490131804	19491208

Priority:

US19490131804 19491208

Probable Assignee:

DEV RES INC

Assignee(s): (std):

DEV RES INC

Assignee(s):

DEVELOPMENT RESEARCH INC

Inventor(s): (std):

SOFFER JACK W

15) Family number: 58189684 (US2016347520A)

© PatBase

Title: CLOSURE DEVICE FOR BOTTLES WITH EVIDENCE OF FIRST OPENING

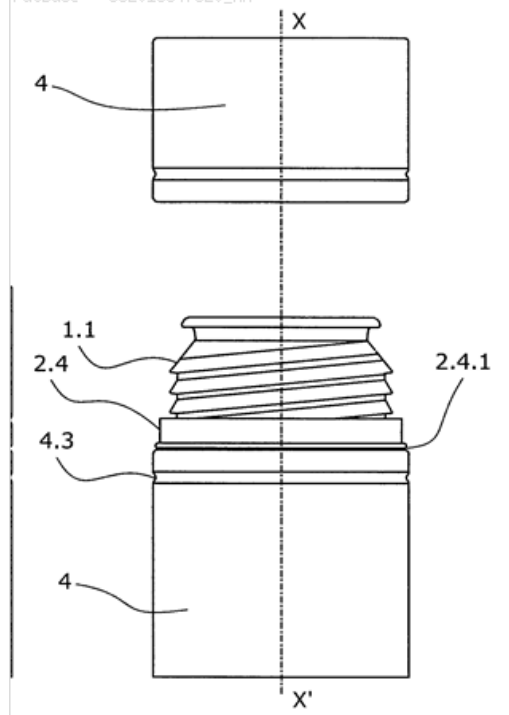
Abstract: The present invention relates to a closure device for bottles with evidence of first opening where before the first opening the closure shows a capsule with a perimetral line, and after the first opening, a separation line visually evidencing said first opening now appears where the perimetral line was previously located.

Classifications:

International (IPC 8-9): B65D41/32 B65D47/02 B65D47/12 B65D49/02
B65D50/00 B65D51/20 B65D55/02 (Advanced/Invention)

CPC: B65D2101/0023 B65D55/026 B65D47/123 B65D49/02 B65D2101/00

US: 215/258

**Family:**

Publication number	Publication date	Application number	Application date
BR112016000134 A2	20170725	BR20161100134	20140704
CO16024069 A2	20160510	CO20160024069	20160203
CO7600661 A2	20160510	CO20160024069	20160203
DE602014011274 D1	20170817	DE201460011274T	20140704
DOP2016000002 A	20160331	DO20160000002	20160105
EA029468 B1	20180330	EA20160090169	20140704
EA201690169 A1	20160630	EA20160090169	20140704
EP2821350 A1	20150107	EP20130382276	20130705
EP3016878 A1	20160511	EP20140735962	20140704
EP3016878 B1	20170628	EP20140735962	20140704
ES2634904 T3	20170929	ES20140735962T	20140704
IN201617003942 A	20160722	IN201617003942	20160204
MX2016000053 A1	20160309	MX20160000053	20140704
PH2016500033 A	20160328	PH20160500033	20160105
TR201710923 T4	20170821	TR20170010923T	20140704
US2016347520 AA	20161201	US20140902949	20140704
US10196191 BB	20190205	US20140902949	20140704
WO15001084 A1	20150108	WO2014EP64321	20140704

Priority:

EP20130382276 20130705 EP20140735962 20140704 WO2014EP64321 20140704

Probable Assignee: COMPANIA DE TAPONES IRRELLENABLES SA

Assignee(s): (std): CIA DE TAPONES IRRELLENABLES S A ; COMPANIA DE TAPONES IRRELLENABLES S A ; TAPONES IRRELLENABLES

Assignee(s): COMPANIA DE TAPONES IRRELLENABLES SA ; CIA DE TAPONES IRRELLENABLES SA

Inventor(s): (std): TORRENT ORTEGA DAVID ; ORTEGA DAVID TORRENT ; DAVID TORRENT ORTEGA

Agent(s): ANDREA TOBOS MATEUS; ABG PATENTES SL; ARIAS JUAN; ERKAN SEVINC; FULERER TRISTAN A; OLIVE LAW GROUP PLLC; CALVO RAMON PABLO

