

Search history

Search PN=(WO2016084353) (Results 1)

1:

Search [SP]: 1-4. (canceled) 5. a steel sheet for a crown cap comprising: a composition containing, in percent by mass, c: 0.010 percent to 0.025 percent, si: 0.10 percent or less, mn: 0.05 percent to 0.50 percent, p: 0.050 percent or less, s: 0.005 percent to 0.050 percent, al: 0.020 percent to 0.070 percent, n: less than 0.0040 percent, and the balance being fe and inevitable impurities, the steel sheet having a yield strength after heat treatment at 210 degrees centigrade for 15 minutes, wherein 1) and 2):1) yield strength is 550 mpa or more in a rolling direction, and 2) yield strength in a direction 45 degrees from the rolling direction in a rolling plane is equal to or less than an average of the yield strength in the rolling direction and a yield strength in a direction 90 degrees from the rolling direction in the rolling plane. 6. a method of manufacturing the steel sheet for a crown cap according to claim 5, comprising: a hot rolling step of hot rolling a slab and coiling the hot rolled steel sheet at a coiling temperature of 530 degrees centigrade to 590 degrees centigrade a primary cold rolling step of cold rolling the hot rolled steel sheet after the hot rolling step an annealing step of annealing the cold rolled steel sheet at an annealing temperature of 650 degrees centigrade to 720 degrees centigrade after the primary cold rolling step and a secondary cold rolling step of performing secondary cold rolling with a rolling reduction of 25 percent to 40 percent after the annealing step. 7. a crown cap comprising the steel sheet for a crown cap according to claim 5. 8. a method of manufacturing a steel sheet for a crown cap comprising: a hot rolling step of hot rolling a slab having a composition containing, in percent by mass, c: 0.010 percent to 0.025 percent, si: 0.10 percent or less, mn: 0.05 percent to 0.50 percent, p: 0.050 percent or less, s: 0.005 percent to 0.050 percent, al: 0.020 percent to 0.070 percent, n: less than 0.0040 percent, and the balance being fe and inevitable impurities, and coiling the hot rolled steel sheet at a coiling temperature of 530 degrees centigrade to 590 degrees centigrade a primary cold rolling step of cold rolling the hot rolled steel sheet after the hot rolling step an annealing step of annealing the cold rolled steel sheet at an annealing temperature of 650 degrees centigrade to 720 degrees centigrade after the primary cold rolling step and a secondary cold rolling step of performing secondary cold rolling with a rolling reduction of 25 percent to 40 percent after the annealing step, the manufactured steel sheet having a yield strength after heat treatment at 210 degrees centigrade for 15 minutes, wherein 1) a yield strength of 550 mpa or more in a rolling direction, and 2) a yield strength in a direction 45 degrees from the rolling direction in a rolling plane being equal to or less than an average of the yield strength in the rolling direction and a yield strength in a direction 90 degrees from the rolling direction in the rolling plane. (Results 0)

Search crown cap and (steel sheet) (Results 0)

3:

Search (crown cap) and (steel sheet) (Results 0)

4:

Search crown cap and (steel sheet) (Results 0)

5:

Search (crown cap) and (steel sheet) (Results 55)

6:

Title: **STEEL SHEET** FOR **CROWN CAP** AND METHOD FOR PRODUCING THE SAME

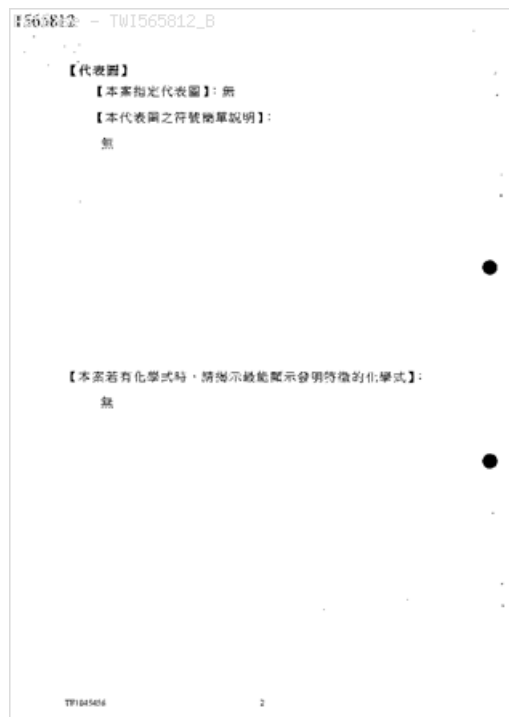
Abstract: A **steel sheet** for a **crown cap** having sufficient strength and formability suitable for forming **crown caps** even when reduced in gauge, and a method for producing the **steel sheet** for a **crown cap**. The **steel sheet** for a **crown cap** having a composition that includes, in terms of percent by mass: C: 0.002 percent or more and 0.010 percent or less, Si: 0.05 percent or less, Mn: 0.05 percent or more and 0.30 percent or less, P: 0.030 percent or less, S: 0.020 percent or less, Al: less than 0.0100 percent, N: 0.0050 percent or less, and the balance being Fe and unavoidable impurities. The C content is more than 0.003 percent when the Al content is 0.005 percent or more. The yield strength in the rolling direction is 500 MPa or more. The average Lankford value is 1.3 or more.

Classifications:

International (IPC 8-9): B21B1/22 B21B3/02 B65D59/06 C21D6/00 C21D8/02 C21D8/04 C21D9/46 C21D9/48 C22C38/00 C22C38/02 C22C38/04 C22C38/06 C23G1/08 (Advanced/Invention)

International (IPC 1-7): C21D9/46 C22C38/00 C22C38/06

CPC: C22C38/00 C21D8/0221 C21D8/0268 C21D8/0436 C21D8/0468 C21D9/48 C21D6/005 C22C38/06 C22C38/001 C22C38/004 C22C38/02 C22C38/04 C21D8/0426 C21D9/46



Family:

Publication number	Publication date	Application number	Application date
AU2015329455 AA	20160414	AU20150329455	20151008
AU2015329455 BB	20180426	AU20150329455	20151008
BR112017007235 A2	20171212	BR20171107235	20151008
CA2960110 AA	20170303	CA20152960110	20151008
CN106795607 A	20170531	CN201580054890	20151008
CN106795607 B	20180703	CN201580054890	20151008
CO20170003327 A2	20170831	CO20170003327	20170406
EP3205739 A1	20170816	EP20150849457	20151008
EP3205739 A4	20170913	EP20150849457	20151008
ID201713909 A	20171229	ID2017P0002427	20151008
JP2016079505 A2	20160516	JP20150189112	20150928
JP5958630 B2	20160802	JP20150189112	20150928
KR20170052660 A	20170512	KR20177009648	20151008
MX2017004584 A1	20170627	MX20170004584	20151008
NZ729397 A	20180727	NZ20150729397	20151008
PH2017500350 A	20170717	PH20170500350	20170227
TW201619408 A	20160601	TW20150133241	20151008
TWI565812 B	20170111	TW20150133241	20151008
US2017292176 AA	20171012	US20150518190	20151008
WO16056239 A1	20160414	WO2015JP05115	20151008

Priority:

JP20140208696 20141010 JP20150189112 20150928 WO2015JP05115 20151008

Probable Assignee: JFE HOLDINGS INC

Assignee(s): (std): JFE HOLDINGS INC ; KAWASAKI STEEL CO ; JFE STEEL CORP

Assignee(s): KIKUCHI TOSHIHIRO ; NAKAMARU HIROKI ; TANAKA TAKUMI ; TSUJIMOTO MASAMI ; KOJIMA KATSUMI ; SUGIHARA REIKO ; AOKI FUMIO ; ARATANI MAKOTO ; HIRAGUCHI TOMONARI

Inventor(s): (std): AOKI FUMIO ; ARATANI MAKOTO ; ARAYA MAKOTO ; FUMIO AOKI ; HIRAGUCHI TOMONARI ; HIROKI NAKAMARU ; KATSUMI KOJIMA ; KIKUCHI TOSHIHIRO ; KOJIMA KATSUMI ; MAKOTO ARATANI ; MASAMI TSUJIMOTO ; NAKAMARU HIROKI ; REIKO SUGIHARA ; SUGIHARA REIKO ; TAKUMI TANAKA ; TANAKA TAKUMI ; TOMONARI HIRAGUCHI ; TOSHIHIRO KIKUCHI ; TSUJIMOTO MASAMI

Agent(s): DAVIES COLLISON CAVE PTY LTD; ROBIC; JUAN PABLO CADENA SARMIENTO; GRUENECKER PATENT U RECHTSANWAELTE PARTG MBB; ANNISA AM BADAR SH LLM; KUMASAKA AKIRA 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
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IR IS IT 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

Title: **STEEL SHEET** FOR **CROWN CAP**, MANUFACTURING METHOD THEREFOR, AND **CROWN CAP**

Abstract: A **steel sheet** for a **crown cap** has sufficient strength and formability even when the thickness thereof is reduced for use, and has a composition containing, in percent by mass, C: 0.010 percent to 0.025 percent, Si: 0.10 percent or less, Mn: 0.05 percent to 0.50 percent, P: 0.050 percent or less, S: 0.005 percent to 0.050 percent, Al: 0.020 percent to 0.070 percent, N: less than 0.0040 percent, and the balance being Fe and inevitable impurities, wherein yield strength after heat treatment at 210 degrees centigrade for 15 minutes is as follows: the yield strength is 550 MPa or more in a rolling direction, and the yield strength in a direction 45 degrees from the rolling direction in a rolling plane is equal to or less than the average of the yield strength in the rolling direction and the yield strength in a direction 90 degrees from the rolling direction in the rolling plane.

Classifications:

International (IPC 8-9): A44C27/00 B21B1/22 B65D41/12 C21D6/00 C21D8/02 C21D9/46 C22C38/00 C22C38/02 C22C38/04 C22C38/06 C22C38/60 (Advanced/Invention); B65D41/12 C21D9/46 C22C38/00 C22C38/60 (Core/Invention)

International (IPC 1-7): B65D41/12 C21D9/46 C22C38/00 C22C38/60

CPC: C22C38/00 C22C38/60 C21D8/0263 C21D8/0226 C21D8/0236 C22C38/02 C22C38/04 C22C38/06 C21D6/005 C22C38/001 B65D41/12 C21D9/46

Family:

Publication number	Publication date	Application number	Application date
AU2015351836 AA	20160602	AU20150351836	20151119
AU2015351836 BB	20180719	AU20150351836	20151119
BR112017010201 A2	20171226	BR20171110201	20151119
CA2963622 AA	20170404	CA20152963622	20151119
CN107109559 A	20170829	CN201580062055	20151119
CO20170004922 A2	20170929	CO20170004922	20170517
ID201800079 A	20180112	ID2017P0003279	20151119
JP2016084353 A1	20170427	JP20160515154T	20151119
JP5988012 B1	20160907	JP20160515154T	20151119
KR20170070184 A	20170621	KR20177013154	20151119
MX2017006871 A1	20170814	MX20170006871	20151119
NZ730832 A	20180525	NZ20150730832	20151119
PH2017500676 A	20171009	PH20170500676	20170410
TH170870 A	20171130	TH20171002934	20151119
TW201636433 A	20161016	TW20150139167	20151125
TWI601830 B	20171011	TW20150139167	20151125
US2017335438 AA	20171123	US20150527167	20151119
WO16084353 A1	20160602	WO2015JP05782	20151119

Priority:

JP20140240903 20141128 WO2015JP05782 20151119

Probable Assignee: JFE HOLDINGS INC

Assignee(s): (std): KAWASAKI STEEL CO ; JFE HOLDINGS INC ; JFE STEEL CORP

Assignee(s): KARIYA NOBUSUKE ; HIRAGUCHI TOMONARI ; NAKAMARU HIROKI ; TANAKA TAKUMI ; KOJIMA KATSUMI

Inventor(s): (std): HIRAGUCHI TOMONARI ; HIROKI NAKAMARU ; KARIYA NOBUSUKE ; KATSUMI KOJIMA ; KOJIMA KATSUMI ; NAKAMARU HIROKI ; NOBUSUKE KARIYA ; TAKUMI TANAKA ; TANAKA TAKUMI ; TOMONARI HIRAGUCHI

Agent(s): DAVIES COLLISON CAVE PTY LTD; ROBIC; JUAN PABLO CADENA SARMIENTO; JANUAR FERRY; KUMASAKA AKIRA 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 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

Title: **STEEL SHEET** FOR **CROWN CAP**, METHOD FOR MANUFACTURING **STEEL SHEET** FOR **CROWN CAP**, AND **CROWN CAP**

Abstract: Provided are a **steel sheet**, having sufficient strength and formability regardless of reduction of thickness, for **crown caps**; a method for manufacturing the same; and a **crown cap**. The **steel sheet** for **crown caps** has a composition containing C: 0.0010 percent to less than 0.0050 percent, Si: 0.10 percent or less, Mn: 0.05 percent to less than 0.50 percent, P: 0.050 percent or less, S: 0.050 percent or less, Al: more than 0.002 percent to less than 0.070 percent, N: less than 0.0040 percent, and B: 0.0005 percent to 0.0020 percent on a mass basis, the balance being Fe and inevitable impurities, and also has a yield strength of 500 MPa or more in a rolling direction, an average Lankford value (r) of 1.1 or more, and an in-plane anisotropy (DELTA r) of Lankford value of -0.3 to 0.3.

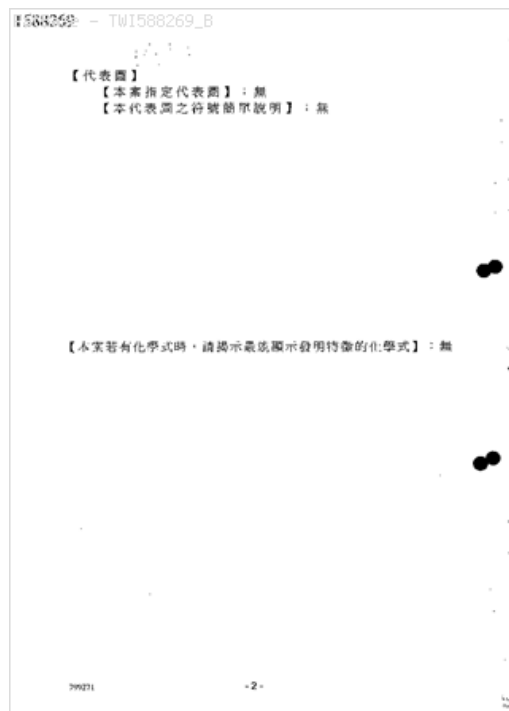
Classifications:

International (IPC 8-9): B21B1/22 C21D6/00 C21D8/02 C21D9/46
C22C38/00 C22C38/02 C22C38/04 C22C38/06

C22C38/60 (Advanced/Invention);

C22C38/00 (Core/Invention)

CPC: C22C38/00 C22C38/004 C21D8/0226 C21D8/0263 C22C38/001
C22C38/02 C22C38/04 C21D8/0268 B65D41/12 C22C38/06 C21D9/46



Family:

Publication number	Publication date	Application number	Application date
AU2016225754 AA	20160901	AU20160225754	20160127
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CA2975068 AA	20170726	CA20162975068	20160127
CN107250413 A	20171013	CN201680011415	20160127
CO20170008516 A2	20180116	CO20170008516	20170823
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JP2016136140 A1	20170427	JP20160533666T	20160127
JP6052474 B1	20161227	JP20160533666T	20160127
KR20170104586 A	20170915	KR20177022820	20160127
MX2017010907 A1	20171124	MX20170010907	20160127
PH2017550087 A	20180212	PH20170550087	20170823
TH176383 A	20180531	TH20171004872	20160127
TW201632637 A	20160916	TW20160104286	20160215
TWI588269 B	20170621	TW20160104286	20160215
US2018051362 AA	20180222	US20160551641	20160127
WO16136140 A1	20160901	WO2016JP00391	20160127

Priority:

JP20150036400 20150226 WO2016JP00391 20160127

Probable Assignee: JFE HOLDINGS INC

Assignee(s): (std): KAWASAKI STEEL CO ; JFE HOLDINGS INC ; JFE STEEL CORP

Assignee(s): KARIYA NOBUSUKE ; HIRAGUCHI TOMONARI ; NAKAMARU HIROKI ; TANAKA TAKUMI ; KOJIMA KATSUMI

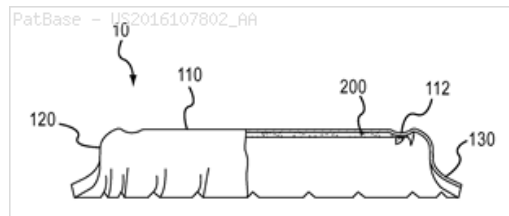
Inventor(s): (std): HIRAGUCHI TOMONARI ; HIROKI NAKAMARU ; KARIYA NOBUSUKE ; KATSUMI KOJIMA ; KOJIMA KATSUMI ; NAKAMARU HIROKI ; NOBUSUKE KARIYA ; TAKUMI TANAKA ; TANAKA TAKUMI ; TOMONARI HIRAGUCHI

Agent(s): DAVIES COLLISON CAVE PTY LTD; ROBIC; JUAN PABLO CADENA SARMIENTO; JANUAR FERRY SSI; KUMASAKA AKIRA 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 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

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): ALFREDO ABEL MERINO ; MERINA ALFREDO ABEL JR ; MERINO ALFREDO ABEL ; MERINO ALFREDO ABEL JR ; MERINO CABALLERO ALFREDO ABEL**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

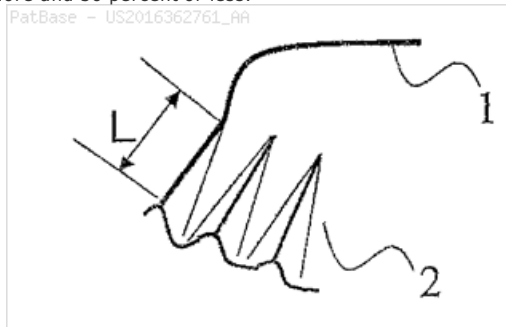
Title: **STEEL SHEET** FOR **CROWN CAP**, METHOD FOR MANUFACTURING SAME, AND **CROWN CAP**

Abstract: A **steel sheet** for **crown caps** includes C: 0.0005 to 0.0050 percent, Si: 0.020 percent or less, Mn: 0.10 to 0.60 percent, P: 0.020 percent or less, S: 0.020 percent or less, Al: 0.01 to 0.10 percent, N: 0.0050 percent or less, Nb: 0.010 to 0.050 percent, and Fe and inevitable impurities. The **steel sheet** has an average r value of 1.30 or more and a YP of 450 MPa or more and 650 MPa or less. The **steel sheet** is obtained by hot rolling a steel slab at a slab reheating temperature of 1,150 degrees centigrade or higher and a finishing temperature of 870 degrees centigrade or higher; coiling the hot rolled **steel sheet** at a coiling temperature of 600 degrees centigrade or higher, performing pickling; then-performing primary cold rolling; performing annealing at an annealing temperature of recrystallization temperature or more and 790 degrees centigrade or less; and performing secondary cold rolling at a rolling reduction of 10 percent or more and 50 percent or less.

Classifications:

International (IPC 8-9): B21B1/22 B21B3/00 B65D41/12 C21D6/00 C21D8/02 C21D9/46 C22C38/00 C22C38/02 C22C38/04 C22C38/06 C22C38/12 C23G1/00 (Advanced/Invention); C22C38/00 (Core/Invention)
CPC: C21D8/0268 C21D8/0226 C21D8/0236 C21D8/0263 C22C38/001 C22C38/02 C22C38/04 C22C38/06 C21D8/0468 C21D8/0473 C22C38/002 C23G1/00 B65D41/12 C21D9/46 C21D2211/005 C22C38/004 C22C38/12
US: 215/328

PatBase - US2016362761_AA



Family:

Publication number	Publication date	Application number	Application date
■ CN106029926 A	20161012	CN201580010012	20150213
■ CO20160000497 A2	20170331	CO20160000497	20160729
■ JP2015129191 A1	20170330	JP20160505035T	20150213
■ JP6195012 B1	20170913	JP20160505035T	20150213
■ KR101871735 B1	20180627	KR20167026089	20150213
■ KR20160126014 A	20161101	KR20167026089	20150213
■ TH165655 A	20170803	TH20161004843	20150213
■ TW201536930 A	20151001	TW20150105830	20150224
■ TWI541363 B	20160711	TW20150105830	20150224
■ US2016362761 AA	20161215	US20150121540	20150213
■ WO15129191 A1	20150903	WO2015JP00684	20150213

Priority:

JP20140033851 20140225 WO2015JP00684 20150213

Probable Assignee: JFE HOLDINGS INC

Assignee(s): (std): JFE HOLDINGS INC ; JFE STEEL CORP ; KAWASAKI STEEL CO

Inventor(s): (std): HIRAGUCHI TOMONARI ; HIRAGUCHI TOMOYA ; NAKAMARU HIROKI ; NAKAMURA HIROKI ; KIKUCHI TOSHIHIRO ; KOJIMA KATSUMI ; TSUJIMOTO MASAMI

Inventor(s): MASAMI TSUJIMOTO ; TOMONARI HIRAGUCHI ; TOSHIHIRO KIKUCHI ; HIROKI NAKAMARU ; KATSUMI KOJIMA

Agent(s): JUAN PABLO CADENA SARMIENTO; KUMASAKA AKIRA 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 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

Title: METHOD OF MANUFACTURING A METAL CAP WITH A LINING AFFIXED THERETO AT SELECTED AREAS

Abstract: A metal cap having a primer layer thereon which has a thermal adhesiveness with respect to a lining layer and wherein part of the lining at the bottom of a cap is thermally adhesively fixed to the primer layer. A method of manufacturing a metal cap including steps of applying a primer to the cap which has a thermal adhesiveness with respect to a lining layer and heating only a portion of the bottom of the cap to cause only part of the lining to become affixed to the primer.

