

Search history

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Search 2 and glass (Results 7)

4:

Search 2 and seal* (Results 40)

5:

Search TAC=(container and seal and ring) and IC=(B65D) (Results 7747)

6:

Search 6 and indent (Results 27)

7:

Search 6 and portion (Results 4715)

8:

Search 8 and glass (Results 332)

9:

Search 9 and fold* (Results 45)

10:

Search 10 and slot or notch (Results 7)

11:

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Search 12 or 2 (Results 134)

13:

Search 13 and folda* (Results 2)

14:

Search 13 and notch or slot (Results 12)

15:

Search 13 and ring (Results 66)

16:

Search 16 and film (Results 12)

17:

Search 13 and portion and axial (Results 16)

18:

Search 13 and annular (Results 71)

19:

Search 19 and seal* (Results 67)

20:

Search 20 and (channel or groove) (Results 31)

21:

Search 21 and surface (Results 27)

22:

Title: Resealable container closure

Abstract: Source: US4793510A A resealable closure device for use on metallic cans includes a metallic end wall having an opening surrounded by an upwardly extending and outwardly flaring beaded flange. The flexible closure element includes a central panel, a lever portion and a connecting portion connecting the lever portion to the central panel; the closure device is molded in an inverted umbrella position which is capable of being inverted to engage the flange of the opening; a skirt portion is provided on the interior side of the central panel of the flexible closure element to provide a degree of resistance to removal of the closure device from the opening by user.

Classifications:

International (IPC 8-9): B65D41/18 B65D41/60

B65D51/16 (Advanced/Invention);

B65D41/02 B65D41/32 B65D51/16 (Core/Invention)

International (IPC 1-7): B65D41/16 B65D41/18 B65D41/22

B65D41/40 B65D41/42 B65D41/46 B65D41/60 B65D45/00

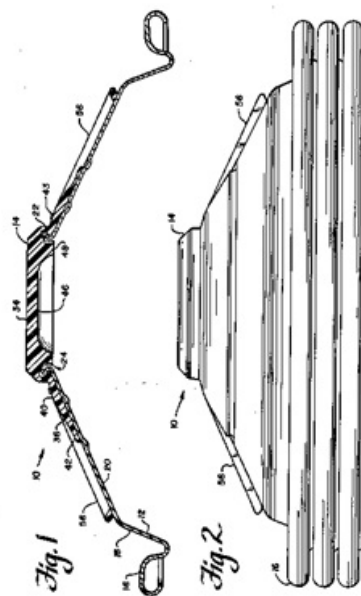
B65D45/02 B65D51/00 B65D51/14 B65D51/16 B65D51/18

CPC: B65D41/18 B65D51/1661

European: B65D41/18 B65D51/16D3

US: 215/320 215/321 220/260 220/306 220/309 220/780 220/793

PatBase - US4793510_A
U.S. Patent Dec. 27, 1988 Sheet 1 of 3 4,793,510



Family:

Publication number	Publication date	Application number	Application date
AT72189 E	19920215	AT19880305889T	19880629
AU1901788 A1	19890119	AU19880019017D	19880713
AU198819017 A1	19890119	AU19880019017	19880713
BRPI8803501 A	19890131	BR1988PI03501	19880712
CN1013094 B	19910710	CN19881004345	19880713
CN1038623 A	19900110	CN19881004345	19880713
DE3868161 D1	19920312	DE19883868161	19880629
DK388388 A	19890114	DK19880003883	19880712
DK388388 A0	19880712	DK19880003883	19880712
EP0299644 A2	19890118	EP19880305889	19880629
EP0299644 A3	19890823	EP19880305889	19880629
EP0299644 B1	19920129	EP19880305889	19880629
IL86742 A0	19881130	IL19880086742	19880614
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JP1037358 A2	19890208	JP19880173636	19880712
JP64037358 A2	19890208	JP19880173636	19880712
NZ225244 A	19910528	NZ19880225244	19880630
PH25068 A	19910219	PH19880037101	19880621
SU1651785 A3	19910523	SU19884356067	19880712
US4793510 A	19881227	US19870073080	19870713
ZA8804310 A	19890329	ZA19880004310	19880616

Priority:

EP19880305889 19880629 US19870073080 19870713

Probable Assignee: REYNOLDS METALS CO

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Assignee(s): REYNOLDS METALS COMPANY REYNOLDS METALS BUILDING ; REYNOLDS METALS COMPANY ; REYNOLDS METALS CO RICHMOND VA US ; REYNOLDS METALZ KOMPANI FA ; REYNOLDS METALZ KOMPANI FIRMA

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Agent(s): CALLINANS; REINHOLD COHN AND PARTNERS