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

16) Family number: 11174826 (US5215204A)

© PatBase

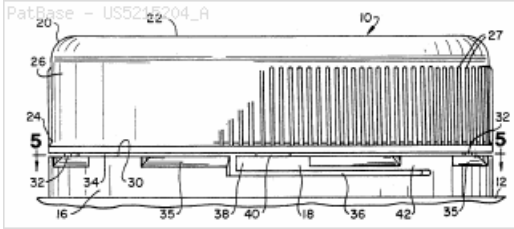
Title: Tamper evident closure with hinged band

Abstract: A closure for a container having a tamper evident band which remains on the container after the closure is removed including a substantially cylindrical end cap closed at a first end thereof by a top surface, open at a second opposite end thereof and including an annular side wall having a predetermined length extending between the first and second ends, an annular band having a first side positioned proximate the second open end of the end cap, a plurality of severable bridge members connecting the first side of the annular band to the second open end of the end cap at a plurality of predetermined positions about the

periphery of the annular band and the end cap thereby forming between the bridge members a plurality of slits extending between the first side of the annular band and the second end of the end cap, a member for affixing the annular band to the container and a tether member connected between the first side of the annular band and the second open end of the end cap for providing limited movement between the annular band and the end cap during removal of the end cap, for enabling removal of the end cap from the container without distorting the end cap or the annular band, and for enabling the annular band to remain affixed to the container by the affixing member after removal of the end cap, the tether member remaining attached to both the end cap and the annular band.

Classifications:

International (IPC 8-9): B65D41/34 B65D55/16 (Advanced/Invention);
B65D41/34 B65D55/00 (Core/Invention)
International (IPC 1-7): B65D41/32
CPC: B65D41/3447 B65D55/16 B65D2101/0046
European: B65D41/34D1 B65D55/16 L65D101/00A3D
US: 215/252 215/258 215/306



Family:

Publication number	Publication date	Application number	Application date
US5215204 A	19930601	US19920848253	19920309

Priority:

US19920848253 19920309

Probable Assignee: CREATIVE PACKAGING CORP

Assignee(s): (std): CREATIVE PACKAGING CORP

Assignee(s): CREATIVE PACKAGING CORP A CORP ; WACHOVIA BANK NATIONAL ASSOCIATION ; WACHOVIA BANK NATIONAL ASSOCIATION ; BANK OF AMERICA NA

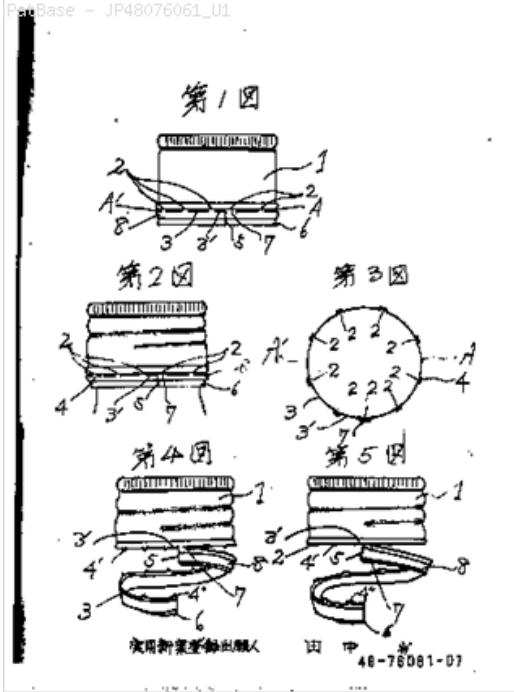
Inventor(s): (std): BECK JAMES M ; KUBITZ TERRY E ; KUTAJ ALEX

17) Family number: 36351888 (JP48076061 U1)

© PatBase

Classifications:

International (IPC 8-9): B65D41/34 (Advanced/Invention);
B65D41/34 (Core/Invention)
International (IPC 1-7): B65D41/34



Family:

Publication number	Publication date	Application number	Application date
JP48076061 U1	19730920	JP19710420972U	19711224

Priority:

JP19710420972U 19711224

18) Family number: 5105952 (US4611723A)

© PatBase

Title: Container closure with expandable anti-missiling section

Abstract: An improved container closure including a shell with top and side walls. The shell is disposable over an opening in a container. In the shell are a threaded portion in the side wall for engaging threads on the container and an axially expandable

section. A safety section in the side wall below the expandable section provisionally secures the shell to a fixed element on the container at least until the expandable section expands.