Classifications:

International (IPC 8-9): B21D51/44 B21D51/46 B29C35/08 B29C43/18 B29C55/00 B29C65/00 B29C65/52 B29C70/80 B32B15/04 B32B15/08 B65D41/00 B65D53/04 C21D1/00 C21D1/42 C21D9/00 H05B6/02 H05B6/04 H05B6/06 H05B6/10 H05B6/36 H05B6/40 (Advanced/Invention); B29C33/02 B29C33/36 B29C47/00 (Advanced/Non-invention); B21D51/38 B29C35/08 B29C43/18 B29C55/00 B29C65/00 B29C65/52 B29C70/00 B32B15/04 B32B15/08 B65D41/00 B65D53/00 C21D1/00 C21D1/42 C21D9/00 H05B6/02 H05B6/06 H05B6/10 H05B6/36 (Core/Invention); B29C33/00 B29C33/02 B29C47/00 (Core/Non-invention); B29C B65B B65D B65G B67B (Subclass/Invention)

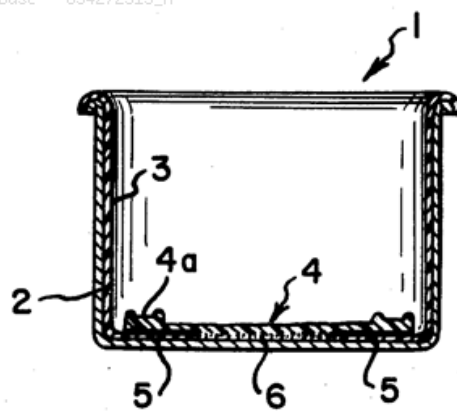
International (IPC 1-7): B21D51/44 B21D51/46 B21D51/48 B29C27/04 B29C27/10 B32B15/08 B65B B65D41/00 B65D41/02 B65D41/04 B65D41/08 B65D41/14 B65D43/02 B65D53/00 B65D53/04 B65G17/36 B67B3/00 C21D1/00 C21D1/42 C21D9/00 F24C13/00 F26B23/08 H05B3/00 H05B5/00 H05B5/04 H05B5/08 H05B6/02 H05B6/06 H05B6/10 H05B6/36 H05B6/40 H05B6/44 H05B9/00 H05B9/02

CPC: B21D51/44 B29C47/0076 B29K2023/04 H05B6/06 H05B6/103 Y10S215/02 B29C47/0009 B29C47/0011 B29C47/0014 B29C47/0016 B29C47/0021 H05B6/362 B29C33/02 B29C33/36 B29C35/08 B29C47/00 B29C70/80 B29C2035/0811 B29K2023/06 Y10T156/1072 Y02P10/253

European: B21D51/44 B29C35/08 B29C70/80 H05B6/36B L29C33/02 L29C33/36 L29C35/08B2 L29C47/00 L29C66/71 L29K23/06

US: 156/262 156/275.3 156/311 156/322 156/379.7 215/230 215/341 215/349 215/DIG.2 219/10.69 219/10.71 219/10.77 219/604 219/633 219/653 219/657 219/659 219/660 219/665 219/673 336/186 413/58

PatBase - US4272313_A



Family:

Publication number	Publication date	Application number	Application date
AR218146 A1	19800515	AR19790277281	19790712
AR218379 A1	19800530	AR19790276685	19790528
AR219400 A1	19800815	AR19790277280	19790712
AR231424 A1	19841130	AR19790276686	19790528
AU510533 B1	19800703	AU19790047217	19790521
BE876490 A	19790917	BE19790195344	19790523
BR7903246 A	19791211	BR19790003246	19790524
BR7903247 A	19791211	BR19790003247	19790524
BR7904347 A	19800408	BR19790004347	19790709
BR7904372 A	19800408	BR19790004372	19790710
BR7906040 A	19800708	BR19790006040	19790921
CA1117475 A1	19820202	CA19790326875	19790503
CA1120552 A1	19820323	CA19790329966	19790618
CA1126345 A1	19820622	CA19790335199	19790907
CA1136718 A1	19821130	CA19790330055	19790619
CA1136719 A1	19821130	CA19790326874	19790503
CH630863 A	19820715	CH19790005061	19790525
DE2920982 A1	19791129	DE19792920982	19790523
DE2920982 C2	19821230	DE19792920982	19790523
ES480699 A1	19800616	ES19790480699	19790518
FI791674 A	19791127	FI19790001674	19790525
FR2426507 A1	19791221	FR19790013012	19790522
FR2426507 B1	19851108	FR19790013012	19790522
GB2025297 A1	19800123	GB19790018092	19790524
GB2025297 B2	19820811	GB19790018092	19790524
IL57383 A0	19790930	IL19790057383	19790523
IL57383 A1	19820228	IL19790057383	19790523
IT1120759 A	19860326	IT19790023007	19790525
IT7923007 A0	19790525	IT19790023007	19790525
JP1168388 C3	19830930	JP19780062304	19780526
JP1170114 C3	19831017	JP19780087079	19780719
JP1174662 C3	19831028	JP19780119655	19780927
JP1195724 C3	19840312	JP19780084920	19780712
JP1198006 C3	19840321	JP19780084921	19780712
JP1372790 C3	19870407	JP19780084919	19780712
JP54153712 A2	19791204	JP19780062304	19780526
JP54154694 A2	19791205	JP19780062305	19780526
JP55012634 A2	19800129	JP19780084919	19780712
JP55012635 A2	19800129	JP19780084920	19780712
JP55012636 A2	19800129	JP19780084921	19780712
JP55014861 A2	19800201	JP19780087079	19780719
JP55046272 A2	19800331	JP19780119655	19780927

JP58000735 B4	19830107	JP19780062304	19780526
JP58000831 B4	19830108	JP19780119655	19780927
JP58003013 B4	19830119	JP19780087079	19780719
JP58026798 B4	19830604	JP19780084920	19780712
JP58031720 B4	19830707	JP19780084921	19780712
JP61032787 B4	19860729	JP19780084919	19780712
LU81310 A	19790911	LU19790081310	19790523
MX146135 A	19820518	MX19790178415	19790710
MX147319 A	19821110	MX19790179403	19790925
MX149307 A	19831014	MX19790177787	19790524
MX151913 A	19850503	MX19790177788	19790524
MX4675 U	19820723	MX19790100747U	19790710
NL182127 B	19870817	NL19790004128	19790525
NL182127 C	19880118	NL19790004128	19790525
NL7904128 A	19791128	NL19790004128	19790525
NO151732 B	19850218	NO19790001733	19790525
NO151732 C	19850529	NO19790001733	19790525
NO791733 A	19791127	NO19790001733	19790525
NZ190543 A	19820525	NZ19790190543	19790524
PH15687 A	19830311	PH19790022568	19790525
PH16453 A	19831012	PH19790022760	19790709
PH16578 A	19831122	PH19790023057	19790924
PH16640 A	19831205	PH19790022761	19790709
PH16765 A	19840222	PH19790022551	19790523
SE7904512 A	19791127	SE19790004512D	19790523
SE7904512 L	19791127	SE19790004512	19790523
US4272313 A	19810609	US19790039119	19790515
US4288673 A	19810908	US19790047646	19790611
US4309586 A	19820105	US19790076858	19790919
US4319111 A	19820309	US19790047647	19790611
US4327840 A	19820504	US19800202343	19801029
US4340801 A	19820720	US19810223822	19810109
ZA7902586 A	19800730	ZA19790002586	19790525

Priority:

JP19780062304 19780526	JP19780062305 19780526	JP19780084920 19780712
JP19780084919 19780712	JP19780084919 19780712	JP19780084921 19780712
JP19780087079 19780719	JP19780119655 19780927	JP19990965578 19780927
US19790039119 19790515	JP19790062304 19790522	MX19790178413 19790710
CA19790335199 19790907		

Probable Assignee: TOYO SEIKAN KAISHA LTD

Assignee(s): (std): TOYO SEIKAN KAISHA LTD

Assignee(s): TOYO SEIKAN KAISHA LTD ; TOYO SEIKAN KAISHA LTD TOKYO JP ; TOYO SEIKAN KAISHA TE TOKIO JAPAN LTD ; TOYO SEIKAN KAISHA TOKIO LTD ; TOYO SODA MFG CO LTD ; ISHIBASHI KAZUHISA ; TOYA SEIKAN KAISHA LTD ; TOYO SEIKAB KAISHA LTD ; TOYO SEIKAN KAISHA LIMITED ; TOYO SEIKAN KAISHA LIMITED TE TOKIO JAPAN ; TOYO SEIKAN KAISHA LIMITED TOKIO

Inventor(s): (std): ISHIBASHI KAZUHISA ; MORI FUMIO ; OMI H ; OUMI HIDEHIKO ; OUMI HIDEHIKO ; OUMI H ; OMI HIDEHIKO ; MORI F ; KAZUHISA ISHIBASHI ; ISHIBASHI K ; HIDEHIKO OUMI ; FUMIO MORI

Inventor(s): HIDEHIKO OMI ; ISHIBASHI KAZUHISA YOKOHAMA KANAGAWA JP ; MORI FUMIO YOKOHAMA KANAGAWA JP ; OUMI HIDEHIKO HIRATSUKA KANAGAWA JP ; K ISHIBASHI ; KAZUHISA ISHIBASHI HIDEHIKO OUMI ET FUMIO MORI ; F MORI ; H OUMI

Agent(s): GRIFFITH HASSEL AND FRAZER; OSLER HOSKIN AND HARCOURT LLP; WOLFF BREGMAN AND GOLLER

Title: SCREW LIDS OR **CROWN CAPS** FOR BOTTLES HAVING IMPROVED SEALING GASKETS

Abstract: A gasket is prepared in a bottle cap by reacting in the bottle cap a first component containing a polyol having 2 or 3 hydroxyl functional groups in one molecule and a second component containing a polymethylene polyphenylisocyanate, preferably a quasi-prepolymer of a polymethylene polyphenylisocyanate having an isocyanate equivalent of not more than 300 until a cured substantially non-porous polyurethane gasket is obtained. The thus obtained sealing gasket undergoes neither deformation, color change nor weight loss over a prolonged period of time and has no tackiness on its surface.

Classifications:

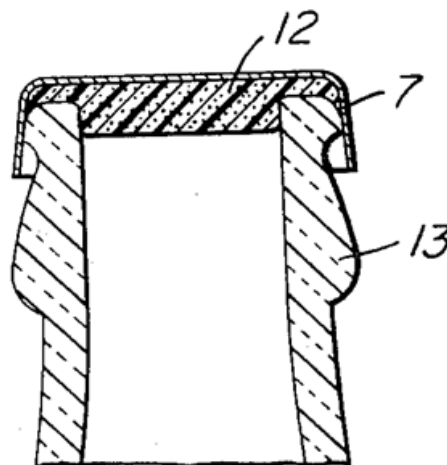
International (IPC 8-9): B29C35/00 B29C61/00 B29C63/00 B65D53/00 C08G18/00 C08G18/10 C08G18/48 C09K3/10 (Advanced/Invention); B65D23/02 (Advanced/Non-invention); B29C35/00 B29C61/00 B29C63/00 B65D53/00 C08G18/00 C09K3/10 (Core/Invention); B65D23/00 (Core/Non-invention)

International (IPC 1-7): B29C13/00 B29C13/02 B29C5/00 B65D23/02 B65D53/00 B65D53/04 C08G18/10 C08G18/48 C08G18/76 C08L75/04 **CPC:** Y10T428/24999 C09K3/1021 C08G18/00 C08G18/10 C08G18/4804 C09K2200/023 C09K2200/0239 C09K2200/0243 C09K2200/0252 C09K2200/026 C09K2200/0652

European: C08G18/00 C08G18/10 C08G18/48A C09K3/10D14 M09K200/02D6 M09K200/02E M09K200/02F M09K200/02F4 M09K200/02F4D M09K200/06M6

US: 215/341 215/4. 264/268 428/319.1 528/60

PatBase - US3799380_A



Family:

Publication number	Publication date	Application number	Application date
CS178154 B2	19770831	CS19690005667	19690815
DE1941500 A1	19700226	DE19691941500	19690814
DE1941500 B2	19750828	DE19691941500	19690814
FR2015862 A1	19700430	FR19690027970	19690814
GB1228085 A	19710415		19690814
JP51029075 B4	19760823	JP19680058689	19680818
US3799380 A	19740326	US19710212602	19711227

Priority:

JP19680058689 19680818 JP19680096265 19681226 US19690850699 19690814

Probable Assignee: HASHIMOTO KOGYO CO LTD

Assignee(s): (std): HASHIMOTO KOGYO CO LTD ; SUMITOMO CHEMICAL CO

Assignee(s): SUMITOMO CHEM CO LTD JA ; SUMITOMO CHEMICAL CY LTD ; SUMITOMO CHEMICAL COMPANY LTD ; SUMITOMO CHEMICAL COMPANY LTD OSAKA ; HASHIMOTO KOGYO CO LTD TOKIO ; SUMITOMO CHEMICAL CO LTD ; HASHIMOTO KOGYO CO LTD JA ; HASHIMOTO KOGYO CO

Inventor(s): (std): KANAIWA TSUTOMU ; KANAIWA T ; KAMADA HARUNORI ; KAMADA H ; IWASA KIYOSHI ; IWASA K ; HASHIMOTO RIKICHI ; HASHIMOTO R ; FUJIMOTO KAZUO ; FUJIMOTO K ; FUJIMOTO KAZNO

Inventor(s): FUJIMOTO K JA ; KANAIWA T JA ; KAMADA HARUNORI TOYONAKA ; KAMADA H JA ; IWASA K JA ; HASHIMOTO RIKICHI TOKIO ; HASHIMOTO R JA

Title: METHOD FOR MANUFACTURING **STEEL SHEET** FOR BOTTLE CAP, AND **STEEL SHEET** FOR BOTTLE CAP

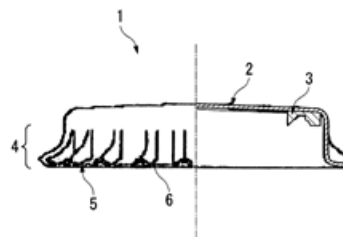
Abstract: This method for manufacturing a **steel sheet** for a bottle cap has a heating step for heating a slab containing a predetermined chemical composition, a hot rolling step for obtaining a hot-rolled **steel sheet** by hot rolling and winding the slab after the heating step, a pickling step for pickling the hot-rolled **steel sheet** after the hot rolling step, a cold rolling step for obtaining a cold-rolled **steel sheet** by cold rolling the hot-rolled **steel sheet** after the pickling step, an annealing step for annealing the cold-rolled **steel sheet** after the cold rolling step at an annealing temperature T (degrees C), and a secondary cold rolling step for performing secondary cold rolling of the cold-rolled **steel sheet** after the annealing step using a two-stand cold rolling mill in which the inter-stand tension t (MPa) and the annealing temperature T are set so as to satisfy the expression $350 \leq t \leq 0.067 \times \ln(t) \times T \times (-0.23 \times \ln(C) + 0.25)$. In the above expression, C is the C content in wt percent.

Classifications:

International (IPC 8-9): B21B1/22 B21B3/02 B65D41/12 C21D8/02 C21D9/46 C22C38/00 C22C38/06 C22C38/12 C22C38/14 C22C38/60 (Advanced/Invention)

CPC: B21B1/22 C21D9/46 C22C38/00 C22C38/14

PatBase - WO16104773_A1



Family:

Publication number	Publication date	Application number	Application date
JP2016104773 A1	20170427	JP20160523345T	20151225
JP6057023 B1	20170111	JP20160523345T	20151225
TW201631177 A	20160901	TW20150143836	20151225
WO16104773 A1	20160630	WO2015JP86374	20151225

Priority:

JP20140264506 20141226 WO2015JP86374 20151225

Probable Assignee: NIPPON STEEL AND SUMITOMO METAL CORP

Assignee(s): (std): NIPPON STEEL AND SUMITOMO METAL CORP

Assignee(s): NIPPON STEEL SUMITOMO METALS CO LTD

Inventor(s): (std): TAKEUCHI SATOSHI ; NONAKA TOSHIKI ; MIKASA AKIRA

Agent(s): SHIGA MASATAKE 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 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

Title: Closure cap having prize markings and peelable liner

Abstract: A closure cap having a liner adhered to a cap shell by a plurality of coating layers. Prize markings are printed on one of the coating layers and are positioned between the coating layers. The peel resistance in the interface between the coating layers is less than that between the topmost coating layer and the liner to assure that the prize markings will be transferred to the liner when the liner is peeled from the cap shell. The liner includes a starting portion which adheres to the topmost coating layer only slightly to facilitate easy removal of the liner from the cap shell.

Classifications:

International (IPC 8-9): B65D41/12 B65D53/00 B65D53/04

B65D53/06 (Advanced/Invention);

B65D41/02 B65D53/00 (Core/Invention)

International (IPC 1-7): B32B27/00 B65D41/12 B65D41/18 B65D51/24

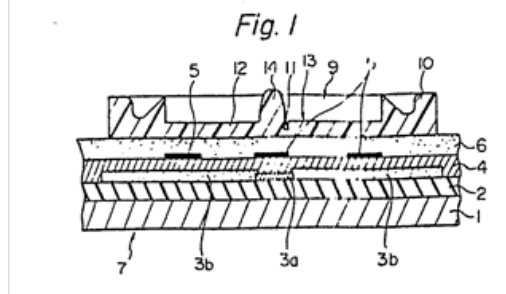
B65D53/00 B65D53/04 B65D53/06

CPC: B65D41/12 B65D53/00

European: B65D41/12 B65D53/00

US: 215/228 215/254

PatBase - US4372457_A



Family:

Publication number	Publication date	Application number	Application date
AU197952985 A1	19800529	AU19790052985	19791120
AU530421 B2	19830714	AU19790052985	19791120
DE2964164 D1	19830105	DE19792964164	19791123
EP0011999 A1	19800611	EP19790302687	19791123
EP0011999 B1	19821201	EP19790302687	19791123
ES486237 A1	19800516	ES19790486237	19791122
FI69787 B	19851231	FI19790003695	19791123
FI69787 C	19860526	FI19790003695	19791123
FI793695 A	19800526	FI19790003695	19791123
JP1420439 C3	19880114	JP19780144968	19781125
JP1443025 C3	19880608	JP19790090334	19790718
JP55071275 A2	19800529	JP19780144968	19781125
JP56023460 A2	19810305	JP19790090334	19790718
JP62022867 B4	19870520	JP19780144968	19781125
JP62046421 B4	19871002	JP19790090334	19790718
NO151456 B	19850102	NO19790003820	19791123
NO151456 C	19850417	NO19790003820	19791123
NO793820 A	19800528	NO19790003820	19791123
NZ192166 A	19820907	NZ19790192166	19791120
US4372457 A	19830208	US19790097370	19791126

Priority:

JP19780144968 19781125 JP19790090334 19790718

Probable Assignee: CROWN CORK JAPAN

Assignee(s): (std): CROWN CORK JAPAN ; JAPAN CRWON CORK CO LTD ; TOYO SEIKAN KAISHA LTD

Assignee(s): NIPPON CROWNCORK ; JAPAN CROWN CORK CO ; JAPAN CROWN CORK CO LTD

Inventor(s): (std): ICHINOSE ISAO ; ICHINOSS ISAO ; KUNIMOTO G ; KUNIMOTO GO ; SUZUKI NOBORU ; MORI FUMIO ; KUNIMOTO TAKESHI ; SUZUKI N ; MORI F

Inventor(s): NOBORU SUZUKI ; ISAO ICHINOSE ; FUMIO MORI ; GO KUNIMOTO

Agent(s): PHILLIPS ORMONDE AND FITZPATRICK

Designated states: BE DE FR GB IT NL

Title: ADHESIVE FOR BONDING POLYETHYLENE TO **CROWN CAPS**

Abstract: ABSTRACT OF THE DISCLOSURE An adhesive composition for securely bonding poly-ethylene film to a smooth surface métal substrate comprises at least 20 percent by weight of polyethylene hav-ing a molecular weight of less than 10,000, at least 10 percent by weight of a terpene resin having a melting point between about 100 degrees C. and 135 degrees C. and a molecular weight of about 1,200 and at least 10 percent by weight of a polymeric linseed drying oil. The adhesive 20 produces a dry film which resists blocking and exhibits the ability of undergoing déformation without flaking or loss of adhésion.

Classifications:

International (IPC 8-9): B65D53/04 C09J123/06 C09J191/00 (Advanced/Invention)

International (IPC 1-7): B65D53/06 C08F29/10 C09J3/14

CPC: B65D53/04 C09J123/06 C09J191/005 C08L2666/02 C08L2666/04

European: B65D53/04 C09J123/06 C09J191/00B

US: 156/262 156/334 215/341 260/23 524/313 524/484 524/553 525/210

Family:

Publication number	Publication date	Application number	Application date
BE675820 A	19660516		19660131
FR1467363 A	19670127	FR19666946880	19660131
GB1061118 A	19670308	GB19660003250	19660125
US3445412 A	19690520	US19650430183	19650203

Priority:

US19650430183 19650203

Probable Assignee: STANLEY WORKS

Assignee(s): (std): STANLEY WORKS

Assignee(s): STANLEY WORKS THE ; THE STANLEY WORKS

Inventor(s): (std): GERHARDT HERBERT W ; LYNCH CONRAD L ; LYNCH CONRAD LINDEN ; GERHARDT HERBERT WILLIAM

Inventor(s): HERBERT W GERHARDT ; CONRAD L LYNCH

Title: STEEL ALLOYS

Abstract: 1376007 Steel compositions NIPPON STEEL CORP 7 Sept 1972 [7 Sept 1971] 41536/72 Heading C7A A steel especially suited as **steel sheet** for use in cans, comprises by weight:- the balance being iron and impurities such as silicon and phosphorus. The alloys may be hot or cold-rolled into sheet and annealed before being plated on one side with tin, chromium, nickel or aluminium or a chromate: the other side may also be plated with a vinyl chloride compound. The steel has improved rust resistance when exposed to the atmosphere, e.g. when the plated steel is scored to define the lines of weakness in the top of cans which are adapted for easy opening. The **steel sheet** may also be fabricated into bottle caps.

Classifications:

International (IPC 8-9): B21D51/44 C22C38/00

C22C38/16 (Advanced/Invention);

B21D51/38 C22C38/00 C22C38/16 (Core/Invention)

International (IPC 1-7): B65D17/00 C22C38/14 C22C38/16 C22C39/54

CPC: C22C38/16

European: C22C38/16

PatBase - GB1376007A	up to 0.12%	carbon
	up to 0.015%	sulphur
	up to 50 times	the sulphur content of manganese
	0.02 to 0.2%	copper
one or more of	0.02 to 0.2%	molybdenum
	0.02 to 0.2%	tin
	0.05 to 0.15%	titanium
	0.05 to 0.15%	zirconium
optionally and/or	0.02 to 0.2%	nickel
	0.02 to 0.2%	cobalt

Family:

Publication number	Publication date	Application number	Application date
CA977189 A1	19751104	CA19720151111	19720906
GB1376007 A	19741204	GB19720041536	19720907
JP48034020 A2	19730515	JP19710068537	19710907
JP51010569 B4	19760405	JP19710068537	19710907

Priority:

JP19710068537 19710907

Probable Assignee: NIPPON STEEL CORP

Assignee(s): (std): NIPPON STEEL CORP

Assignee(s): NISHIHARA TOSHIRO ; OYAGI YASHICHI ; ASANO HIDEJIRO ; MAEDA SHIGEYOSHI

Inventor(s): (std): ASANO HIDEJIRO ; MAEDA SHIGEYOSHI ; NISHIHARA TOSHIRO ; OYAGI YASHICHI

Title: DEVICE FOR REPEATED REPROCESSING OF USED CROWN CAPS OF DRINK BOTTLES IN REPROCESSING PLANT, HAS SENSOR FOR DETERMINING REPROCESSING OF CROWN CAPS AND CONTROL SYSTEM FOR CONTROLLING AND TRACKING CROWN CAPS THROUGH REPROCESSING PLANT

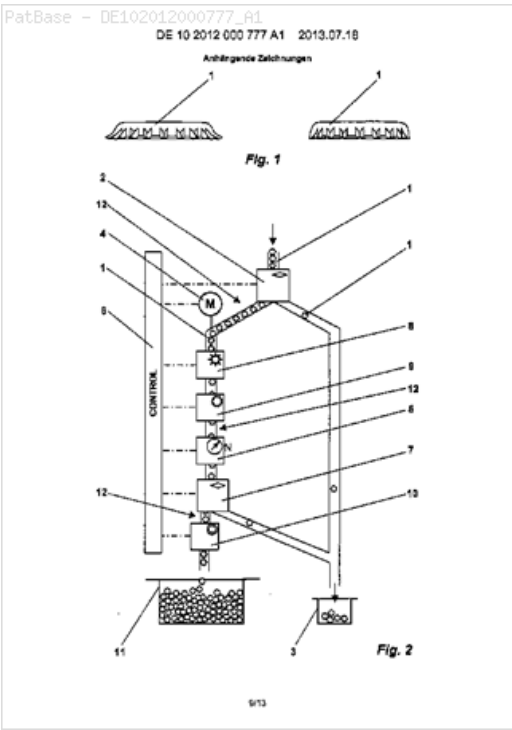
Abstract: The device comprises a loading unit, a transport unit (4), a presorting unit (2), a cleaning unit, an evacuation unit, and a sensor (5) for determining the reprocessing of the crown caps (1). A distribution line for crown caps has outputs for outputting crown caps of same age into a treatment channel or a sorting unit (7) for selection of reusable crown caps. A control system (6) is provided for controlling and tracking the crown caps through the reprocessing plant. The sorting unit is controllable by the data of the sensor. An independent claim is included for a method for repeated reprocessing of used container closures, particularly crown caps in a reprocessing plant.

Classifications:

International (IPC 8-9): B03B9/06 B07B13/00 B07B9/00

B09B3/00 (Advanced/Invention)

CPC: B09B3/00



Family:

Publication number	Publication date	Application number	Application date
DE102012000777 A1	20130718	DE201210000777	20120112

Priority:

DE201210000777 20120112

Probable Assignee:

HUEBEL EGON

Assignee(s): (std):

HUEBEL EGON

Inventor(s): (std):

HUEBEL EGON

Title: AL DEPOSITED **STEEL SHEET** FOR **CROWN CAP** AND METHOD THEREFOR

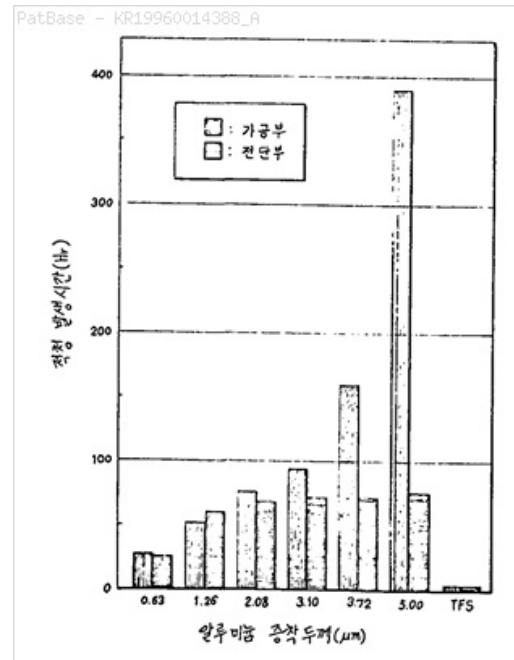
Abstract: Source: KR19960014388A **Machine translation:** The present invention is an aluminum vapor deposition plating layer has a thickness of 0.5 to 2.0 of the **crown cap** for a micrometres and a method of manufacturing the aluminum deposition relates to a plated **steel sheet**. Conventional aluminum-plated **steel sheet** is peeled plating is impossible because only weight 20g / ? or more conditions have been developed. Hot-dip plated **steel sheet** of the present invention has been made in chromium-plated **steel sheet** having had a **crown cap** and wrinkles parts of the front end portion of the 10-4 to 3-fold to 6-fold to corrosion resistance can be improved. In addition, the present invention is vacuum evaporation method using electronic load 250 to 300 degrees centigrade at a substrate temperature deposition so that the thickness of the plating layer is 0.5 to 2.0 the micrometres vacuum deposition of aluminum in the **steel sheet** is excellent in corrosion resistance, **crown cap** for the deposition to provide a method for producing an aluminum-plated **steel sheet**.

Classifications:

International (IPC 8-9): C23C14/14 (Advanced/Invention);

C23C14/14 (Advanced/Non-invention)

International (IPC 1-7): C23C14/14 C23C16/06



Family:

Publication number	Publication date	Application number	Application date
KR0140833 B1	19980715	KR19940027837	19941028
KR19960014388 A	19960522	KR19940027837	19941028

Priority:

KR19940027837 19941028

Probable Assignee: KOREA RES ASS NEW IRON AND STEEL

Assignee(s): (std): KOREA RES ASS NEW IRON AND STEEL ; KOREA RESEARCH ASS OF NEW IRON

Assignee(s): KOREA RESEARCH ASSOCIATION OF NEW IRON AND STEEL M ; KOREA RESEARCH ASSOCIATION OF NEW IRON AND STEEL MAKING TECHNOLOGY

Inventor(s): (std): CHON JOONG HWAN ; LEE HO JONG ; PARK CHI ROK ; SHIN JUNG CHOL

Title: Lined closure

Abstract: A cap adapted for use as a container cover where the cap has a thermoplastic resin liner pressed formed onto the inner surface of a cap shell. The plastic liner is formed such that the difference between the intrasurface orientation index of the outer peripheral portion of the liner and the intrasurface orientation index of the central portion of the liner does not exceed 0.37 where the intrasurface orientation index is defined as the sum of the orientation coefficient of the liner in the radial direction and the orientation coefficient of the liner in the circular direction. A method of making a cap having a thermoplastic liner where the liner is press-formed into shape under conditions whereby the difference between the intrasurface orientation index of the outer peripheral portion of the liner and the orientation index of the central portion of the liner does not exceed 0.37.

Classifications:

International (IPC 8-9): B29C70/80 B65D53/00 B65D53/04

B65D53/06 (Advanced/Invention);

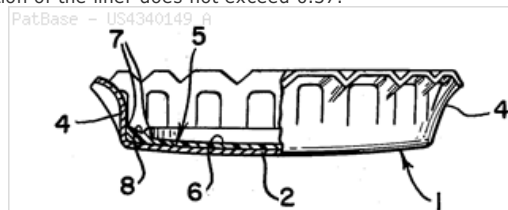
B29C70/00 B65D53/00 (Core/Invention)

International (IPC 1-7): B21D51/46 B29C1/00 B29C13/02 B29C13/2 B29C3/00 B29C43/02 B29D B29G1/00 B29L31/56 B32B15/08 B32B27/32 B65D41/00 B65D41/02 B65D41/12 B65D41/14 B65D41/34 B65D53/00 B65D53/04 B65D53/06 B67B C08F C08J C08L23/04 F16J15/00

CPC: B65D53/00 B29C70/80 B65D53/04

European: B29C70/80 B65D53/00 B65D53/04

US: 215/343



Family:

Publication number	Publication date	Application number	Application date
AR219402 A1	19800815	AR19790277400	19790720
AU197949105 A1	19800131	AU19790049105	19790720
AU523059 B2	19820708	AU19790049105	19790720
BE877796 A	19791116	BE19790196378	19790719
BR7904654 A	19800422	BR19790004654	19790720
CA1134322 A1	19821026	CA19790330617	19790626
CH634522 A	19830215	CH19790006796	19790720
DE2929752 A1	19800131	DE19792929752	19790723
DE2929752 C2	19930121	DE19792929752	19790723
ES250344 U	19800716	ES19800250344U	19800429
ES250344 Y	19810316	ES19800250344U	19800429
ES482693 A1	19800901	ES19790482693	19790720
FI71519 B	19861010	FI19790002280	19790720
FI71519 C	19870119	FI19790002280	19790720
FI792280 A	19800123	FI19790002280	19790720
FR2431438 A1	19800215	FR19790018857	19790720
FR2431438 B1	19850405	FR19790018857	19790720
GB2028781 A1	19800312	GB19790025487	19790720
GB2028781 B2	19820915	GB19790025487	19790720
IE48449 B	19850123	IE19790001341	19790808
IE791341 L	19800122	IE19790001341	19790808
IL57843 A0	19791130	IL19790057843	19790719
IL57843 A1	19810331	IL19790057843	19790719
IT1122244 A	19860423	IT19790024535	19790720
IT7924535 A0	19790720	IT19790024535	19790720
JP1453528 C3	19880810	JP19780088954	19780722
JP55020126 A2	19800213	JP19780088954	19780722
JP61059990 B4	19861218	JP19780088954	19780722
LU81530 A	19791031	LU19790081530	19790719
MX152095 A	19850529	MX19790178579	19790720
NL7905672 A	19800124	NL19790005672	19790720
NO153960 B	19860317	NO19790002410	19790720
NO153960 C	19860625	NO19790002410	19790720
NO792410 A	19800123	NO19790002410	19790720
NZ191021 A	19830715	NZ19790191021	19790716
SE440215 B	19850722	SE19790006187	19790718
SE440215 C	19851031	SE19790006187	19790718
SE7906187 A	19800124	SE19790006187D	19790718
SE7906187 L	19800124	SE19790006187	19790718
US4340149 A	19820720	US19800201608	19801028
ZA7903733 A	19800730	ZA19790003733	19790720

Priority:

JP19780088954 19780722 US19790059196 19790720

Probable Assignee: TOYO SEIKAN KAISHA LTD

Assignee(s): (std): CROWN CORK JAPAN ; TOYO SEIKAN KAISHA LTD ; NIPPON KURAUNKORUKU KK ; NIPPON CROWNCORK

Assignee(s): JAPAN CROWN CORK CO ; JAPAN CROWN CORK CO LTD ; JAPAN CROWN CORK CO LTD TE TOKIO ; JAPAN CROWN CORK CO LTD TOKIO TOKYO JP

Inventor(s): (std): S NAGASHIMA ; T YOSHIDA ; YOSHIDA TOSHIHIKO ; YOSHIDA TOSHIHIRO ; NAGASHIMA SHIGERU ; MORI FUMIO ; MATSUDA GUNJI ; G MATSUDA ; F MORI ; 1F MORI ; 2G MATSUDA ; 3T YOSHIDA ; 4S NAGASHIMA ; YOSHIDA T ; TOSHIHIRO YOSHIDA ; SHIGERU NAGASHIMA ; NAGASHIMA S ; MORI F ; MATSUDA G ; GUNJI MATSUDA ; FUMIO MORI

Inventor(s): 1 F MORI ; MATSUDA GUNJI ISEHARA KANAGAWA JP ; MORI FUMIO YOKOHAMA KANAGAWA JP ;
NAGASHIMA SHIGERU HIRATSUKA KANAGAWA JP ; 4 S NAGASHIMA ; 3 T YOSHIDA ; 2 G MATSUDA
Agent(s): PHILLIPS ORMONDE AND FITZPATRICK; SANFORD TCOLB AND CO

Title: CROWN CORK OPENER

Abstract: The invention concerns a crown cork opener (2) consisting of a handle (4) associated with a bottle opening head (3) comprising a central cut with a support element (17) of a catching member (19) on its edge, the support element being located between the handle (4) and the catching member (19), a device designed to be fixed (1) on the first forefinger and middle finger bone being attached on the handle (4), said fixing device (1) enabling to hold the bottle opener in hand constantly without inconvenience and to open bottles single-handed.

Classifications:

International (IPC 8-9): B67B7/00 B67B7/014

B67B7/16 (Advanced/Invention);

B67B7/16 (Advanced/Non-invention);

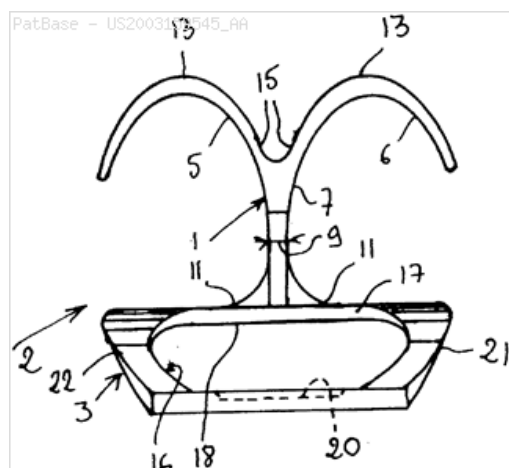
B67B7/00 (Core/Invention)

International (IPC 1-7): B65B7/16 B67B7/00 B67B7/16 F16B45/00

CPC: B67B2007/166 B67B7/16

European: B67B7/16 L67B7/16K

US: 81/3.07 81/3.070P 81/3.41 81/3.55 81/3.550S 81/34.1 D8/40



Family:

Publication number	Publication date	Application number	Application date
AT311342 E	20051215	AT20010925640T	20010413
AU2001252334 AA	20011203	AU20010252334	20010413
AU200152334 A1	20011203	AU20010052334	20010413
AU200152334 A5	20011203	AU20010052334	20010413
BG107290 A	20030630	BG20020107290	20021119
BRPI0111010 A	20030408	BR2001PI11010	20010413
CA2408129 AA	20021107	CA20012408129	20010413
CN1260113 C	20060621	CN20018012031	20010413
CN1440365 A	20030903	CN20018012031	20010413
CZ20023844 A3	20030514	CZ20020003844	20010413
DE60115425 D1	20060105	DE20016015425	20010413
DE60115425 T2	20060810	DE20016015425T	20010413
EP1283816 A1	20030219	EP20010925640	20010413
EP1283816 B1	20051130	EP20010925640	20010413
ES2254399 T3	20060616	ES20010925640T	20010413
FR2809097 A1	20011123	FR20000006497	20000522
FR2809097 B1	20020719	FR20000006497	20000522
HU0302042 AB	20030929	HU20030002042	20010413
JP2003534213 T2	20031118	JP20010586178T	20010413
KR20030015250 A	20030220	KR20027015776	20010413
MA25672 A1	20021231	MA20020026911	20021114
MXPA02011525 A1	20030425	MX2002PA11525	20010413
NO20025577 A	20021121	NO20020005577	20021121
NO20025577 A0	20021121	NO20020005577	20021121
NZ522448 A	20061027	NZ20010522448	20010413
OA12270 A	20060511	OA20021000352	20010413
PL359161 A1	20040823	PL20010359161	20010413
RU2002134490 A	20040420	RU20020134490	20010413
RU2265573 C2	20051210	RU20020134490	20010413
US2003159545 AA	20030828	US20020276296	20021122
US7165475 BB	20070123	US20020276296	20021122
WO0189982 A1	20011129	WO2001FR01142	20010413
ZA200208771 A	20040203	ZA20020008771	20021030

Priority:

FR20000006497 20000522 WO2001FR01142 20010413 US20020276296 20021122

Probable Assignee: TEPPE BRUNO

Assignee(s): (std): BRUNO TEPPE ; TEPPE BRUNO

Inventor(s): (std): BRUNO TEPPE ; TEPPE BRUNO ; TEPPE BRJUNO ; TEPPE B

Inventor(s): B TEPPE

Agent(s): SPRUSON AND FERGUSON; ROBIC; GREENBLUM AND BERNSTEIN PLC

Designated states: AE AT AU BE BF BG BJ BR CA CF CG CH CI CM CN CU CY CZ DE DK ES FI FR GA GB GN GR GW HU IE IN IT JP KR LI LU MA MC ML MR MX NE NL NO NZ PL PT RO RU SE SG SN TD TG TR US VN ZA

Title: **STEEL SHEET** FOR **CROWN CAP**, MANUFACTURING METHOD THEREFOR AND **CROWN CAP**

Abstract: PROBLEM TO BE SOLVED: To provide a **steel sheet** for **crown cap** excellent in pressure resistance and processability, a manufacturing method therefor and a **crown cap** by molding the **steel sheet**. SOLUTION: There is provided a **steel sheet** for **crown cap** excellent in processability having a component composition containing, by mass percent, C:0.0005 to 0.0050 percent, Si:0.02 percent or less, Mn:0.10 to 0.60 percent, P:0.02 percent or less, S:0.02 percent or less, Al:0.01 to 0.10 percent, N:0.0050 percent or less, Nb:0.010 to 0.050 percent and the balance Fe with inevitable impurities, and having average TS which is an average value of TS (tensile strength) in a rolling direction and TS in a rolling right angle direction of the **steel sheet** of 500 MPa or more and average YP which is the average value of YP (yield strength) in the rolling direction and YP in the rolling right angle direction and the average TS satisfying a relationship of average YP (MPa) less than or equal to $130+0.746 \times \text{average TS (MPa)}$.

Classifications:

International (IPC 8-9): B21B1/22 C21D9/46 C22C38/00 C22C38/12
C22C38/54 (Advanced/Invention)

PatBase - JP2015224384_A2



Family:

Publication number	Publication date	Application number	Application date
JP2015224384 A2	20151214	JP20140111800	20140530
JP6123735 B2	20170510	JP20140111800	20140530

Priority:

JP20140111800 20140530

Probable Assignee: JFE HOLDINGS INC

Assignee(s): (std): JFE HOLDINGS INC ; JFE STEEL CORP ; KAWASAKI STEEL CO

Inventor(s): (std): HIRAGUCHI TOMONARI ; KOJIMA KATSUMI ; TANAKA TAKUMI ; NAKAMARU HIROKI

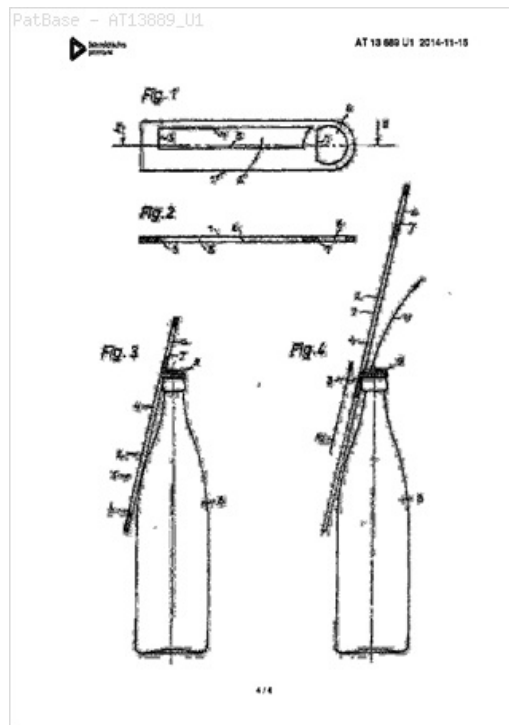
Title: KRONENKORKENOEFFNER KRONENKORKENOEFFNER (Machine translation)

Abstract: Source: AT13889U [DE] Ein Kronenkorkenoeffner umfasst eine linealartige Griffleiste (1) mit einer Gleitfuehrung, beispielsweise einem Schlitz (2) in Laengsrichtung. An einem Ende des Schlitzes (2) ist quer zur Laengsrichtung derselben eine Einsatzkante (3) vorgesehen. Die Flanken- bzw. Laengskanten (4, 5) des Schlitzes (2) bilden die Gleitfuehrungen, die an die Kappe eines Kronenkorkens (9) angelegt werden. Bei einer raschen linearen Verschiebung des gefuehrten Kronenkorkenoeffners stoest die Einsatzkante (3) von unten gegen den Zahnungsbereich des Kronenkorkens (9) und schleudert diesen aus seiner Verschlussstellung. **Machine translation:** A Kronenkorkenoeffner comprises a linear-like handle bar (1) with a slide, for example, a slot (2) in Laengsrichtung. At one end of the slot (2) is provided transversely with respect to the same Laengsrichtung an insert edge (3). The flank or Laengskanten (4, 5) of the slot (2) forming the sliding guides are applied to the cap of the **cap** (9). In a rapid linear displacement of the guided Kronenkorkenoeffners the insert edge (3) pushes from below against the Zahnungsbereich the **cap** (9) and hurls it from its closed position.

Classifications:

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

CPC: B67B7/16



Family:

Publication number	Publication date	Application number	Application date
AT13889 U1	20141115	AT20130050071U	20130516

Priority:

AT20130050071U 20130516

Probable Assignee:

ZWOELFER PATRICK

Assignee(s): (std):

ZWOELFER PATRICK

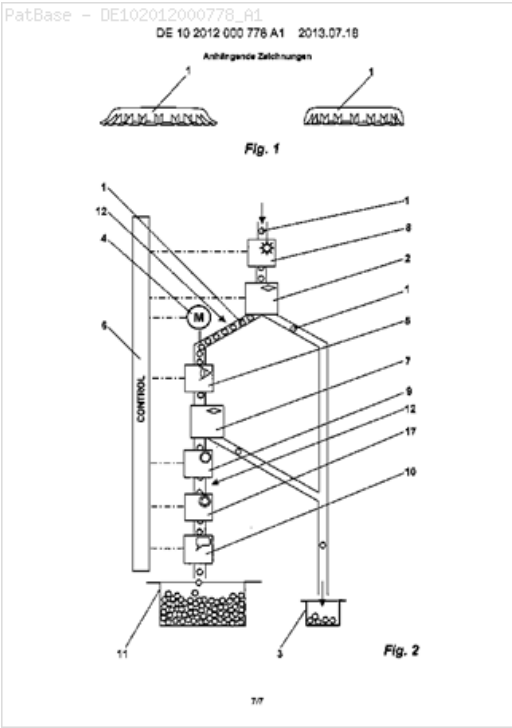
Inventor(s): (std):

ZWOELFER PATRICK

Title: APPARATUS FOR REPEATED RECYCLING OF USED CONTAINERS CLOSURES E.G. CROWN CORK OF DRINK BOTTLE, HAS CONTROL UNIT TO CONTROL AND TRACK CORK, AND MONITORING STATION WITH SENSOR TO DETERMINE MATERIAL PROPERTIES OF CORK

Abstract: The apparatus has feed unit, transport unit (4), presorting medium (2), cleaning agents and emptying unit. The sorting unit (7) is provided to select reusable crown corks (1) into an output. The control unit (6) is provided for controlling and tracking the cork through the reprocessing plant. The monitoring station (5) is provided with a sensor for determining the material properties of the crown corks. An independent claim is included for method for repeated recycling of used containers closures used in reprocessing plant.