Classifications:

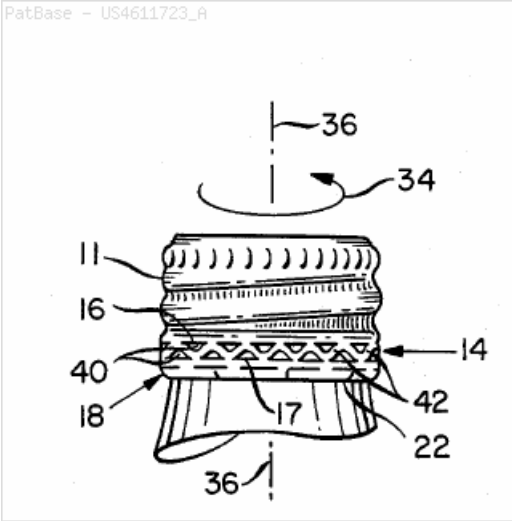
International (IPC 8-9): B65D41/34 (Advanced/Invention);
B65D41/34 (Core/Invention)

International (IPC 1-7): B65D51/16

CPC: B65D41/348 B65D2101/0053

European: B65D41/34F L65D101/00A3E

US: 215/252 215/307



Family:

Publication number	Publication date	Application number	Application date
US4611723 A	19860916	US19850787037	19851015

Priority:

US19850787037 19851015

Probable Assignee:

MEGOWEN WILLIAM

Assignee(s): (std):

MEGOWEN WILLIAM

Inventor(s): (std):

MEGOWEN WILLIAM

19) Family number: 28673962 (US4448317A)

© PatBase

Title: TAMPER EVIDENT CLOSURES AND PACKAGES

Abstract: A tamper evident closure and package having a container (10), a resealable, substantially rigid closure (12) for closing, opening and reclosing the container (10), color changing means (32a in Figures 1-6) which effect a color change upon stretching, and coating mechanical means (24, 36, 44 and 46 in Figures 1-6) for uncapping and recapping the closure 10 and for stretching the color changing means (32a) which clearly and unequivocally indicate the condition of the package, e.g., open or closed. Where legends, or other well defined indicia, indicating opening is desired, the color changes can be localized in the skirt by providing thin sections (32a) which stretch preferentially and adjacent thicker sections (38) which remain substantially unstretched. The thin sections (32a) for example can be a legend, or alternatively the thick sections (38) can be the legend while the thin sections (32a) provide a suitable background. The colour changes employed by the invention can be accomplished by such phenomena as stress whitening inherent in various plastic materials. Alternatively, the color changes can be accomplished by mechanisms such as the use of encapsulated staining or coloring agents incorporated in a suitable matrix.

Classifications:

International (IPC 8-9): B65D41/18 B65D41/34
B65D55/02 (Advanced/Invention);

B65D41/34 (Advanced/Non-invention);

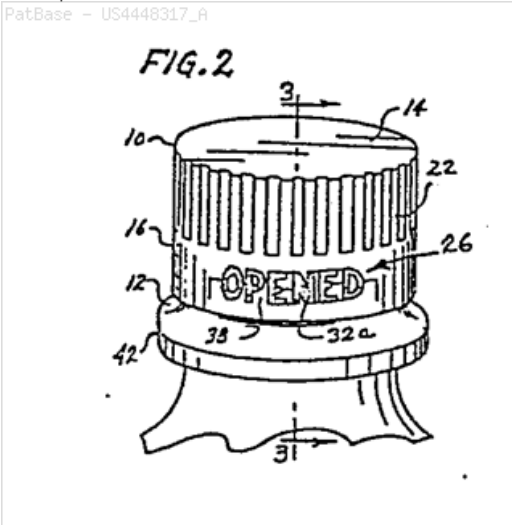
B65D41/02 B65D41/34 B65D55/02 (Core/Invention)