Classifications:
International (IPC 8-9): B21D51/44 (Advanced/Invention)
CPC: B21D51/48 B07C5/34



Family:

Publication number	Publication date	Application number	Application date
DE102012000778 A1	20130718	DE201210000778	20120112

Priority:
DE201210000778 20120112

Probable Assignee: HUEBEL EGON
Assignee(s): (std): HUEBEL EGON
Inventor(s): (std): HUEBEL EGON

Title: **STEEL SHEET** FOR **CROWN CAP** AND MANUFACTURING METHOD THEREFOR AND **CROWN CAP**

Abstract: PROBLEM TO BE SOLVED: To provide a **steel sheet** for **crown cap** having sufficient strength and moldability even used with making a thin wall and a manufacturing method therefor and a **crown cap**. **SOLUTION:** There is provided a **steel sheet** for **crown cap** having a composition component containing, by mass percent, C:0.0040 percent or less, Si:0.02 percent to 0.10 percent, Mn:0.05 percent to 0.50 percent, P:0.050 percent or less, S:0.005 percent to 0.050 percent, Al:0.020 percent to 0.070 percent, N:less than 0.0040 percent and the balance Fe with inevitable impurities and having yield strength in a rolling direction after a heat treatment at 210 degrees centigrade for 15 minutes of 550 MPa or more. **SELECTED DRAWING:** None

Classifications:

International (IPC 8-9): B65D41/12 C21D9/46 C22C38/00 C22C38/60 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
JP2016102234 A2	20160602	JP20140240904	20141128
JP6176225 B2	20170809	JP20140240904	20141128

Priority:

JP20140240904 20141128

Probable Assignee: JFE HOLDINGS INC

Assignee(s): (std): JFE HOLDINGS INC ; JFE STEEL CORP ; KAWASAKI STEEL CO

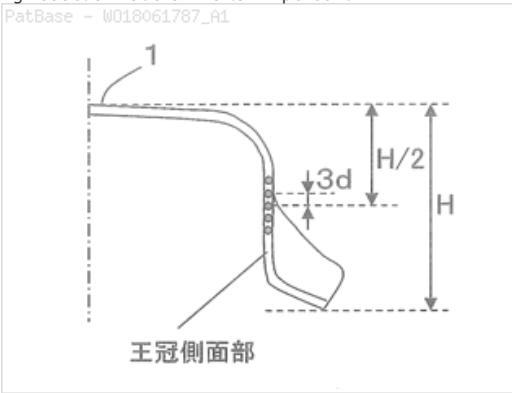
Inventor(s): (std): HIRAGUCHI TOMONARI ; KOJIMA KATSUMI ; NAKAMARU HIROKI ; TANAKA TAKUMI

Title: **STEEL SHEET** FOR **CROWN CAPS**, PRODUCTION METHOD THEREFOR, AND **CROWN CAP**

Abstract: The purpose of the present invention is to provide: a **steel sheet** for **crown caps** which has sufficient pressure resistance and formability even if reduced in thickness; a method for producing the **steel sheet** for **crown caps**; and a **crown cap**. The present invention provides a **steel sheet** for **crown caps**, wherein the **steel sheet** has a predetermined component composition, the value of N total – (N as AlN) is 0.0090 to 0.0170 percent, the maximum particle size of a carbide in a rolling-direction cross section is 2.0 micro m or less, and the yield strength in the rolling direction is 420 to 600 MPa. The present invention also provides a method for producing a **steel sheet** for **crown caps** comprising: a hot rolling step of winding a steel material having a predetermined component composition at a predetermined temperature after finish rolling; a primary cold rolling step; a continuous annealing step of heating at an average heating rate of 10 degrees C/s to 30 degrees C/s in a temperature range A of 500 to 600 degrees centigrade in a heating process, annealing at an annealing temperature B in a temperature range of 620 to 740 degrees centigrade, cooling from the annealing temperature B to a cooling stop temperature C in a temperature range of 400 to 580 degrees centigrade at an average cooling rate of 20 degrees C/s or more, and setting the time of residence in the temperature range of 400 to 580 degrees centigrade after stopping cooling at the average cooling rate to 30 to 90 seconds; and a secondary cold rolling step of cold rolling at a rolling reduction ratio of 1.0 to 12 percent.

Classifications:

International (IPC 8-9): C21D9/46 C22C38/00
C22C38/06 (Advanced/Invention)
CPC: C21D9/46 C22C38/00 C22C38/06



Family:

Publication number	Publication date	Application number	Application date
WO18061787 A1	20180405	WO2017JP33179	20170914

Priority:

JP20160192247 20160929

Probable Assignee: JFE HOLDINGS INC

Assignee(s): (std): JFE HOLDINGS INC ; JFE STEEL CORP ; KAWASAKI STEEL CO

Inventor(s): (std): HIRAGUCHI TOMONARI ; KARIYA NOBUSUKE ; KOJIMA KATSUMI ; UMEMOTO MASASHI ; TSUJIMOTO MASAMI

Agent(s): KUMASAKA AKIRA 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 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 JO JP KE KG KH KM KN KP KR KW 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

Title: Enhancement of lowest order mode operation in nonplanar DH injection lasers

Abstract: By employing a channel in the substrate of a GaAs-GaAlAs injection laser, the active waveguiding layer of the laser can be made to have constricted regions above the shoulders of the substrate channel. The constricted regions are characterized as being of thin cross section as compared to immediate adjacent areas of the active layer and may be provided at one terminus point of the region with a pinch-off in the active layer. This configuration, upon proper stripe placement and current confinement through this region into the substrate channel will enhance light wave propagation in this region and improve fundamental transverse mode operation.

Classifications:

International (IPC 8-9): B65D41/34 B65D53/00 B65D53/04 B65D53/06 C08L1/00 C08L101/00 C08L21/00 C08L23/00 C08L23/16 C08L27/00 C08L33/00 C08L33/02 C08L51/00 C08L51/02 C08L7/00

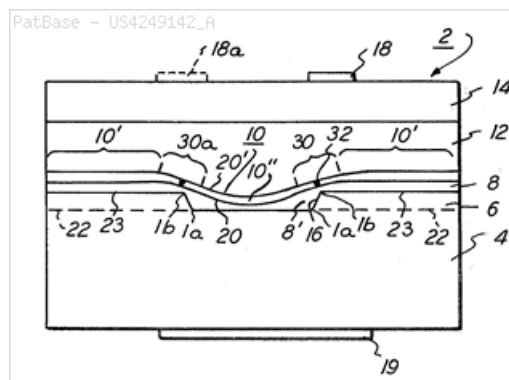
C08L77/00 (Advanced/Invention); B65D41/34 B65D53/00 C08L1/00 C08L101/00 C08L21/00 C08L23/00 C08L27/00 C08L33/00 C08L51/00 C08L7/00 C08L77/00 (Core/Invention)

International (IPC 1-7): B29D B65D39/08 B65D39/08 B65D39/18 B65D39/8 B65D41/00 B65D41/34 B65D53/00 B65D53/02 B65D53/04 B65D53/06 B65D55/08 B65D55/12 B67B C08J5/00 C08J5/18 C08K5/20 C08L23/00 C08L23/02 C08L23/04 C08L23/06 C08L23/08 C08L23/14 C08L23/16 C08L7/00 C08L9/00 H01S3/19

CPC: B65D53/00 B65D41/34 B65D53/04

European: B65D41/34F B65D53/00 B65D53/04

US: 215/343 331/94.5H 372/45 372/45.01 372/46 372/46.01 372/48 524/232 525/95



Family:

Publication number	Publication date	Application number	Application date
AU197953268 A1	19800605	AU19790053268	19791128
AU533769 B2	19831208	AU19790053268	19791128
BE880372 A	19800317	BE19790198377	19791130
CH634791 A	19830228	CH19790010674	19791130
DE2948371 A1	19800612	DE19792948371	19791130
DE2948371 C2	19900419	DE19792948371	19791130
ES486356 A0	19801201	ES19790486356	19791127
ES8101000 A1	19801201	ES19790486356	19791127
FI68854 B	19850731	FI19790003745	19791129
FI68854 C	19851111	FI19790003745	19791129
FI793745 A	19800531	FI19790003745	19791129
FR2442777 A1	19800627	FR19790029486	19791130
FR2442777 B1	19850621	FR19790029486	19791130
GB2037793 A1	19800716	GB19790041114	19791128
GB2037793 B2	19830119	GB19790041114	19791128
IE48998 B	19850710	IE19790002276	19791127
IE792276 L	19800530	IE19790002276	19791127
IL58832 A0	19800229	IL19790058832	19791129
IL58832 A1	19811231	IL19790058832	19791129
IT1201932 A	19890202	IT19790027772	19791130
IT7927772 A0	19791130	IT19790027772	19791130
JP1298804 C3	19860131	JP19790149010	19791119
JP55079263 A2	19800614	JP19790149010	19791119
JP58037183 B4	19830815	JP19790149010	19791119
LU81933 A	19800422	LU19790081933	19791129
MX151442 A	19841122	MX19790180242	19791129
NL189119 B	19920817	NL19790008698	19791130
NL189119 C	19930118	NL19790008698	19791130
NL7908698 A	19800603	NL19790008698	19791130
NO793894 A	19800602	NO19790003894	19791129
NZ192232 A	19830902	NZ19790192232	19791126
SE432430 B	19840402	SE19790009864	19791129
SE432430 C	19840712	SE19790009864	19791129
SE7909864 A	19800531	SE19790009864	19791129
SE7909864 L	19800531	SE19790009864	19791129
US4249142 A	19810203	US19780964863	19781130
US4256234 A	19810317	US19780964883	19781130
ZA7906518 A	19801126	ZA19790006518	19791130

Priority:

US19780964863 19781130 US19780964883 19781130

Probable Assignee: CROWN CORK JAPAN

Assignee(s): (std): JAPAN CROWN CORK CO LTD TOKIO TOKYO JP ; XEROX CORP ; NIPPON KURAUNKORUKU KK ; NIPPON CROWNCORK ; TOYO SEIKAN KAISHA LTD ; CROWN CORK JAPAN

Assignee(s): JAPAN CROWN CORK CO ; JAPAN CROWN CORK CO LTD TE TOKIO JAPAN ; JAPAN CROWN CORK CO LTD TE TOKIO ; JAPAN CROWN CORK CO LTD

Inventor(s): (std): SHIGERU NAGASHIMA ; SCIFRES DONALD R ; S NAGASHIMA ; NAKAMURA KOZO HIRATSUKA KANGAWA JP

; NAKAMURA KOUZOU ; NAGASHIMA SHIGERU HIRATSUKA KANAGAWA JP ; NAGASHIMA S ; MORI FUMIO
YOKOHAMA JP ; MATSUDA GUNJI ISEHARA JP ; KOZO NAKAMURA ; J ITSUBO ; ITSUSO JUNICHI ; ITSUBO
JUNICHI HIRATSUKA JP ; ITSUBO JIYUNICHI ; GUNJI MATSUDA ; G MATSUDA ; F MORI ; BURNHAM ROBERT
D ; 5K NAKAMURA ; 4S NAGASHIMA ; 2J ITSUBO ; 1F MORI ; NAKAMURA KOZO ; NAKAMURA K ;
NAGASHIMA SHIGERU ; MORI FUMIO ; MORI F ; MATSUDA GUNJI ; MATSUDA G ; K NAKAMURA ; JUNICHI
ITSUBO ; ITSUBO JUNICHI ; ITSUBO J ; FUMIO MORI ; 3G MATSUDA

Inventor(s):

3 G MATSUDA ; 2 J ITSUBO ; 1 F MORI ; 5 K NAKAMURA ; 4 S NAGASHIMA

Agent(s):

PHILLIPS ORMONDE AND FITZPATRICK; BENJAMIN J BARISH

Abstract: PURPOSE: To improve the red rust resistance of the cut edge of a **crown cap** and the corrosion resistance of the painted part by coating the inside and outside of a **steel sheet** for the **crown cap** with different amts. of zinc and combining the zinc with metallic chromium and chromium oxide hydrate. CONSTITUTION: One side of the **steel sheet** is successively coated with 500W5,000mg/m² zinc, 50W150mg/m² metallic chromium and 5W30mg/m² (expressed in terms of chromium) chromium oxide hydrate. The other side is successively coated with 50W300mg/m² zinc, 50W150mg/m² metallic chromium and 5W30mg/m² (expressed in terms of chromium) chromium oxide hydrate. Even when the **crown cap** made of the resulting surface-treated **steel sheet** is exposed to a wet environment, the cut edge and the painted part are prevented from gathering red rust.

European: C25D5/12

[illegible]

Publication number	Publication date	Application number	Application date
JP1268895 A2	19891026	JP19880093495	19880418

JP19880093495 19880418

Assignee(s): (std): TOYO KOHAN CO LTD

Inventor(s): (std): FUJIMOTO TERUNORI ; INUI TSUNEO ; ISHIDA MASAYOSHI ; KAWAMURA HIROAKI ; KONDO YOSHIKAZU

Title: MULTIPURPOSE TOOL INCLUDING FOLDING SCISSORS

Abstract: A folding multipurpose tool incorporating a latch release mechanism including a lever, a cam, and a rocker-shaped grip body to easily effect release of a catch for holding knife or screwdriver blades extended. A spring and cams are arranged to hold each of a pair of handles either extended or folded with respect to the tangs of a pair of pliers jaws or the like. The handles include inwardly directed comfortable rounded rims. Portions of folding blades interlock with other folding blades on an opposite handle when the tool is folded, to stabilize the handles while using a knife or screwdriver. Blades of folding scissors include edges that are serrated only near their tips. A container opener includes a hook defining a recessed throat.

Classifications:

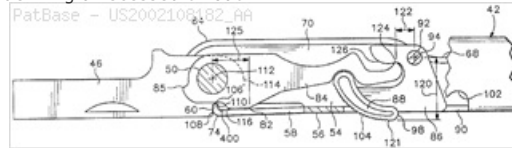
International (IPC 8-9): B25B23/00 B25B7/22 B25F1/00 B26B1/04
B26B11/00 B26B13/00 B26B3/06 D06M11/00 (Advanced/Invention);
B25F1/00 B26B13/00 (Core/Invention)

International (IPC 1-7): B25B B25B23/00 B25B7/00 B25B7/22 B25B9/00
B25F1/00 B25F1/04 B25G1/08 B26B B26B1/04 B26B11/00 B26B13/00
B26B13/22 B26B3/06 B67B7/00

CPC: B25F1/003 B26B13/005

European: B25F1/00B B26B13/00B

US: 7/127 7/128 7/128P 7/129 7/131 7/135 7/161 7/261 71/28 71/35 72/61 81/427.5 81/440

**Family:**

Publication number	Publication date	Application number	Application date
AT240819 E	20030615	AT20010300016T	20010103
AU200114985 A1	20010913	AU20010014985	20010112
AU200114985 A5	20010913	AU20010014985D	20010112
AU743351 B2	20020124	AU20010014985	20010112
CA2328592 AA	20010712	CA20002328592	20001215
CA2328592 C	20060328	CA20002328592	20001215
CN1145544 C	20040414	CN20011000617	20010112
CN1303762 A	20010718	CN20011000617	20010112
DE60100276 D1	20030626	DE20016000276	20010103
DE60100276 T2	20031127	DE20016000276T	20010103
EP1116557 A2	20010718	EP20010300016	20010103
EP1116557 A3	20010725	EP20010300016	20010103
EP1116557 B1	20030521	EP20010300016	20010103
HK1038717 A1	20050204	HK20010109011	20011222
NO20010178 A	20010713	NO20010000178	20010111
NO20010178 A0	20010111	NO20010000178	20010111
NO318408 B1	20050314	NO20010000178	20010111
US2002108182 AA	20020815	US20020123948	20020416
US2003037644 AA	20030227	US20020267707	20021008
US2004237207 AA	20041202	US20040886752	20040708
US6389625 BA	20020521	US20000632630	20000804
US6510767 BA	20030128	US20000479411	20000112
US6763543 BB	20040720	US20020123948	20020416
US6990702 BB	20060131	US20040886752	20040708
US7051627 BB	20060530	US20020267707	20021008
ZA200100039 A	20021202	ZA20010000039	20010102

Priority:

US20000479411 20000112 US20000632630 20000804 CA20002328592 20001215
US20020123948 20020416 US20020267707 20021008 US20040886752 20040708

Probable Assignee: LEATHERMAN TOOL GROUP INC

Assignee(s): (std): LEATHERMAN TOOL GROUP INC ; LEATHERMAN TOOL GROUP INC

Assignee(s): RIVERA BENJAMIN C ; C RIVERA BENJAMIN

Inventor(s): (std): BENJAMIN C LIWEYLLA ; BENJAMIN C RIVERA ; BENJAMIN C LIWEYLLA ; C RIVERA BENJAMIN ; RIVERA BENJAMIN C ; LIWEYLLA BENJAMIN C

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; OYEN WIGGS GREEN AND MUTALA LLP; CHERNOFF VILHAUER MCCLUNG AND STENZEL LLP

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

Title: RESIN-COATED METAL PLATE FOR THIN AND DEEPLY DRAWN CAN

Abstract: PURPOSE: To impart excellent processability and processing corrosion resistance to a metal plate for a thin and deeply drawn can by forming polyester resin layers having different surface orientation coefficients of polyester resin layers brought into contact with an outermost layer and a metal plate on both or one side surfaces of the plate. CONSTITUTION: Both or one side surfaces of a metal plate are covered with copolymerized polyester resin layers of an outermost layer having a surface orientation coefficient (n2) of 0.01-0.15 and a layer near a surface of the plate having a surface orientation coefficient (n1) of 0-0.10 via an adhesive layer or without adhesive layer. Particularly, it is more preferable to form the resin layers having n2 greater than or equal to n1 or to use polymeric composition having an epoxy resin in a molecule as the adhesive.

Classifications:

International (IPC 8-9): B32B15/08 B32B15/09 B32B27/20 B32B27/36 B32B7/02 B32B7/12 B65D25/14 (Advanced/Invention); B32B15/08 B32B27/20 B32B27/36 B32B7/02 B32B7/12 B65D25/14 (Core/Invention)

International (IPC 1-7): B05D1/36 B21D51/26 B29C63/02 B29K67/00 B32B15/08 B32B15/18 B32B15/20 B32B27/06 B32B27/20 B32B27/36 B32B7/02 B32B7/04 B32B7/12 B65D1/12 B65D25/34 B65D65/42 C08J5/12

CPC: B65D25/14 B32B15/09 B32B7/02 B32B15/18 B32B15/20 B32B27/08 B32B27/20 B32B2311/16 B32B2311/20 B32B2311/22 B32B2311/24 B32B2311/30 B32B2367/00 B32B2439/66 B32B2439/70 B32B15/08 B32B27/36

European: B32B15/08 B32B27/36 B65D25/14

PatBase - JP6320669A ポリエステル樹脂フィルム (低内面側)

符号	樹脂組成 (酸/アルコール) (数字はモル%)	融点 ℃	面配向係数 (積層前)	厚さ μm
A	上層: (IA* (12)+TA* (88))/EG* (100)	229	0.129	20
	下層: (IA* (35)+TA* (65))/EG* (100)	179	0.119	10
B	上層: TA* (100)/EG* (100)	255	0.189	20
	下層: (IA* (12)+TA* (88))/EG* (100)	229	0.145	10
C	上層: (IA* (2)+TA* (98))/EG* (100)	250	0.161	20
	下層: (IA* (12)+TA* (88))/EG* (100)	229	0.122	10
D	上層: (IA* (8)+TA* (92))/EG* (100)	235	0.128	20
	下層: (IA* (20)+TA* (80))/EG* (100)	210	0.121	10
E	上層: (IA* (20)+TA* (80))/EG* (100)	210	0.122	20
	下層: (IA* (12)+TA* (88))/EG* (100)	229	0.137	10
F	上層: (IA* (20)+TA* (80))/EG* (100)	210	0.128	20
	下層: (IA* (30)+TA* (70))/EG* (100)	191	0.122	10
G	上層: (IA* (25)+TA* (75))/EG* (100)	202	0.119	10
	下層: (IA* (12)+TA* (88))/EG* (100)	229	0.120	20

Family:

Publication number	Publication date	Application number	Application date
CA2114511 AA	19950729	CA19942114511	19940128
CA2114511 C	20040316	CA19942114511	19940128
DE4403174 A1	19950803	DE19944403174	19940202
DE4403174 C2	19990211	DE19944403174	19940202
DE4447776 C2	20020718	DE19944447776	19940202
FR2715344 A1	19950728	FR19940000708	19940124
FR2715344 B1	19960412	FR19940000708	19940124
GB2285952 A1	19950802	GB19940000928	19940119
GB2285952 B2	19970625	GB19940000928	19940119
GB9400928 A0	19940316	GB19940000928	19940119
JP2532002 B2	19960911	JP19900418199	19901226
JP2934182 B2	19990816	JP19950337658	19951204
JP6320669 A2	19941122	JP19900418199	19901226
JP8238720 A2	19960917	JP19950337658	19951204
NL194788 B	20021101	NL19940000154	19940201
NL194788 C	20030304	NL19940000154	19940201
NL9400154 A	19950901	NL19940000154	19940201

Priority:

JP19900418199 19901226	GB19940000928 19940119	FR19940000708 19940124
CA19942114511 19940128	NL19949400154 19940201	NL19940000154 19940201
DE19944403174 19940202	DE19944403174 19940202	JP19950337658 19951204

Probable Assignee: TOYO KOHAN CO LTD

Assignee(s): (std): TOYO KOHAN CO LTD

Assignee(s): TOYO KOHAN KK ; TOYO KOHAN CO LTD TOKIO TOKYO JP ; HANABUSA TETSUHIRO ; INUI TSUNEO ; KOJO HARUNORI ; TANAKA ATSUO ; TOYO KOHAN CO

Inventor(s): (std): TSUNEO INUI ; TETSUHIRO HANABUSA ; HARUNORI KOJO ; ATSUO TANAKA ; TANAKA ATSUO ; KOJO HARUNORI ; INUI TSUNEO ; HANABUSA TETSUHIRO ; HANABUSA AKIHIRO

Inventor(s): HANABUSA TETSUHIRO TOKUYAMA YAMAGUCHI JP ; INUI TSUNEO TOKUYAMA YAMAGUCHI JP ; KOJO HARUNORI YAMAGUCHI JP ; TANAKA ATSUO TOKUYAMA YAMAGUCHI JP

Agent(s): OGILVY RENAULT LLP SENCRL SRL

Title: Preparation process of chlorinated rubber

Abstract: Disclosed herein is a process for the preparation of a chlorinated rubber, wherein chlorine gas is caused to act on a polyisoprene rubber to prepare the chlorinated rubber. Chlorine gas is blown into a high-acidity aqueous dispersion of the polyisoprene rubber to chlorinate the polyisoprene rubber, whereby a chlorinated isoprene rubber with high performance is prepared stably in an aqueous medium.

Classifications:

International (IPC 8-9): C08C19/14 C08F8/20 (Advanced/Invention);
C08C19/00 C08F8/00 (Core/Invention)

International (IPC 1-7): C08C19/14 C08F8/22

CPC: C08C19/14

European: C08C19/14

US: 525/332.8 525/332.9 525/333.1 525/356

試 験 項 目	樹 脂	実施例 1	実施例 2	実施例 3	実施例 4 (60/40部)	実施例 5	塩化 ゴム (CR-10)	塩化 ゴム (CR-20)	実施例 6	実施例 7	実施例 8	実施例 9
		26	32	33	41	27	26	32	32	32	24	34
1 次 物 性	膜厚 (μm)	87.8	87.8	87.2	86.9	87.0	83.8	87.8	87.5	88.2	87.2	81.3
	光沢 (60°傾面反射率 %)	2H	2H	2H	2H	2H	2H	2H	2H	2H	2H	2H
	硬度 (鉛筆硬度:三菱uni)	100	100	100	100	100	100	100	100	100	100	100
	断面 (1mm/mm:1/100) (7割離)	10	10	10	10	10	10	10	10	10	10	10
	断面 (断面500g×/10)	○	○	○	○	○	○	○	○	○	○	○
2 次 物 性	断面 (φ3mm, <180°)	○	○	○	○	○	○	○	○	○	○	○
	断面 (φ3mm, 8mm)	○	○	○	○	○	○	○	○	○	○	○
	断面 (φ1/2in, 500g×50cm)	○	○	○	○	○	○	○	○	○	○	○
	耐光性: (200hr) ΔE	2.96	3.05	3.10	2.82	3.25	2.94	3.32	2.98	2.88	3.05	2.85
	(殺菌灯) 光沢保持率(%)	72.1	73.3	74.2	75.2	70.4	67.8	72.8	73.1	73.5	72.5	71.2
2 次 物 性	塩水噴霧: 表面状態	異常	異常	異常	異常	異常	異常	異常	異常	異常	異常	異常
	(300hr) 下地金属面の発錆	無し	無し	無し	無し	無し	無し	無し	無し	無し	無し	無し
	耐水性: (1000hr) 表面	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
2 次 物 性	耐水性: (200hr) 光沢保持率(%)	99.4	97.1	98.9	99.9	96.1	102.3	98.0	96.0	97.2	95.0	94.5

Family:

Publication number	Publication date	Application number	Application date
DE69216789 D1	19970227	DE19926016789	19921120
DE69216789 T2	19970528	DE19926016789T	19921120
EP0545593 A1	19930609	EP19920310630	19921120
EP0545593 B1	19970115	EP19920310630	19921120
JP3215491 B2	20011009	JP19920108820	19920331
JP5202101 A2	19930810	JP19920108820	19920331
US5350809 A	19940927	US19930006315	19930122

Priority:

JP19910340192 19911129 JP19920108820 19920331

Probable Assignee: ASAHI DENKA CO LTD

Assignee(s): (std): ASAHI DENKA KOGYO KK ; NIPPON ZEON CO

Assignee(s): NIPPON ZEON CO LTD ; ASAHI DENKA CO LTD ; ASAHI DENKA KOGYO K K ; ASAHI DENKA KOGYO K K TOKIO TOKYO JP ; ASAHI DENKA KOGYO KABUSHIKI KAISHA

Inventor(s): (std): KOKURA MAKOTO ; OGURA MAKOTO ; OZAWA YUTAKA ; TSUCHIYA HIROSHI ; SUGIMURA TAKAAKI

Inventor(s): SUGIMURA TAKAAKI C O RESEARCH AND DEVELOP... ; TSUCHIYA HIROSHI C O ASAHI DENKA KOGYO K K ; TSUCHIYA HIROSHI C O ASAHI DENKA KOGYO K K ARAKAWA ; SUGIMURA TAKAAKI C O RESEARCH AND DEVELOP CENTER K ; OZAWA YUTAKA C O RESEARCH AND DEVELOPMENT CENTER K ; KOKURA MAKOTO C O ASAHI DENKA KOGYO K K ARAKAWA KU ; OZAWA YUTAKA C O RESEARCH AND DEVELOPMENT... ; KOKURA MAKOTO C O ASAHI DENKA KOGYO K K

Designated states: DE GB IT

Title: Flaschenoeffner Bottle opener (Machine translation)

Abstract: Source: DE202011002534U1 [DE] Flaschenoeffner (10) mit einer oeffnung (18) zum Ansetzen an einen Kronkorken, gekennzeichnet durch vier in die oeffnung (18) hineinragende Abschnitte (16), die jeweils eine Spitze (20) aufweisen, wobei die vier Spitzen (20) an den Eckpunkten eines gedachten Quadrats (22) mit einer Kantenlaenge im Bereich von 13 mm bis 18 mm angeordnet sind.

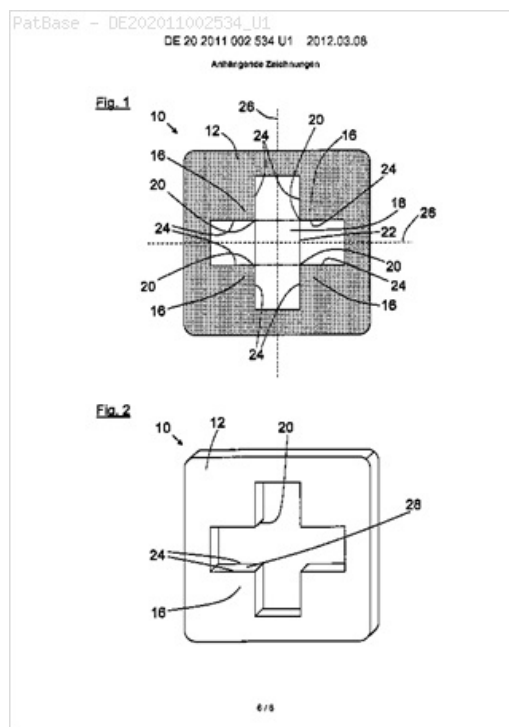
Machine translation: Bottle opener (10) having an opening (18) for attachment to a bottle cap, characterized by four in the opening (18) protruding portions (16), each having a tip (20), wherein the four tips (20) at the vertices of an imaginary square (22) having a Kantenlaenge in the range from 13 mm to 18 mm disposed. are

Classifications:

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

CPC: B67B7/16

European: B67B7/16



Family:

Publication number	Publication date	Application number	Application date
DE202011002534 U1	20120308	DE201120002534U	20110209

Priority:

DE201120002534U 20110209

Probable Assignee:

BIEGERT MARCO

Assignee(s): (std):

BIEGERT MARCO ; FUNK ANDREAS

Assignee(s):

BIEGERT ; FUNK

Title: HEAT EXCHANGER

Abstract: The present invention relates to a heat exchanger, especially oil cooler for vehicles, comprising a heat exchanging element with a first terminal plate closing the heat exchanging element on one of its sides and with at least one opening provided with a socket for inlet or release of a fluid into or from the heat exchanger element, at least a first gasket carrier plate, with a first lateral face being arranged adjacent to the first terminal plate and a second lateral face being arranged opposite to the first lateral face, at least one passage opening leading from the first to the second lateral face for taking up at least one socket of the first terminal plate, at least a first sealing element, being arranged between the first terminal plate and the first gasket carrier plate, completely encircling the circumferential edge of the at least one passage opening on the first lateral face and sealing the passage opening between the first terminal plate and the first gasket carrier plate, at least a second sealing element, being arranged adjacent to the second lateral face and completely encircling the circumferential edge of the passage opening on the second lateral face, with the at least one socket of the first terminal plate being bulged outwardly, advantageously adjoining to the second sealing element at least in sections.

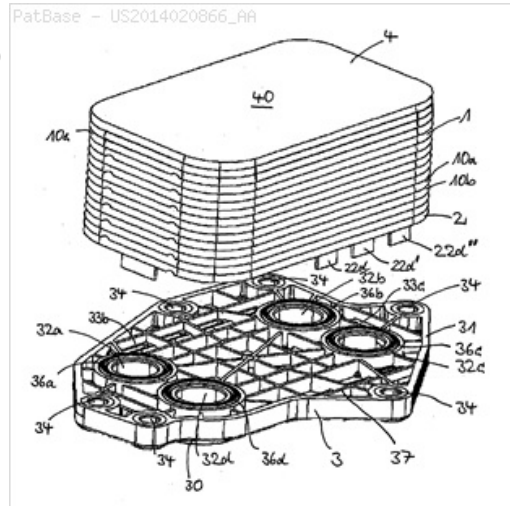
Classifications:

International (IPC 8-9): F01M5/00 F16L13/14 F16L19/04 F16L19/08 F16L39/00 F16L41/00 F16L45/00 F16L51/00 F28D7/02 F28D9/00 F28F3/00 F28F3/12 F28F9/02 F28F9/04 (Advanced/Invention); F28D21/00 F28F9/00 (Advanced/Non-invention)

CPC: F28F3/00 F01M5/002 F28D9/005 F28D2021/0089 F28F9/002 F28F9/0246 F28F2230/00 F28F2280/06

European: F01M5/00C F28D9/00F4B F28F9/02K R28D21/00T260P R28F280/06

US: 165/104.19

**Family:**

Publication number	Publication date	Application number	Application date
CA2826008 AA	20130729	CA20122826008	20120201
CA2826008 C	20150630	CA20122826008	20120201
DE112012000637 T5	20140102	DE201211000637T	20120201
DE202011002197 U1	20120329	DE201120002197U	20110201
US2014020866 AA	20140123	US20120261700	20120201
US9921005 BB	20180320	US20120261700	20120201
WO12104077 A1	20120809	WO2012EP00446	20120201

Priority:

DE201120002197U 20110201 WO2012EP00446 20120201

Probable Assignee: DANA CANADA CORP

Assignee(s): (std): BUNTZ WERNER ; DANA CANADA CORP ; DANA GMBH ; BLUETLING JENS ; REINZ DICHTUNG GMBH ; SALZMANN JOCHEN

Assignee(s): BLUTLING JENS ; REINZ DICHTUNGS GMBH

Inventor(s): (std): BLUETLING JENS ; BLUTLING JENS ; BUNTZ WERNER ; SALZMANN JOCHEN

Agent(s): MCFADDEN FINCHAM INC; OSLER HOSKIN AND HARCOURT LLP; MARSHALL AND MELHORN LLC; PFENNING MEINIG AND PARTNER

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 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 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

Title: Bottle crate for crown-corked bottles - has integral bottle opener in side wall

Abstract: The bottle crate for **crown cap** bottles includes a bottle opener (9) for the bottles set in a side wall (1-4) of the crate. The opener can be embedded in the plastics material of the side wall or can be designed as a separate component inserted between two opposite edges (10,11) of a recess (5) of the side wall (1). The bottle opener can be snap fitted between the opposite edges (10,11). USE/ADVANTAGE - Bottle crate with built-in bottle opener. A separate opener is not required for bottles with **crown cap** closures.

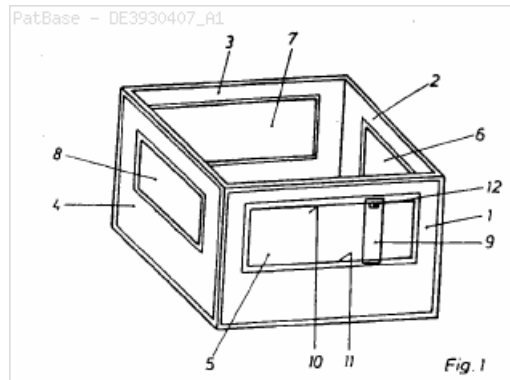
Classifications:

International (IPC 8-9): B65D1/24 (Advanced/Invention); B65D1/22 (Core/Invention)

International (IPC 1-7): B65D1/40 B65D25/00 B67B7/16

CPC: B65D1/243 B65D2501/2407 B65D2501/24917

European: B65D1/24B L65D501/24B18D L65D501/24B4B1



Family:

Publication number	Publication date	Application number	Application date
DE3930407 A1	19910314	DE19893930407	19890912

Priority:

DE19893930407 19890912

Probable Assignee: KOELLNER PETER

Assignee(s): (std): KOELLNER PETER ; RUEBSAM ROLAND DIPL ING

Assignee(s): RUEBSAM ROLAND DIPL ING 6400 FULDA DE ; KOELLNER PETER 6402 GROSSENLUEDER DE

Inventor(s): (std): KOELLNER PETER ; RUEBSAM ROLAND DIPL ING

Inventor(s): RUEBSAM ROLAND DIPL ING 6400 FULDA DE ; KOELLNER PETER 6402 GROSSENLUEDER DE

Title: Container cover with peelable liner

Abstract: A container closure for use in packaging flowable materials is disclosed comprising a closure shell, a peelable thermoplastic liner disposed on the inner surface of the shell and having a thick periphery and a comparatively thin central portion with a demarcated peeling tab extending to the periphery of the liner, and at least one adhesive interfacial layer separating the liner from and peelably bonding said liner to the shell and having a non-adhesive or weakly adhesive zone underlying and corresponding to the periphery of the liner and a relatively strongly adhesive zone underlying and corresponding to the central portion of the liner.

Classifications:

International (IPC 8-9): B65D53/00 B65D53/04

H04N9/16 (Advanced/Invention);

B65D53/00 H04N9/16 (Core/Invention)

International (IPC 1-7): B65D17/00 B65D17/20 B65D41/00 B65D41/12

B65D41/30 B65D41/32 B65D41/50 B65D41/60 B65D51/00 B65D51/20

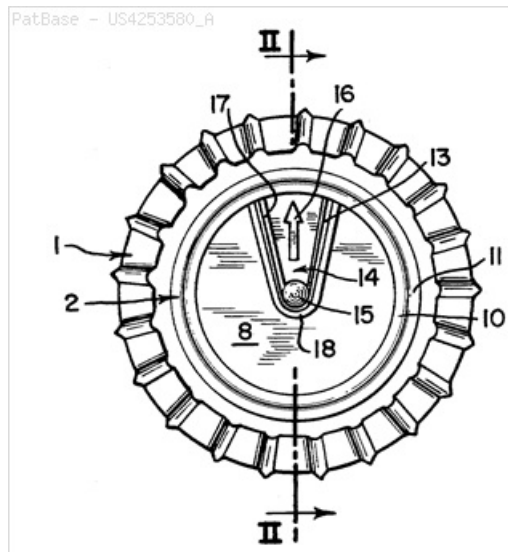
B65D51/24 B65D53/00 B65D53/04 B65D53/06 B67B C09J5/00

F16B11/00 G09F23/00 G09F3/10

CPC: B65D53/00 H04N9/16

European: B65D53/00 H04N9/16

US: 215/228 215/230 313/429 315/14 348/815 348/E09.014 348/E9.014



Family:

Publication number	Publication date	Application number	Application date
AR221102 A1	19801230	AR19790277818	19790822
AU197949636 A1	19800228	AU19790049636	19790807
AU528699 B2	19830512	AU19790049636	19790807
BE878358 A	19791217	BE19790196824	19790821
BR7905391 A	19800520	BR19790005391	19790821
CA1126210 A1	19820622	CA19790333144	19790803
CH635293 A	19830331	CH19790007573	19790817
DE2934021 A1	19800306	DE19792934021	19790822
DE2934021 C2	19900517	DE19792934021	19790822
DE950561 A	19561011	DE1954R014585	19540710
ES483525 A1	19800301	ES19790483525	19790821
FI73185 B	19870529	FI19790002604	19790821
FI73185 C	19870910	FI19790002604	19790821
FI792604 A	19800223	FI19790002604	19790821
FR1107965 A	19560106		19540621
FR2435407 A1	19800404	FR19790020992	19790820
FR2435407 B1	19831209	FR19790020992	19790820
GB2029809 A1	19800326	GB19790029088	19790821
GB2029809 B2	19830302	GB19790029088	19790821
GB754169 A	19560801	GB19540017724	19540616
IE48538 B	19850220	IE19790001530	19790809
IE791530 L	19800222	IE19790001530	19790809
IL58093 A0	19791230	IL19790058093	19790822
IL58093 A1	19810520	IL19790058093	19790822
IT1122871 A	19860430	IT19790025259	19790822
IT7925259 A0	19790822	IT19790025259	19790822
JP1252824 C3	19850226	JP19780101463	19780822
JP55029467 A2	19800301	JP19780101463	19780822
JP59026539 B4	19840628	JP19780101463	19780822
LU81617 A	19791207	LU19790081617	19790820
MX149845 A	19831229	MX19790178982	19790820
NL189079 B	00000000		00000000
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NL7906174 A	19800226	NL19790006174	19790813
NO151455 B	19850102	NO19790002718	19790821
NO151455 C	19850417	NO19790002718	19790821
NO792718 A	19800225	NO19790002718	19790821
NZ191232 A	19810424	NZ19790191232	19790807
SE439620 B	19850624	SE19790006933	19790820
SE439620 C	19851003	SE19790006933	19790820

SE7906933 A	19800223	SE19790006933	19790820
SE7906933 L	19800223	SE19790006933	19790820
US2866127 A	19581223	US19530367270	19530710
US4253580 A	19810303	US19790067308	19790817
ZA7904266 A	19800827	ZA19790004266	19790814

Priority:

US19530367270 19530710 JP19780101463 19780822 CA19790333144 19790803
US19790067308 19790817

Probable Assignee: TOYO SEIKAN KAISHA LTD

Assignee(s): (std): JAPAN CROWN CORK CO LTD ; NIPPON KURAUNKORUKU KK ; NIPPON CROWNCORK ; JP CROWN CORK CO LTD ; CROWN CORK JAPAN ; TOYO SEIKAN KAISHA LTD ; TOYO SIKAN KAISHA LTD ; RCA CORP

Assignee(s): OGIMOTO TETSUOMI ; RADIO OF AMERICA CORP ; DOI KOICHI ; JAPAN CROWN CORK CO LTD TE TOKIO JAPAN ; JAPAN CROWN CORK CO LTD TE TOKIO ; KITAKAWA KATSUHIKO ; MORI FUMIO ; JAPAN CROWN CORK CO ; ICHINOSE ISAO ; JAPAN CROWN CORK CO LTD TOKIO TOKYO JP

Inventor(s): (std): T OGIMOTO ; TETUOMI OGIMOTO ; TETSUOMI OGIMOTO ; OGIMOTO TETUOMI ; OGIMOTO TETSUOMI ; OGIMOTO T ; MORI FUMIO ; MORI F ; KOUICHI DOI ; KOICHI DOI ; KITAKAWA KATSUHIKO ; KITAGAWA KATSUHIKO ; KITAGAWA K ; KATSUHIKO KITAKAWA ; KATSUHIKO KITAGAWA ; ISAO ICHINOSE ; ICHINOSE ISAO ; ICHINOSE I ; FUMIO MORI ; DOI KOUICHI ; DOI KOICHI ; DOI K ; ALLWINE HARRISON STEPHEN ; ALLWINE HARRISON S ; F MORI ; I ICHINOSE ; K DOI ; K KITAGAWA ; KOTAGAWA KATSUHIKO

Inventor(s): MORI FUMIO YOKOHAMA KANAGAWA JP ; OGIMOTO TETUOMI KOMAKI AICHI JP ; ICHINOSE ISAO HIRATSUKA KANAGAWA JP ; DOI KOUICHI INUYAMA AICHI JP

Agent(s): PHILLIPS ORMONDE AND FITZPATRICK; OSLER HOSKIN AND HARCOURT LLP; BENJAMIN J BARISH

Title: RIDGE ROOF COPPER CROWN CAP IS PRE-TENSIONED TOWARDS TOP TILES

Abstract: A ridge roof has a copper crown cap with two side-shanks (14) linked at the top by a crown (16). Each side shank (14) incorporates a shallow copper water-permeable jacket (18). The inner face of the water jacket is joined to the outer face of a plastic lining (24), and on the outside to a sheet metal copper lining (30). The crown cap is slightly pre-tensioned towards the ridge.

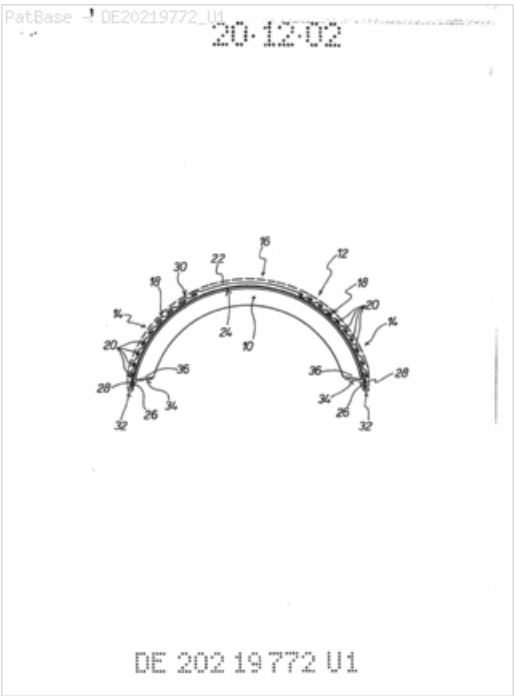
Classifications:

International (IPC 8-9): E04D1/30 E04D13/00 (Advanced/Invention); E04D1/30 E04D13/00 (Core/Invention)

International (IPC 1-7): E04D1/30 E04D13/00

CPC: E04D1/30 E04D13/002 E04D2001/305

European: E04D1/30 E04D13/00A P04D1/30B1



Family:

Publication number	Publication date	Application number	Application date
DE20219772 U1	20030327	DE20022019772U	20021220

Priority:

DE20022019772U 20021220

Probable Assignee: DACH U FASSADEN PRAKTIKER OS

Assignee(s): (std): DACH U FASSADEN PRAKTIKER OS ; DACH UND FASSADEN PRAKTIKER OS

Assignee(s): DACH UND FASSADEN PRAKTIKER OST WEST VERTRIEBS GMB ; DACH UND FASSADEN PRAKTIKER OST WEST VERTRIEBS GMBH ; DACH U FASSADEN PRAKTIKER OST WEST VERTRIEBS GMBH

Title: Bottle opener for crown-cork bottles

Abstract: The invention relates to a bottle opener in the form of an elongated, flat parallelepiped. The parallelepiped is penetrated at one end by a flat, substantially rectangular channel, the longitudinal axis of which runs obliquely to the longitudinal axis of the parallelepiped. The crown cork of a bottle to be opened can be introduced from both sides into the flat channel, so that one edge of the channel engages under the crown-cork edge and the other opposite edge lying on the same side of the parallelepiped is supported on the end face of the crown cork. Owing to the obliquely running channel, the bottle can be opened with the bottle opener both by compressive force and by lifting force. The smooth outer shape fits snugly in the operator's hand and facilitates cleaning.