International (IPC 1-7): B65D41/00 B65D41/04 B65D41/18 B65D41/28
B65D41/34 B65D55/02 B67B1/00 B67B3/00

CPC: Y10S206/807 B65D55/026

European: B65D55/02G

US: 206/459.1 206/807 215/203 215/230 215/365



Family:

Publication number	Publication date	Application number	Application date
AT39459 E	19890115	AT19840101269T	19840208
AU198426538 A1	19840910	AU19840026538	19840213
AU561982 B2	19870521	AU19840026538	19840213
CA1253116 A1	19890425	CA19840447712	19840217

DE3475769 D1	19890202	DE19843475769	19840208
EP0116892 A2	19840829	EP19840101269	19840208
EP0116892 A3	19850911	EP19840101269	19840208
EP0116892 B1	19881228	EP19840101269	19840208
ES290070 U	19861116	ES19840290070U	19840217
ES290070 Y	19870716	ES19840290070U	19840217
ES290070 Y1	19870814	ES19840290070U	19840217
IE55522 B	19901010	IE19840000379	19840217
IE840379 L	19840818	IE19840000379	19840217
IL70843 A0	19840531	IL19840070843	19840201
IL70843 A1	19870831	IL19840070843	19840201
IN163531 A	19881008	IN1984CA00091	19840206
JP1772225 C3	19930714	JP19840501094	19840213
JP4064941 B4	19921016	JP19840501094	19840213
JP60500524 T2	19850418	JP19840501094T	19840213
KR19840007701 A	19841210	KR19840000742	19840216
KR840007701 A	19841210	KR19840000742	19840216
MX158578 A	19890215	MX19840200380	19840217
NZ207189 A	19870630	NZ19840207189	19840217
US4448317 A	19840515	US19830467791	19830218
US4489841 A	19841225	US19830467794	19830218
US4905851 A	19900306	US19880292661	19881230
WO8403270 A1	19840830	WO1984US00206	19840213
ZA8400458 A	19850227	ZA19840000458	19840120

Priority:

US19830467791 19830218 EP19840101269 19840208 WO1984US00206 19840213
CA19840447712 19840217 US19880292661 19881230

Probable Assignee: ZAPATA INNOVATIVE CLOSURES INC

Assignee(s): (std): TRI TECH SYST ; TRI TECH SYSTEMS INT INC ; TRI TECH SYSTEMS INTERNATIONAL INC ; TRI TECH SYSTEMS INTERNAT INC

Assignee(s): TRI TECH SYSTEMS INT ; YODER J SCOTT ; ZAPATA INNOVATIVE CLOSURES INC ; TORAI TEKU SHISUTEMUZU INTERN INC ; TRI TECH SYSTEMS INTERNATIONAL INC ; FIRST FEDERAL SAVING AND LOAN ASSOCIATION OF TOLED ; FIRST FEDERAL SAVING AND LOAN ASSOCIATION OF TOLEDO 701 FIRST FEDERAL PLAZA TOLEDO OH 43624 ; INNOVATIVE CLOSURES INC ; MID AMERICAN BANK AND TRUST CO ; MID AMERICAN NATIONAL BANK AND TRUST CO ; SCHEICH RICHARD A ; MID AMERICAN NATIONAL BANK AND TRUST COMAPNY ; S D TECHNOLOGIES INC ; MID AMERICAN NATIONAL BANK AND TRUST CO 222 SOUTH ; S D TECHNOLOGIES INC FL CORP ; THOMPSON MORTIMER S ; MID AMERICAN NATIONAL BANK AND TRUST CO 222 SOUTH MAIN STREET BOWLING GREEN OHIO 43402

Inventor(s): (std): THOMPSON MS ; THOMPSON MORTIMER STAFFORD ; MORTIMER S THOMPSON ; ELI ASHER ; ASHER ELI ; THOMPSON M S ; THOMPSON MORTIMER S ; STAFFORD THOMPSON MORTIMER

Inventor(s): TONPUSON MOOTEIMAA SUTATSUFUODOO

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SIM AND MCBURNEY; REINHOLD COHN AND PARTNERS

Designated states: AT AU BE BR CF CG CH CM DE DK FI FR GA GB HU IT JP LI LU MC MR NL NO RO SE SN SU TD TG