Classifications:

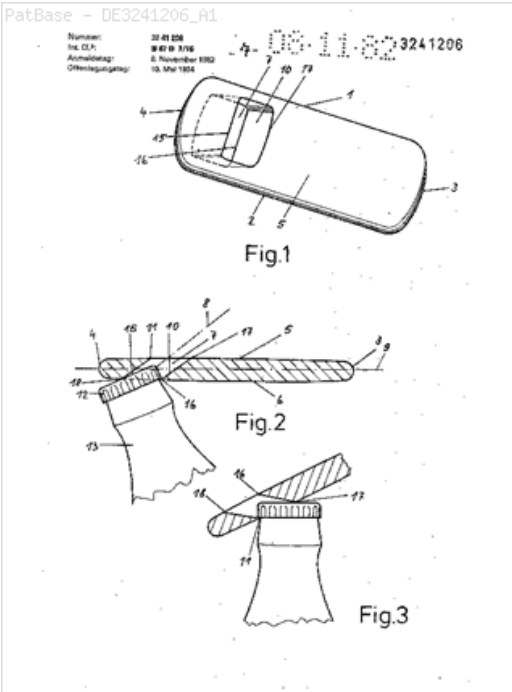
International (IPC 8-9): B67B7/16 (Advanced/Invention);

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
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DE3241206 C2	19860417	DE19823241206	19821108

Priority:

DE19823241206 19821108

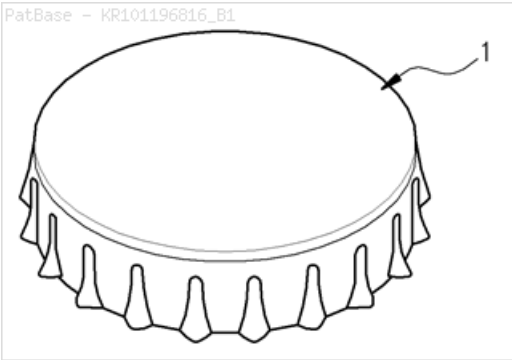
Probable Assignee: KOENIG BRAUEREI KG
Assignee(s): (std): KOENIG BRAUEREI KG
Assignee(s): KOENIG BRAUEREI KG 4100 DUISBURG DE
Inventor(s): (std): HAUG ANDREAS
Inventor(s): HAUG ANDREAS 7272 ALTENSTEIG DE

Title: RUSTPROOF CAP AND METHOD OF THEREOF

Abstract: PURPOSE: A rust-proofing cap offering a completely rust proof effect to a cut-out portion, and a manufacturing method thereof are provided to rust-proof processing the cut-out portion on a lug cap or a crown cap using the electric-chemistry reaction. CONSTITUTION: A manufacturing method of a rust-proofing cap including a lug cap or a crown cap (1) comprises the following steps: cutting a steel plate selected from a tin-electroplated steel sheet or a chrome-electroplated steel sheet, coating the steel plate before printing; pressing the printed plate to obtain the cap; and rust-proof processing the cap. The rust-proof processing step is performed by the following steps: inserting the cap into a coater, and firstly washing the cap; soaking the cap in a coating bath for transferring a colloidal phase resin in the electric potential of cations to the cut-out portion of the cap having the electric potential of anions; and secondly washing the cap before drying, and attaching a gasket sealing member on the inner surface.

Classifications:

International (IPC 8-9): B21D51/44 B65D41/12
C25D7/00 (Advanced/Invention)
CPC: B65D41/12 B21D51/44 C25D7/00 B67B7/16



Family:

Publication number	Publication date	Application number	Application date
 KR101196816 B1	20121106	KR20110108822	20111024

Priority:

KR20110108822 20111024

Probable Assignee:

DOOIL CAP CO LTD

Assignee(s):

DOOIL CAP CO LTD

Inventor(s):

KANG MOON GYU

Title: PRESS-ON, TWIST-OFF BOTTLE CAP

Abstract: The closure cap herein described has a generally cylindrical skirt with a circular lowermost edge. Corrugations in the form of axial ridges and flutes terminate downwardly in a plane spaced from the edge. The crests of the ridges and the cylindrical lip are elements of a common cylinder. When the cap skirt is uniformly constricted about threads of a bottle finish, material along the lines of the flutes forms female thread elements, securing the cap to the bottle. The ridges, the thread elements and the lip constitute a knurling grid which affords a comfortable, sure finger grip for twisting the cap off the bottle, with the smooth lip surface shielding the edge.

Classifications:

International (IPC 8-9): B65D41/04 B65D41/10 B65D41/20

B65D41/34 (Advanced/Invention);

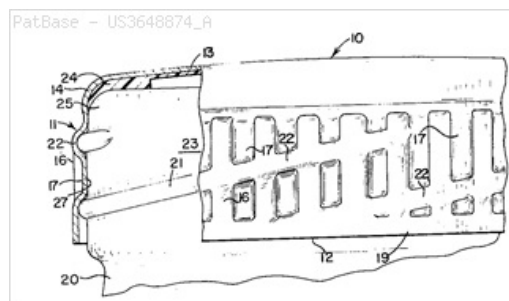
B65D41/02 B65D41/04 B65D41/34 (Core/Invention)

International (IPC 1-7): B65D41/00 B65D41/04 B65D41/10 B65D41/12 B65D41/20 B65D41/34

CPC: B65D41/0464 B65D41/348

European: B65D41/04D4 B65D41/34F

US: 215/252 215/328 215/337 215/39 215/42 215/43



Family:

Publication number	Publication date	Application number	Application date
BE768239 A	19711103	BE19710768239	19710608
BE769894 A	19711116	BE19710769894	19710712
CA967511 A1	19750513	CA19700101679	19701229
CH539552 A	19730731	CH19710009438	19710628
DE2113921 A1	19720120	DE19712113921	19710323
FR2098422 A1	19720310	FR19710025839	19710715
JP53004473 B4	19780217	JP19710052159	19710715
LU63455 A	19711112		19710701
NL7107678 A	19720118	NL19710007678	19710604
NL7109650 A	19720118	NL19710009650	19710713
US3648874 A	19720314	US19700054956	19700715

Priority:

US19700054956 19700715

Probable Assignee: CONTINENTAL CAN CO

Assignee(s): (std): CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COINC ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL CAN CY INC ; CONTINENTAL CAN CY INC NEW YORK V S A ; CONTINENTAL CAN CY INC 633 THIRD AVENUE NEW YORK NEW YORK E U A ; MOLLER JENS L

Inventor(s): (std): JENS L MOLLER ; L MOELLER JENS ; MOLLER J L ; MOLLER JENS L

Inventor(s): J L MOLLER ; L MOLLER JENS ; JL MOLLER

Title: CAP WITH SEALING LINER

Abstract: A cap includes a metallic cap shell having a circular top and a skirt extending downwardly from the peripheral edge of the top and provided with a thread-forming portion deformable along the thread of the opening part of a container, and a flexible liner provided inwardly of the top of the cap shell. The liner includes an annular protrusion having an inside diameter substantially equal to, or slightly larger than, the outside diameter of the sealing surface of the opening of a container to be sealed and comprising a perpendicular inside wall adapted to seal intimately with the peripheral sealing surface of the container opening and an upright outside wall spaced apart from the inner circumferential surface of the skirt.

Classifications:

International (IPC 8-9): B65D41/04 B65D41/34 B65D53/04 B65D53/06 C07C69/74 C07C69/75 C07C69/753 (Advanced/Invention);

B65D41/04 B65D41/34 B65D53/00 C07C69/00 (Core/Invention)

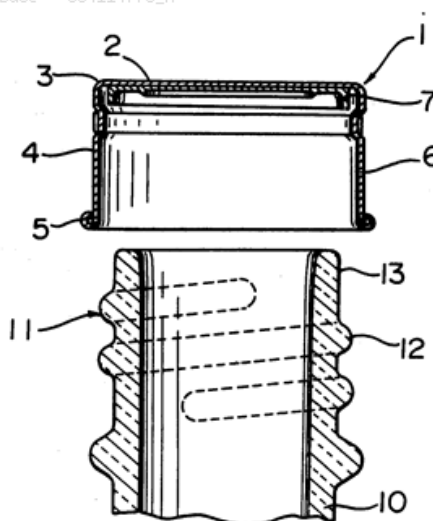
International (IPC 1-7): B65D39/08 B65D41/00 B65D41/02 B65D41/04 B65D41/08 B65D41/10 B65D41/12 B65D41/34 B65D41/38 B65D41/40 B65D53/00 B65D53/02 B65D53/04 B65D53/06 B67B3/02 C07C69/74 F16J15/10

CPC: Y10S206/807 B65D41/0464 B65D53/04 B65D41/0435 B65D41/348

European: B65D41/04D B65D41/04D4 B65D41/34F B65D53/04

US: 206/807 215/324 215/343

PatBase - US4114775_A

**Family:**

Publication number	Publication date	Application number	Application date
AU197722924 A1	19780907	AU19770022924	19770304
AU510936 B2	19800724	AU19770022924	19770304
BE852384 A	19770701	BE19770175724	19770311
CA1113038 A1	19811124	CA19770273683	19770310
CH614413 A	19791130	CH19770003033	19770310
DE2710704 A1	19770922	DE19772710704	19770311
DE2710704 C2	19821125	DE19772710704	19770311
ES456570 A1	19780801	ES19770456570	19770305
FI69030 B	19850830	FI19770000774	19770310
FI69030 C	19851210	FI19770000774	19770310
FI770774 A	19770912	FI19770000774	19770310
FR2343658 A1	19771007	FR19770007290	19770311
FR2343658 B1	19790914	FR19770007290	19770311
GB1552713 A	19790919	GB19770008794	19770302
IE44782 B	19820324	IE19770000474	19770303
IE44782 L	19770911	IE19770000474	19770303
IL51582 A0	19770531	IL19770051582	19770302
IL51582 A1	19790531	IL19770051582	19770302
IT1076609 A	19850427	IT19770021130	19770310
JP1086988 C3	19820226	JP19760025538	19760311
JP1087008 C3	19820226	JP19760137773	19761118
JP52110176 A2	19770916	JP19760025538	19760311
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JP53092748 A2	19780815	JP19770006387	19770125
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LU76939 A	19770714	LU19770076939	19770311
MX144239 A	19810914	MX19770168252	19770304
NL170258 B	19820517	NL19770002667	19770311
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NZ183491 A	19800221	NZ19770183491	19770303
SE431531 B	19840213	SE19770002453	19770304
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SE7702453 L	19770912	SE19770002453	19770304
US4114775 A	19780919	US19770774143	19770303

 ZA7701237 A	19780222	ZA19770001237	19770302
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Priority:

JP19760025538 19760311 JP19760137773 19761118 JP19770006387 19770125
JP19770006387 19770311

Probable Assignee: CROWN CORK JAPAN

Assignee(s): (std): CROWN CORK JAPAN ; NIPPON CROWNCORK ; JAPAN SYNTHETIC RUBBER CO LTD ; JAPAN GROWN CORK CO LTD

Assignee(s): JAPAN CROWN CORK COLTD ; JAPAN CROWN CORK CO LTD TOKYO JP ; JAPAN CROWN CORK CO ; JAPAN CROWN CORK CO LTD ; JAPAN CROWN CORK CO LTD TE TOKIO

Inventor(s): (std): ARAKAWA MASATOSHI ; ISHIKAWA KATSUHIRO ; MATSUI TAKASHI ; OONO RIYUUTAROU ; SHINOZAKI T ; YAMAHARA NOBORU ; SHINOZAKI TOKUJIROU ; SHINOZAKI TOKUJIRO

Inventor(s): T SHINOZAKI ; SHINOZAKI TOKUJIRO NAGOYA AICHI JP ; TOKUJIRO SHINOZAKI

Agent(s): REINHOLD COHN AND PARTNERS

Title: A METHOD OF AND APPARATUS FOR COMPRESSION MOLDING ARTICLES OF PLASTIC MATERIALS

Abstract: 976,615. Moulding thermoplastic materials. UNION CARBIDE CORPORATION. July 17, 1963 [July 19, 1962], No. 28225/63. Heading B5A. Molten thermoplastic material from an extruder continuously discharging through a nozzle 3 is cut into measured portions by knife blades 6 and deposited in the mould cavities 5 of moulds 4 carried on a continuously rotating table. A measured portion 10, Fig. 3, is moulded by positioning a die 9 in a mould cavity 5 under pressure. The apparatus may consist of moulds with a plurality of cavities in conjunction with a number of nozzles supplied from a single extruder and the mould table may be fixed with the nozzle or nozzles moving continuously. Laminates may be produced by placing a disc or sheet of different material into the mould cavity prior to forming or placing the disc or sheet on top of the measured portion or forming a first portion, putting a disc on top of it and forming a second portion on top of the disc. It is suggested that such laminates may be used as **crowns** **cap** liners.

Classifications:

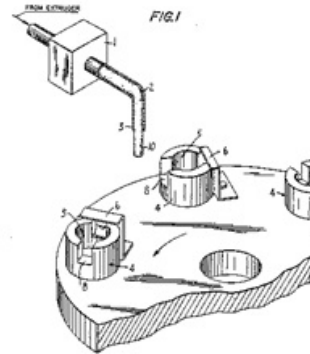
International (IPC 8-9): B29C15/00 B29C17/16 B29C3/02 B29C3/04 B29C31/04 B29C43/08 B29C43/34 B29C69/00 (Advanced/Invention); B29C33/36 B29C47/00 (Advanced/Non-invention); B29C31/04 B29C43/04 B29C43/34 B29C69/00 (Core/Invention); B29C33/00 B29C47/00 (Core/Non-invention)

International (IPC 1-7): B29B5/06 B29C3/04

CPC: B29C47/0019 B29C47/0023 B29C47/0009 B29C2043/3433 B29C47/0066 B29C31/048 B29C33/36 B29C43/08 B29C43/34 B29C47/00 B29C47/003 B29C47/004 B29C2043/3689 B29C2793/0027

European: B29C31/04D4 B29C43/08 B29C43/34 B29C47/00L12 B29C69/00B2 L29C33/36 L29C43/34B L29C43/36H2 L29C47/00 L29C47/00J9 L29C47/00L4 L29C793/00C

PatBase - GB976615_A



Family:

Publication number	Publication date	Application number	Application date
AU3222163 A1	19641224	AU19630032221	19630624
BE635092 A	00000000		00000000
FR1363772 A	19640612	FR19630942058	19630719
GB976615 A	19641202	GB19630028225	19630717
NL126305 C	00000000		00000000
NL295482 A	00000000		00000000

Priority:

US19620210894 19620719 FR19630942058 19630719

Probable Assignee:

UNION CARBIDE CORP

Assignee(s): (std):

UNION CARBIDE CORP

Inventor(s):

PETER HANS HOFER

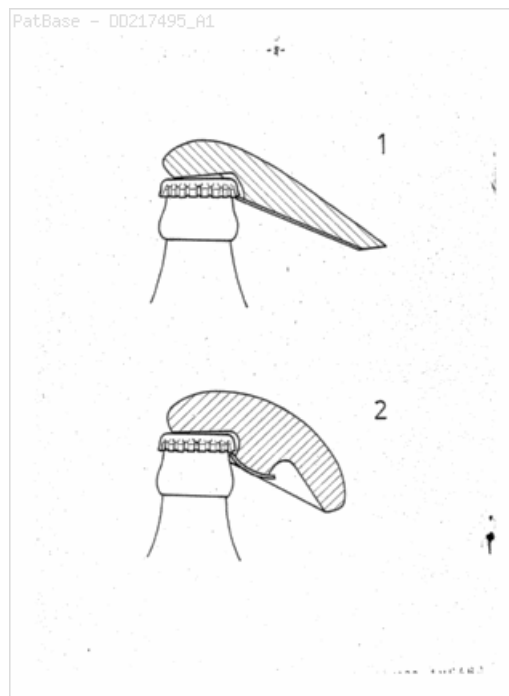
Title: FLASCHENOFFNER MIT NEUEN GEBRAUCHSWERTEIGENSCHAFTEN UND HOHEM AESTHETISCHEN WERT BOTTLE OPENER WITH NEW USABILITY FEATURES AND HIGH AESTHETIC VALUE (Machine translation)

Abstract: Source: DD217495A [DE] [Source: Claim 1] 1 Seite Zeichnung **Machine translation:** [Source: claim 1] 1 page of drawing

Classifications:

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

International (IPC 1-7): B67B7/16

**Family:**

Publication number	Publication date	Application number	Application date
DD217495 A1	19850116	DD19830252745	19830704

Priority:

DD19830252745 19830704

Probable Assignee:

KOETHEN ING HOCHSCHULE

Assignee(s): (std):

KOETHEN ING HOCHSCHULE

Assignee(s):

INGENIEURHOCHSCHULE KOETHEN DD

Inventor(s): (std):

HELLER KLAUS

Inventor(s):

HELLER KLAUS DD

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-proofmodification (Fig. 10, not shown) in which the cap is frangibly connected to a constructed lower skirt edge, a preferred material is aluminium.

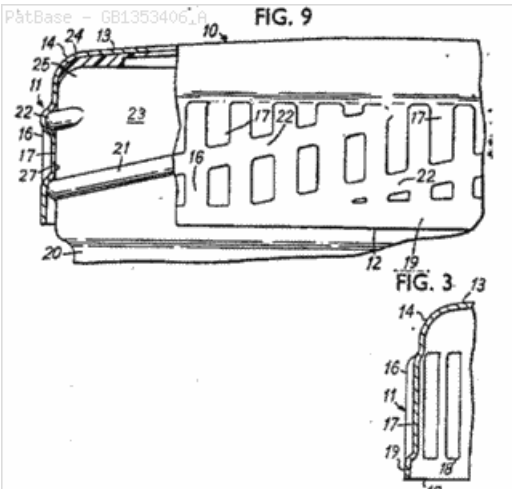
Classifications:

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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
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Priority:

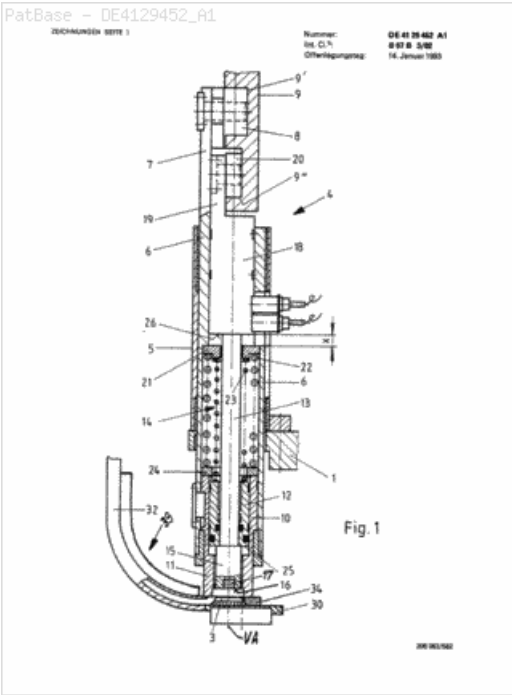
GB19710033396 19710715

Probable Assignee:	CONTINENTAL CAN CO
Assignee(s): (std):	CONTINENTAL CAN CO
Assignee(s):	CONTINENTAL CAN CO INC

Title: Rotary bottle capping machine - Has feed which delivers caps to sealing tool path over set angle as rotor turns

Abstract: The rotary machine seals bottles with caps (3) or crown corks, the rotor (1) turning on a vertical axis. A sealing tool (4) works on a vertical axis (VA) presses the caps home, distorting them permanently in the process, and during this operation a holder (14) movable in the tool bears via its end face (16) against the cap. The caps are delivered via a passage (32) with a stationary horizontal support face. The transfer position is on the path of the sealing tool, and from it a mechanism moves the cap onto the tool. The indexing set angle extends from the transfer position. **ADVANTAGE** - Fast working and accurate positioning of caps.

Classifications:
International (IPC 8-9): B67B3/062 (Advanced/Invention); B67B3/00 (Core/Invention)
International (IPC 1-7): B67B3/02 B67B3/06
CPC: B67B3/062
European: B67B3/062



Family:

Publication number	Publication date	Application number	Application date
DE4129452 A1	19930114	DE19914129452	19910905

Priority:

DE19914121046 19910626 DE19914129452 19910905

Probable Assignee: SEITZ ENZINGER NOLL MASCH

Assignee(s): (std): SEITZ ENZINGER NOLL MASCH

Assignee(s): SEITZ ENZINGER NOLL MASCHINENBAU AG 6800 MANNHEIM ; SEITZ ENZINGER NOLL MASCHINENBAU AG 6800 MANNHEIM DE

Inventor(s): (std): BERNHARD HERBERT

Inventor(s): BERNHARD HERBERT 6551 WOLFSHEIM DE

Title: Spout

Abstract: The spout for tins of condensed milk consists of a short tubular piece of square or triangular cross-section, increasing from its inflow end to the outflow end and made of a plastic of at least slight plasticity. A tool, in which a square or triangular punch is mounted on a handle, is used for piercing a hole in the lid of the tin to use the spout.

Classifications:

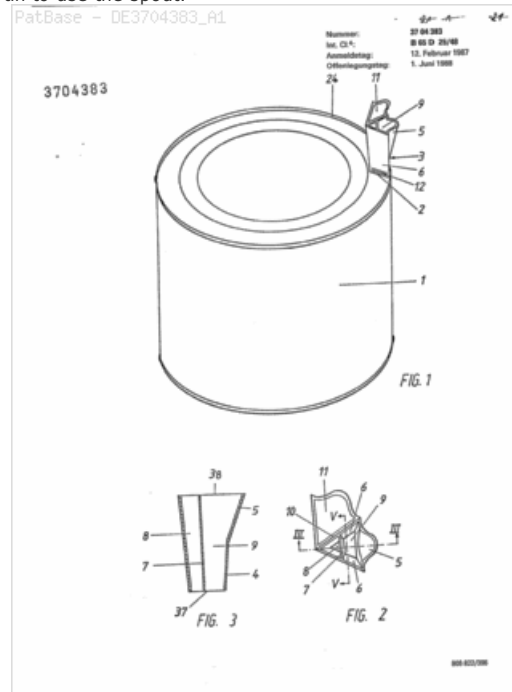
International (IPC 8-9): B65D25/48 B67B7/44 (Advanced/Invention);

B65D25/38 B67B7/00 (Core/Invention)

International (IPC 1-7): B65D25/48 B67B7/50

CPC: B65D25/48 B67B7/26 B67B7/44

European: B65D25/48 B67B7/26 B67B7/44



Family:

Publication number	Publication date	Application number	Application date
DE3704383 A1	19880601	DE19873704383	19870212

Priority:

DE19863640015 19861124 DE19873704383 19870212

Probable Assignee:

RAU ANETTE

Assignee(s): (std):

RAU ANETTE

Inventor(s): (std):

RAU ANETTE

Title: BOTTLE DECAPPING TOOL WITH FLAT SHAFT BENT - HAS END INTO U SHAPED CLAW WITH RIM FURTHEST FROM SHAFT BEVELLED

Abstract: Bottle decapping tool consists of a shaft terminating in a claw to grasp the cap for removal. The shaft (2) is flat and the claw is made by bending round the U shaped end part of the flat shaft leg (3) so as to form an U rim which extends through an arc between 120 and 150 deg. The rim (4) thus formed on the U claw component should be bevelled at 45 deg. on the side furthest from the tool shaft.

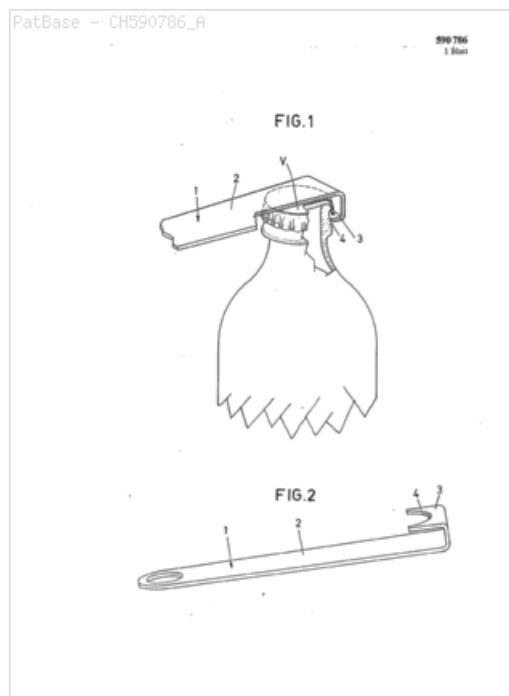
Classifications:

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
CH590786 A	19770831	CH19750001733	19750213

Priority:

CH19750001733 19750213

Probable Assignee: FELDCHLOESSCHEN BRAUEREI

Assignee(s): (std): FELDCHLOESSCHEN BRAUEREI

Title: FLASCHE AUS METALL FUER BIER ODER SONSTIGE FLUESSIGKEITEN. BOTTLE METAL FOR BEER OR OTHER LIQUIDS.
(Machine translation)

Abstract: Source: CH274794A [DE] (Claim 1) 1. Flasche nach Patentanspruch I, dadurch gekennzeichnet, dass die Wandung des konischen Oberteils (2) eine groessere Staerke als die Wandung der Zarge (1) besitzt.

Machine translation: (claim 1) 1 A bottle according to claim I, characterized in that the wall of the conical upper part (2) a greater thickness than the wall of the frame (1) has.

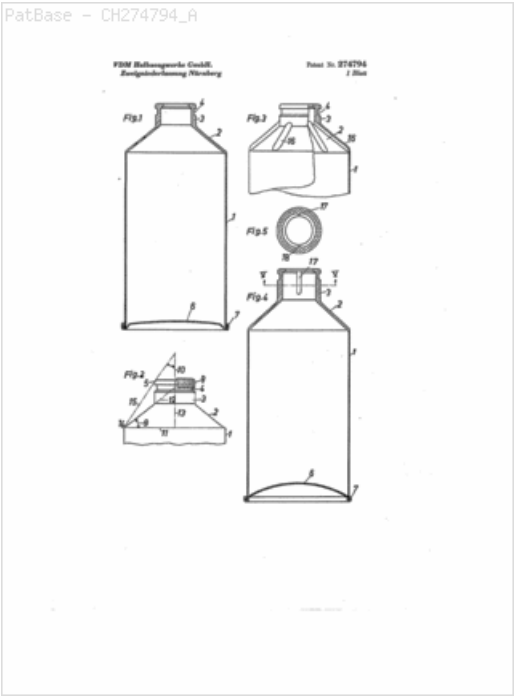
Classifications:

International (IPC 8-9): B65D1/02 B65D23/00 (Advanced/Invention);
B65D1/02 B65D23/00 (Core/Invention)

International (IPC 1-7): B65D1/02

CPC: B65D7/46 B65D23/00

European: B65D23/00 B65D7/46



Family:

Publication number	Publication date	Application number	Application date
CH274794 A	19510430		19490310

Priority:

19481001 19481208

Probable Assignee: VDM HALBZEUGWERKE GMBH ZWEIGNI

Assignee(s): (std): VDM HALBZEUGWERKE GMBH ZWEIGNI

Assignee(s): VDM HALBZEUGWERKE GMBH ZWEIGNIEDERLASSUNG NUERNBER ; VDM HALBZEUGWERKE GMBH ZWEIGNIEDERLASSUNG NUERNBERG ; VDM HALBZEUGWERKE GMBH

Inventor(s): (std): ZWEIGNIEDERLASSUNG NUERNBERG V

Inventor(s): NUERNBERG VDM HALBZEUGWERKE GMBH ; NUERNBERG VDM HALBZEUGWERKE GMBH ZWEIGNIEDERLASSUN

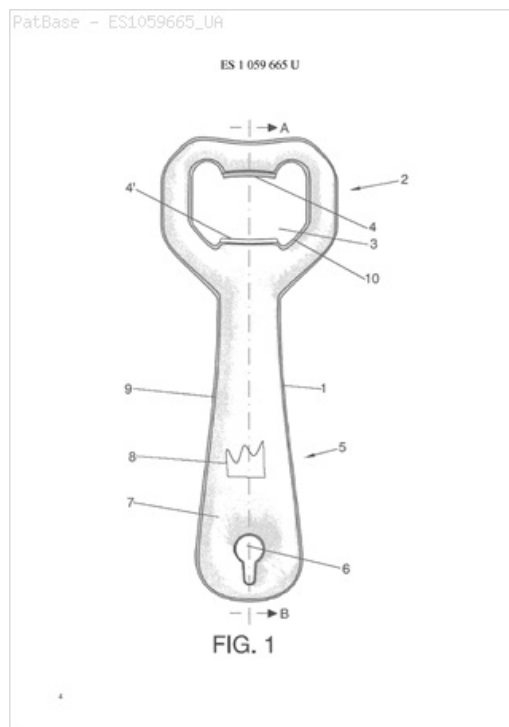
Title: DESCAPSULADOR

Abstract: Source: ES1059665U [ES] 1. Descapsulador, del tipo de los destinados a la apertura de botellas provistas de capsulas o tapones corona como elementos de cierre, y de los que incorporan un cuerpo plano a base de una gruesa chapa metalica indeformable, en la que se define un cabezal anular y un mango o asidero, contando dicho cabezal con pestañas contrapuestas de accionamiento sobre la embocadura de la capsula o tapon corona, caracterizado porque el citado cuerpo metalico y plano presenta sus dos caras afectadas por sendos recubrimientos de naturaleza plastica debidamente fijados al cuerpo base por cualquier medio convencional apropiado, tal como un adhesivo. **Machine translation:** 1. Bottle opener, of the type intended for opening provided bottles capsules or **crown caps** as closure elements, and incorporating a flat body made of a thick metal sheet deformable, in which defines an annular head and a handle or grip, counting said head with opposing tabs on the mouth of the capsule or **crown cap**, characterized in that said metal body and plane has its two faces affected by two coatings of plastic nature properly fixed to the base body by any suitable conventional means, such as an adhesive.

Classifications:

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

International (IPC 1-7): B67B7/16



Family:

Publication number	Publication date	Application number	Application date
ES1059665 UA	20050516	ES20050000333U	20050214
ES1059665 Y1	20050901	ES20050000333U	20050214

Priority:

ES20050000333U 20050214

Probable Assignee: KOALA INTERNAC HOSTELERIA S L

Assignee(s): (std): KOALA INTERNAC HOSTELERIA S L ; KOALA INTERNACIONAL HOSTELERIA SL

Assignee(s): KOALA INTERNACIONAL HOSTELERIA S L

Inventor(s): (std): PELAYO SANCHEZ JOSE MANUEL

Title: Blechdeckel fuer eine Dose fuer fluessiges Fuellgut Cover sheet for a can of liquid filling medium for (Machine translation)

Abstract: Source: DE8228681U1 [DE] (Claim 1) 1. Deckel (4) aus Blech fuer eine Dose (1) zur Aufnahme einer Fluessigkeit, insbesondere eines Getraenks, mit einem von einem Falzrand (3) umgebenen Deckelspiegel (5), dadurch gekennzeichnet, dass der Deckelspiegel (5) eine durch einen Verschluss dicht verschliessbare, durch eine Aussenanrollung (6) des Deckelspiegels (5) definierte oeffnung (7) aufweist.

Machine translation: (Claim 1) 1 Cover (4) made of sheet metal for a can (1) for receiving a liquid, particularly a beverage, with an area surrounded by a folded edge (3) Cover the mirror (5) characterized by the fact that the central panel (5) a close by a closure lockable by a Aussenanrollung (6) of the central panel (5) defined opening (7).

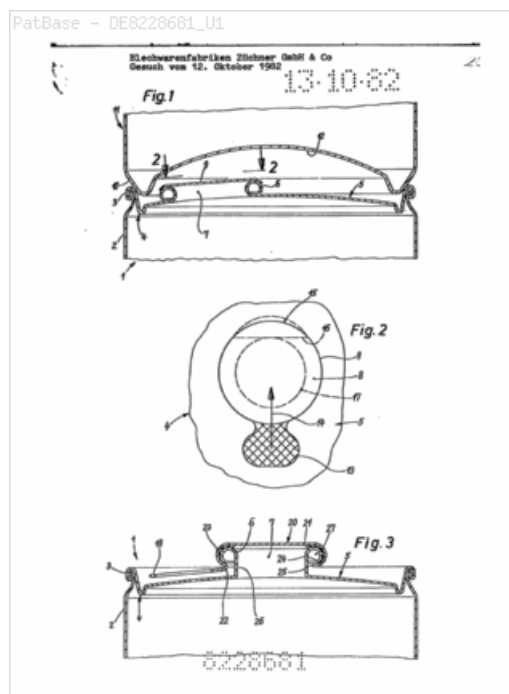
Classifications:

International (IPC 8-9): B65D17/50 (Advanced/Invention); B65D17/00 (Core/Invention)

International (IPC 1-7): B65D41/12 B65D41/22 B65D51/22

CPC: B65D17/502

European: B65D17/50A1



Family:

Publication number	Publication date	Application number	Application date
DE8228681 U1	19831006	DE19820028681U	19821013

Priority:

DE19820028681U 19821013

Probable Assignee: ZUECHNER BLECHWAREN

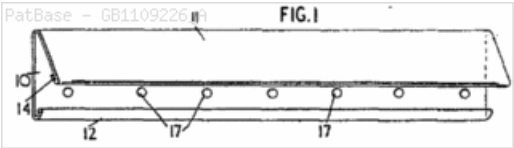
Assignee(s): (std): ZUECHNER BLECHWAREN

Assignee(s): BLECHWARENFABRIKEN ZUECHNER GMBH AND CO 3370 SEESE ; BLECHWARENFABRIKEN ZUECHNER GMBH AND CO 3370 SEESSEN DE

Title: An improved bottle opener

Abstract: 1,109,226. Bottle openers. W. B. BAIN. 28 March, 1967 [30 Dec., 1965], No. 55189/65. Heading B8T. A bottle opener comprises a length of metal having a base 10 with screw-holes 17 by which it can be secured to a support (16), Fig. 3 (not shown), at the rear of a bar, a broad inclined flange 11 and a narrow inclined flange 12. The edges of the flanges 11, 12 are turned inwards. In use, a crown cap (19) on the neck of a bottle is inserted through the gap between the flanges 11, 12 so that one of its edges lies on the inside of the narrow flange 12, and the cap is then levered off. The opener may alternatively be arranged the other way up, viz. with the narrow flange 12 uppermost, Fig. 2 (not shown). In a modification, Fig. 4 (not shown), the opener is of extruded construction.

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
GB1109226 A	19680410	GB19650055189	19651230

Priority:
GB19650055189 19651230

Probable Assignee: WALTER BEATTIE BAIN
Assignee(s): (std): WALTER BEATTIE BAIN

Title: APPARATUS FOR FILLING CONTAINERS ACCORDING TO WEIGHT

Abstract: The invention relates to an apparatus for the weight-dependent filling of containers, especially bottles (3), which comprise a tubular neck section (7) and which consists of a fill nozzle (8), a weighing device (5) and a holding element (6) for holding the container (3) under the fill nozzle (8). In that regard the weighing device (5) includes a force uptake element (14), a force introduction element (15) and a deformation body (17, 18) that is arranged therebetween and that is provided with strain gages (24) applied thereon. In that regard, the force uptake element (14) is secured on a machine frame (2) and the holding element (6) is secured on the force introduction element (15). The invention is characterized in that the force uptake element (14) is embodied as an outwardly lying ring element (14) and the force introduction element is embodied as a coaxially inwardly lying ring element (15), between which at least one radially spring-elastic connecting web (17, 18) is arranged as the deformation body. In that regard, the holding element (6) is secured on the inwardly lying ring element (15) therebelow.

Classifications:

International (IPC 8-9): B65B3/26 B65B3/28 B67C3/20 B67C3/24

B67C7/00 G01G17/04 G01G19/18 G01G19/52

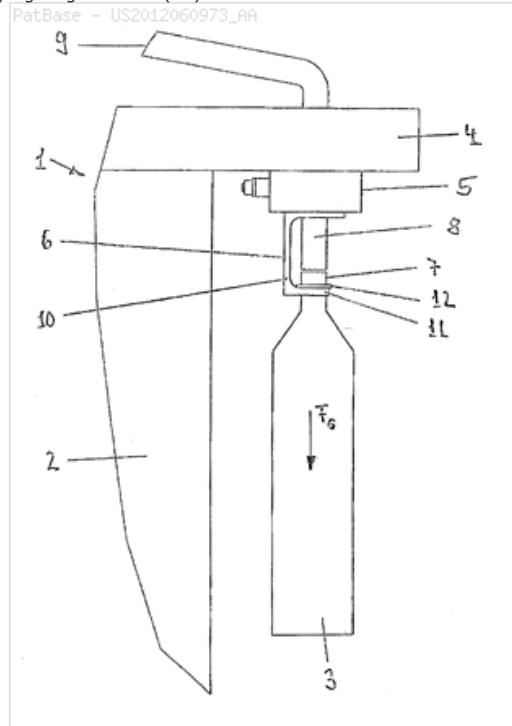
G01G3/14 (Advanced/Invention);

B67C3/02 (Core/Invention)

CPC: B67C3/202 B67C3/242 G01G3/141 G01G17/04 G01G19/18

European: B67C3/20B B67C3/24B G01G17/04 G01G19/18 G01G3/14B8

US: 141/83 141/83P



Family:

Publication number	Publication date	Application number	Application date
DE102009011949 B3	20100729	DE200910011949	20090310
DE502010004281 D1	20131002	DE201050004281T	20100305
EP2406170 A2	20120118	EP20100707834	20100305
EP2406170 B1	20130807	EP20100707834	20100305
ES2434263 T3	20131216	ES20100707834T	20100305
US2012060973 AA	20120315	US20100255540	20100305
WO10102756 A2	20100916	WO2010EP01375	20100305
WO10102756 A3	20110909	WO2010EP01375	20100305

Priority:

DE200910011949 20090310 EP20100707834 20100305 WO2010EP01375 20100305

Probable Assignee: HOTTINGER BALDWIN MESSTECHNIK GMBH

Assignee(s): (std): HOTTINGER MESSTECHNIK BALDWIN ; JAEGER ANDREAS ; SCHERER RALF ; SCHLACHTER WERNER

Assignee(s): HOTTINGER BALDWIN MESSTECHNIK GMBH

Inventor(s): (std): JAEGER ANDREAS ; SCHLACHTER WERNER ; SCHERER RALF

Agent(s): BEHRENS HELMUT; STAUDTE RALPH; LEHMANN MARIA ISABEL

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 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 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

Title: PACKAGING COATING COMPOSITION

Abstract: The present invention provides a solvent borne alkyd resin, comprising an aromatic dicarboxylic acid, an aliphatic diol, a fatty acid and bis(hydroxyalkyl) bisphenol A, and a preparation method thereof. The present invention also provides a solvent borne coating composition, comprising the solvent borne alkyd resin of the present invention, and a crosslinker.

Classifications:

International (IPC 8-9): C08G63/49 C09D167/08 (Advanced/Invention);

C08G C09D (Subclass/Invention)

CPC: C09D167/08

Family:

Publication number	Publication date	Application number	Application date
 CN104169324 A	20141126	CN201380009934	20131118
 CN104169324 B	20160831	CN201380009934	20131118
 HK1200473 A1	20150807	HK20150100741	20150123
 WO15070459 A1	20150521	WO2013CN87335	20131118

Priority:

WO2013CN087335 20131118

WO2013CN87335 20131118

Probable Assignee: PPG PACKAGING COATINGS SUZHOU CO LTD

Assignee(s): (std): SUZHOU PPG PACKAGING PAINT CO LTD ; PPG PACKAGING COATINGS SUZHOU CO LTD

Assignee(s): PPG PACKAGING COATINGS CO LTD IN SUZHOU ; PPG PACKAGING COATINGS SUZHOU CO

Inventor(s): (std): CHEN JIUJUN ; HAN FENG ; MO HUORONG

Agent(s): LIU SHEN AND ASSOCIATES

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

Title: LIGHT-WEIGHT, HIGH-STRENGTH, DRAWN AND IRONED, FLAT ROLLED STEEL CONTAINER BODY METHOD OF MANUFACTURE

Abstract: A light-weight unitary can body for pressure packs, such as carbonated beverage containers, is produced from high tensile strength steel. Flat rolled container stock steel is double cold reduced without an intermediate anneal. This material is drawn and ironed, and a bottom profile is formed while the can body is mounted on the ironing mandrel. The bottom profile includes a rounded-bottom annular chime and recessed convex panel. Formation of the bottom profile breaks surface adhesion between the ironing mandrel and the interior of the can body facilitating removal of the can body. The open end of the can body is necked-in to accommodate a closure chime seam within the diameter of the main portion of the can body sidewall.

Classifications:

International (IPC 8-9): B21D51/26 B65D1/16 (Advanced/Invention);
B21D51/26 B65D1/00 (Core/Invention)

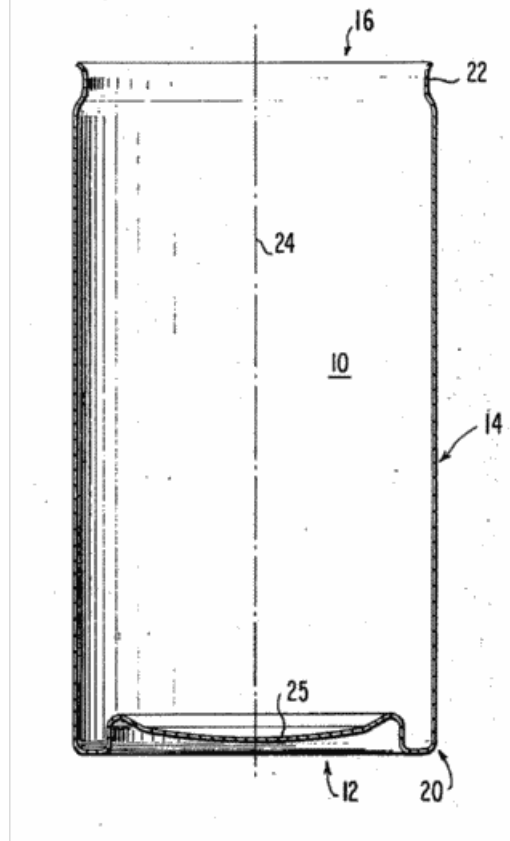
International (IPC 1-7): B21D22/30 B21D51/10 B65D1/16

CPC: Y10S220/22 B65D1/165 B21D51/26

European: B21D51/26 B65D1/16B

US: 113/120H 220/606 220/608 220/DIG.22 72/348 72/349

PatBase - US3998174_R



Family:

Publication number	Publication date	Application number	Application date
US3998174 A	19761221	US19750602727	19750807

Priority:

US19750602727 19750807

Probable Assignee:

NAT STEEL CORP

Assignee(s): (std):

NAT STEEL CORP

Assignee(s):

NATIONAL STEEL CORP

Inventor(s): (std):

SAUNDERS WILLIAM T

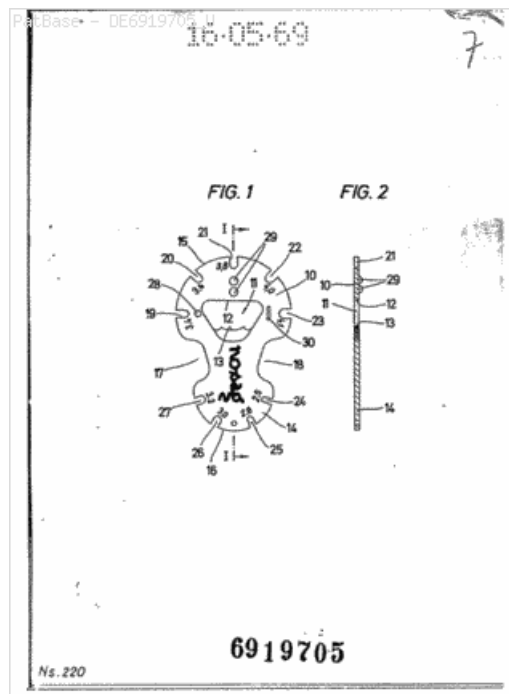
Title: KAPSELHEBER CAPSULE LIFT (Machine translation)

Abstract: Source: DE6919705U [DE] (Claim 1) 1. Kapselheber, bestehend aus einer Metallplatte, die einen Ausschnitt zum Abheben eines Kronenkorken aufweist, da- durch gekennzeichnet, dass der Rand der Platte verbreitert ist und als Drahtstaerkenlehren dienende Randausschnitte unterschiedlicher Breite aufweist.

Machine translation: (claim 1) 1 Bottle opener consisting of a metal plate having a cutout for lifting a crown cork, as characterized by that the edge of the plate is widened and has as Drahtstaerkenlehren serving edge cut-outs of different widths.

Classifications:

International (IPC 1-7): B67B7/44



Family:

Publication number	Publication date	Application number	Application date
DE6919705 U	19691030	DE19690019705U	19690516

Priority:

DE19690019705U 19690516

Probable Assignee:

NO SAG DRAHTFEDERN GMBH

Assignee(s): (std):

NO SAG DRAHTFEDERN GMBH

Abstract: Source: DE8510408U1 [DE] (Claim 1) Handhabung: Der oeffner wird (mit Spitze nach hinten) flach auf die jeweils unterschiedlich grossen Schraubkappen aufgeschoben und zur Seite gedreht (7). Schutzansprueche: 1. Flaschenoeffner fuer Schraubkappen und Kronenkorken, dadurch gekennzeichnet, dass ein keilfoermiges Metallblech (1) imgsseitlich zwei Schienen besitzt, wovon die eine (3) innen geriffelt und rechtwinkelig zur Deckplatte, waehrend die andere (4) innen glatt und nach aussen s c h r ae g gerichtet ist.

Machine translation: (Claim 1) Handling: The opener is (with tip towards the back) pushed flat on each side for different sized screw caps and rotated (7). Schutzansprueche: 1 Bottle opener for screw caps and crown corks, characterized in that a wedge-shaped metal plate (1) imgsseitlich two rails has, one of which (3) inside serrated and perpendicular to the deck plate, while the other (4) directed g smooth inside and outwardly inclined ae is.

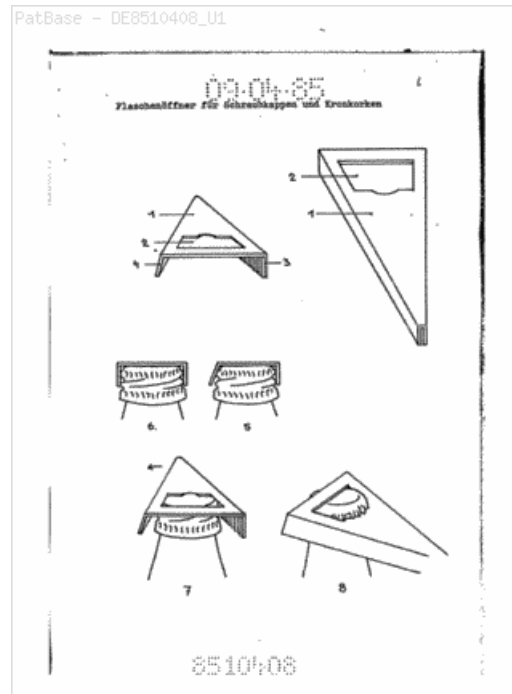
Classifications:

International (IPC 8-9): B67B7/16 B67B7/18 (Advanced/Invention); B67B7/00 (Core/Invention)

International (IPC 1-7): B67B7/16 B67B7/18 B67B7/44

CPC: B67B7/16 B67B7/18

European: B67B7/16 B67B7/18



Family:

Publication number	Publication date	Application number	Application date
DE8510408 U1	19850530	DE19850010408U	19850409

Priority:

DE19850010408U 19850409

Probable Assignee: EDERER JUERGEN 8000 MUENCHEN DE

Assignee(s): EDERER JUERGEN 8000 MUENCHEN DE

Abstract: Source: DE8910881U1 [DE] (Claim 1) 1. Flaschenkasten fuer Flaschen it Kronenverschluss, gekennzeichnet durch einen fuer Kronenverschluesse (16) ausgebildeten Flaschenoeffner (9) in einer Seitenwand (1- 4) des Flaschenkastens.

Machine translation: (Claim 1) 1 Bottle crate for bottles it crown closure, characterized by a Kronenverschluesse for (16) trained Flaschenoeffner (9) in a side wall (1-4) of the bottle crate.

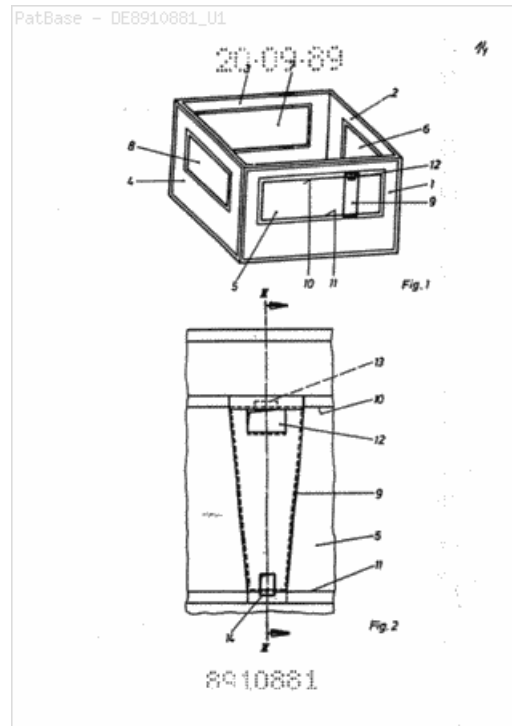
Classifications:

International (IPC 8-9): B65D1/24 B67B7/16 (Advanced/Invention);
B65D1/22 B67B7/00 (Core/Invention)

International (IPC 1-7): B65D1/40 B65D25/00 B67B7/16

CPC: B65D1/243 B65D2501/2407 B65D2501/24917 B67B7/16

European: B65D1/24B B67B7/16 L65D501/24B18D L65D501/24B4B1



Family:

Publication number	Publication date	Application number	Application date
DE8910881 U1	19891214	DE19890010881U	19890912

Priority:

DE19890010881U 19890912

Probable Assignee: KOELLNER PETER 6402 GROSSENLUEDER DE

Assignee(s): KOELLNER PETER 6402 GROSSENLUEDER DE ; RUEBSAM ROLAND DIPL ING 6400 FULDA DE

Title: VERSCHLUSSKAPSEL UND VERFAHREN ZU IHRER HERSTELLUNG CLOSURE CAPSULE AND PROCESS FOR PRODUCING (Machine translation)

Abstract: Source: DE1407330A1 [DE] (Claim 1) 1. Verfahren zur Bildung von Verschlüssen, bei dem eine Verschlusschale eine Menge einer halbflüssigen Paste gefüllt wird, deren Hauptbestandteile ein normalerweise flüssiges Plastifizierungsmittel und ein darin fein verteiltes Kunstharz sind, das mit dem Plastifizierungsmittel bei einer Temperatur, die unterhalb der Fliesstemperatur des Kunstharzes - Plastifizierungsmittel - Komponenten liegt, eine Paste bildet, wobei diese Masse nach ihrer Erwärkung auf die Fliesstemperatur ihrer Kunstharz - Plastifizierungsmittel - Komponenten ein beständiges, gummiartiges Gel bildet, dadurch gekennzeichnet, dass die eingefüllte Masse zum Vermeidung des Verlusts ihrer Klebrigkeit erwärmt wird, hierauf erwärmter Gormstempel auf die so behandelte Masse gepresst wird, um ihr die gewünschte Gestalt zu geben und nach dem Trennen von Stempel und Masse einen Abschluss trocknen vorgenommen wird, bei der die geformte Wule auf einer Fließ- bzw. Schnelltemperatur gehalten wird, bis die Kunstharz - Plastifizierungsmittel - Komponenten vollständig miteinander verschmolzen sind.

Machine translation: (claim 1) 1 A method for formation of closures, is filled with the closure scarf An amount of a halbflüssigen Paste whose Hauptbestandteile a normally liquid plasticizer and a therein finely divided synthetic resin, which with the plasticizer at a temperature which der Kunstharz below the flow temperature - plasticizer - lies components a paste forms, wobei diese composition of their Erwärkung auf the flow temperature of their Kunstharz - plasticizing - Komponenten sustainable and gummiartiges Gel forms, characterized in that the filled mass zum Vermeidung des now loss of their sticky-speed warmed, hierauf erwärmter Gormstempel auf the so behandelte mass is pressed, na ihr die to give desired speed stalt and after separation of stamp and mass graduated drying is carried out in which the shaped Wule auf of watercourses or Schnelltemperatur is gehalten until the resin - plasticizers - are components fused completely miteinander

Classifications:

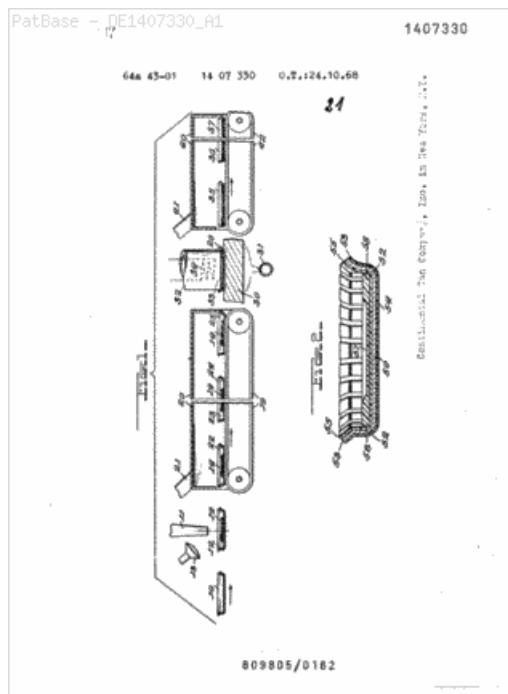
International (IPC 8-9): B65D41/12 (Advanced/Invention);

B65D41/02 (Core/Invention)

International (IPC 1-7): B65D53/06

CPC: B65D41/12

European: B65D41/12



Family:

Publication number	Publication date	Application number	Application date
DE1407330 A1	19681024	DE19541407330	19540514

Priority:

DE1954C009370 19540514

Probable Assignee: CONTINENTAL CAN CO

Assignee(s): (std): CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

Inventor(s): (std): ANDREW LARSON RALPH ; EUGENE BROCKETT HALFORD ; EUGENE MAIER CURTIS

Title: VERFAHREN ZUR HERSTELLUNG VON BEHAELTERVERSCHLUESSEN METHOD FOR PRODUCING BEHAELTERVERSCHLUESSEN
(Machine translation)

Abstract: Source: DE1407331A1 [DE] (Claim 1) 1. Verfahren zur Bildung vonVerschlusswuelsten fuer Verschluesse, bei dem ineine Verschlusssschale eine Menge einer halbfluessigen Pastedgefuellt wird, deren Hauptbestandteil ein normalerweise fluessiges Plastifizierungsmittel una ein darin fein@erteiltes Kunstharz sind, das mit demPlastifi@ieruhgs- mittel bei einer Temperatur, die unterhalb der Fliesstemperatur der Kunstharz-Plastifizierungsmittel-Komponenten liegt, eine raste bildet, wobeidie Masse nach ihrer Erwaermung auf die Fliesstemperatur ihrerKunstharz-Plastifi@ierungs-Komponenten einb@staediges, RTI gummiartiges Gel bildet, dadurch gekennzeichnet, dassdJe Masse nachdem Einfaellen bis zu ihrer Gelierung und Haftung an derVerschl@ssschale erwaermt und danach durch einen erwaermten Formstempel ineine Verschlusswulst der gewuenschtenZers gepresst wird.

Machine translation: (claim 1) 1 A method of forming vonVerschlusswuelsten for closures in which ineine closure shell an amount of a semi-liquid Pastedgefuellt is the main component of a normally liquid plasticizer una therein finely @ issued synthetic resin are provided with demPlastifi @ ieruhgs-medium at a temperature below the flow temperature of the resin Plastifizierungsmittel components is a racing forms, whereinthe mass after heating to the Fliesstemperatur ihrerKunstharz-plasticizing @ ierungs components EINB @ staediges forms, RTI rubbery gel, characterized in dassdJe mass after invasions until its gelation and adhesion to derVerschl @ ssschale warmed and then forced through a heated forming die of the sealing bead ineine gewuenschtenZers. will

Classifications:

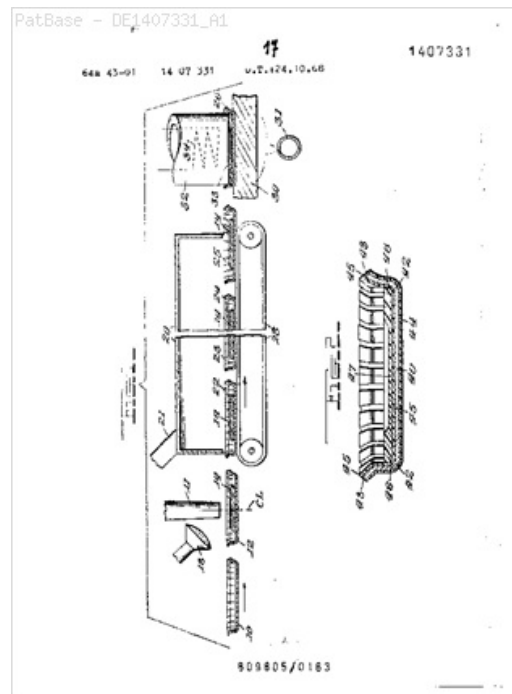
International (IPC 8-9): B65D41/12 (Advanced/Invention);

B65D41/02 (Core/Invention)

International (IPC 1-7): B65D53/06

CPC: B65D41/12

European: B65D41/12



Family:

Publication number	Publication date	Application number	Application date
DE1407329 A1	19681024	DE19541407329	19540514
DE1407331 A1	19681024	DE19541407331	19540603

Priority:

DE1954C009369 19540514 DE1954C009448 19540603

Probable Assignee: CONTINENTAL CAN CO

Assignee(s): (std): CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

Inventor(s): (std): ANDREW LARSON RALPH ; EUGENE BROCKETT HALFORD ; EUGENE MAIER CURTIS ; EUGENE MATER CURTIS

Title: LASER PUMPED BY MULTIPLE PHOTON ABSORPTION**Abstract:** ABSTRACT OF THE DISCLOSURE

A laser which includes active atoms which may be pumped to an excited state by multiple such as double or triple photon absorption. Since the atoms may be pumped to a high energy level, new laser frequencies are available which may be higher than the pumping frequency. In other words, the output energy may be 20 of radiation by multiple absorption of photon energy larger than the input energy, but of course of smaller h_{av}lnS a Pumping frequency which is the corresponding intensity. The atoms may be in gaseous or crystalline submultiple of the frequency separation between initial form and the pumping source may be another laser. The and pumped quantum states of one species of said en-frequency of the pumping radiation preferably is a sub- secmble' one sPecies of particles has at least one group of coupling quantum states of different energy levels preferably, but not necessarily, all lying between those of the initial and pumped states. The coupling quantum states are to be considered as arranged with the initial and pumped states in an ordered array of quantum states, 30 beginning with the initial state and ending with the pumped state. Again it is preferable, but not completely multiple of the frequency separation between an initial state and the pumped state of the active atoms. This application is a continuation of application, Ser. No. 379,840 filed July 2, 1964 and now abandoned.

Classifications:

International (IPC 8-9): B65D41/12 B65D51/24 B65D53/04 B65D53/06 G09F23/00 G09F3/00 G09F3/18 H01S3/094 (Advanced/Invention); B65D41/02 B65D51/24 B65D53/00 G09F23/00 G09F3/00 G09F3/08 H01S3/094 (Core/Invention)

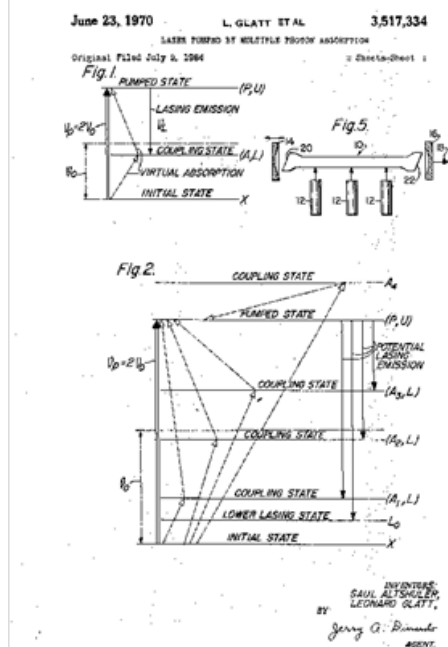
International (IPC 1-7): B21D51/46 B65D17/24 B65D23/00 B65D41/00 B65D41/10 B65D41/12 B65D53/00 B65D53/04 B67B G09F23/00 G09F3/02 G09F3/10 H01S3/22

CPC: B65D41/12 B65D51/245 B65D2203/00 G09F3/00 G09F3/18 G09F23/00 G09F2023/0025 H01S3/094

European: B65D41/12 B65D51/24F G09F3/00 G09F3/18 H01S3/094 L65D203/00 S09F23/00C

US: 215/328 215/343 215/347 215/39 215/40 331/94.5 372/70 413/19 413/9

PatBase - US3517334_A

**Family:**

Publication number	Publication date	Application number	Application date
BE732017 A	19691024		19690424
DE1924816 A1	19691204	DE19691924816	19690516
DE6919680 U	19721207	DE19690019680U	19690516
ES367627 A1	19700101	ES19690367627	19690523
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GB1225563 A	19710317		19690314
JP51018871 B4	19760612	JP19690040557	19690524
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NL6907108 A	19691126	NL19690007108	19690509
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US3517334 A	19700623	US19680785441	19681216
US3581690 A	19710601	US19680785443	19681216
US3633781 A	19720111	US19700061004	19700708

Priority:

US19640379840 19640702 US19680731852 19680524 US19680785443 19681216
US19680785441 19681216 US19700061004 19700708

Probable Assignee: LAPATA IND INC

Assignee(s): (std): TRW INC ; ZAPATA GOMEZ CLAUDIO ; ZAPATA IND INC ; ZAPATA INDUSTRIES INC ; LAPATA IND INC

Assignee(s): LAPATA INDUSTRIES INC ; ZAPATA INDUSTRIES INC FRACKVILLE PENNSYLVANIA VER ; ZAPATA INDUSTRIES INC FRACKVILLE PENNSYLVANIA VER ST V AM

Inventor(s): (std): ZAPATA G CLAUDIO ; GLATT LEONARD ; ALTSHULER SAUL ; ZAPATA CLAUDIO G ; G ZAPATA

Inventor(s): G CLAUDIO ZAPATA ; CLAUDIO G ZAPATA ; SAUL ALTSHULER ; LEONARD GLATT

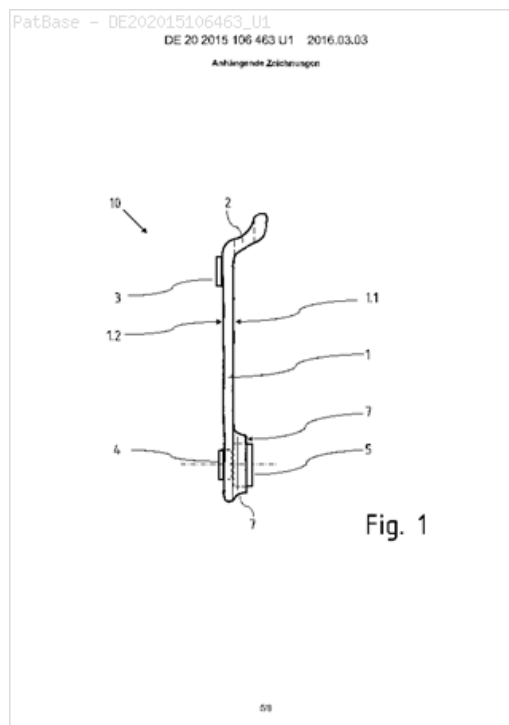
Title: ORTSFEST ANBRINGBARER FLASCHENOFFNER LOCAL FEST attachable OPENER (Machine translation)

Abstract: Source: DE202015106463U1 [DE] Ortsfest anbringbarer Flaschenöffner (10), der wenigstens eine Grundplatte (1) mit einem Kronkorkenhalter (2) umfasst, wobei an der Rueckseite (1.2) der Grundplatte (1) wenigstens ein Haftmagnet (3, 4) angeordnet sind und wobei an der Vorderseite (1.1) der Grundplatte (1), unterhalb des Kronkorkenhalters (2), wenigstens ein Fangmagnet (5) angeordnet ist, dadurch gekennzeichnet, - dass die Grundplatte (1) aus einem magnetisch wirksamem Eisenwerkstoff gebildet ist und eine Ausnehmung (6) aufweist, - dass der Fangmagnet (5) in die Ausnehmung (6) derart eingesetzt ist, dass er mit einem Teil seiner Hoehe ueber die Umgebungsflaeche (7.1) an der Vorderseite (1.1) der Grundplatte (1) hinausragt. **Machine translation:** Stationary attachable Flaschenöffner (10), comprising at least one base plate (1) with a Kronkorkenhalter (2), on the back side (1.2) of the base plate (1) at least one holding magnet (3, 4) are arranged and which at the front (1.1) of the base plate (1), below the Kronkorkenhalters (2), at least one capture magnet (5) is arranged, characterized in - that the base plate (1) is made of a magnetically effective iron material and a recess (6) having that - the capture magnet (5) is inserted into the recess (6) in such a way that it protrudes with a portion of its height above the Umgebungsflaeche (7.1) on the front (1.1) of the base plate (1) .

Classifications:

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

CPC: B67B7/16



Family:

Publication number	Publication date	Application number	Application date
DE202015106463 U1	20160303	DE201520106463U	20151127

Priority:

DE201520106463U 20151127

Probable Assignee:

MEYER AND MEYER LENZEN GBR

Assignee(s): (std):

MEYER AND MEYER LENZEN GBR

Title: METHOD OF MAKING PURE BREW OF COFFEE

Abstract: ABSTRACT OF THE DISCLOSURE A method of making a pure brew of coffee free from impurities by pouring boiling - water onto coffee placed in an open top vessel having a reclosable opening on the bottom thereof. The boiling water is held in the vessel for several minutes, and then the bottom opening is opened to collect the coffee liquor in a container therebelow.

Classifications:

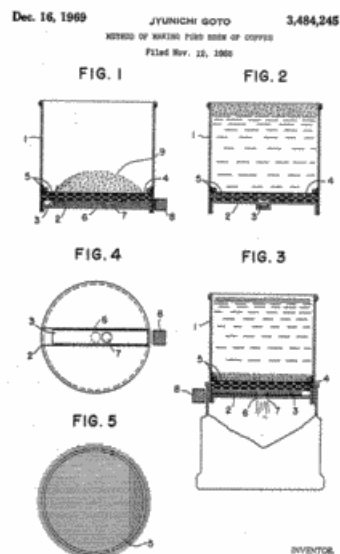
International (IPC 8-9): A47J31/00 A47J31/06 (Advanced/Invention);
A47J31/00 A47J31/06 (Core/Invention)

International (IPC 1-7): A23F1/08

CPC: A47J31/002 A47J31/06

European: A47J31/00M A47J31/06

US: 426/397 426/422 426/433 99/299 99/304 99/710



INVENTOR,
JUNICHI GOTO
BY,
Wendroth, Lind & Pines
Attorneys

Family:

Publication number	Publication date	Application number	Application date
US3484245 A	19691216	US1965057402	19651112

Priority:

US19650507402 19651112

Probable Assignee:

JYUNICHI GOTO

Assignee(s): (std):

JYUNICHI GOTO

Inventor(s): (std):

GOTO JYUNICHI

Inventor(s):

JYUNICHI GOTO