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

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
AT72189 E	19920215	LSGT	+	granted / extensions (spc, cpc, pte)	
AU1901788 A1	19890119	LSPB	+	published / reissued	
AU198819017 A1	19890119	LSPB	+	published / reissued	
BRPI8803501 A	19890131	LSPB	+	published / reissued	
CN1013094 B	19910710	LSPB	+	published / reissued	
CN1013094 B	19900110	LSPB	+C06	PUBLICATION	
CN1013094 B	19921021	LSDW	-C01	DEEMED WITHDRAWAL OF PATENT APPLICATION (PATENT LAW 1993)	
CN1038623 A	19900110	LSPB	+	published / reissued	
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EP0299644 A2	19890118	LSPB	+	published / reissued	
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EP0299644 A2	19930525	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : DE PAYMENT DATE : 19930525 YEAR OF FEE PAYMENT : 06
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EP0299644 A2	19950301	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : DE EFFECTIVE DATE : 19950301
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EP0299644 B1	19920129	LSGT	+	granted / extensions (spc, cpc, pte)	
IL86742 A1	19910630	LSPB	+	published / reissued	
JP1037358 A2	19890208	LSPB	+	published / reissued	
JP64037358 A2	19890208	LSPB	+	published / reissued	
NZ225244 A	19910528	LSPB	+	published / reissued	
PH25068 A	19910219	LSGT	+	granted / extensions (spc, cpc, pte)	
SU1651785 A3	19910523	LSGT	+	granted / extensions (spc, cpc, pte)	
US4793510 A	19881227	LSGT	+	granted / extensions (spc, cpc, pte)	
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ASSIGNORS: ARFERT, HORST F.
W.; CUDZIK, DANIEL F.;
DONALDSON, ROGER H.;
REEL/FRAME: 004744/0996
EFFECTIVE DATE : 19870708

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ZA8804310 A	19890329	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: CONTAINER HAVING AN INTEGRAL HANDLE AN A CLOSURE

Abstract: Source: US4380304A The present invention relates to an improved container construction including a molded resilient plastic vessel having one open end and a molded resilient plastic cover removably and sealingly mountable on the open end of the vessel for containing materials, including liquids, in the vessel. The molded resilient plastic vessel includes a right circular cylindrical wall having a bottom formed integral with the interior of the wall adjacent to one end leaving the opposite end of the wall open. A handle assembly is formed integral with the exterior of the cylindrical wall adjacent to the open end. The handle assembly includes an arcuate handle having opposite ends formed integral with the cylindrical wall. The vessel includes a top seal defining the open end. The top seal includes a bead formed integral with the outer surface of the cylindrical wall and a top surface defining the open end of the vessel. The bead has a side and a lower locking face. The lower locking face is on the bead adjacent to the bottom. The cover includes a substantially flat circular top having a cover seal formed integral with the outer periphery of the top.

Classifications:

International (IPC 8-9): B65D1/00 B65D1/12 B65D1/16 B65D21/02 B65D25/28 B65D25/32 B65D41/16 B65D41/18 B65D41/28 B65D43/02 B65D47/12 (Advanced/Invention); B65D21/02 B65D25/28 B65D43/02 B65D47/12 (Advanced/Non-invention); B61D7/00 B65D1/00 B65D21/02 B65D25/28 B65D41/02 B65D43/02 B65D47/12 B65D90/00 (Core/Invention)

International (IPC 1-7): B29F1/022 B65D1/00 B65D1/12 B65D1/16 B65D25/28 B65D25/32 B65D41/16 B65D41/18 B65D41/28 B65D43/06 B65D43/08 B65D43/10 B65D53/00

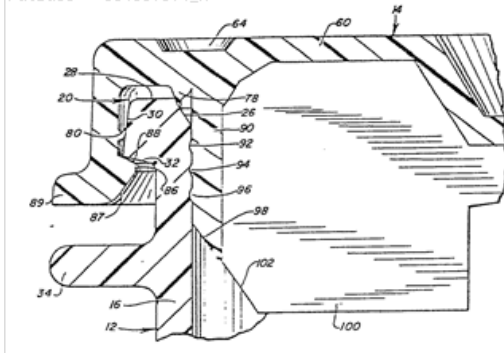
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European: B61D7/30 B65D21/02E7C B65D25/32B B65D43/02S3E B65D43/02S7D B65D47/12A B65D90/58A L65D543/00Y10B4

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US: 215/DIG.1 220/306 220/307 220/771 220/782 220/790 220/94A

PatBase - US4380304_A



Family:

Publication number	Publication date	Application number	Application date
AU198288245 A1	19830222	AU19820088245	19820726
AU548366 B2	19851205	AU19820088245	19820726
BR8207810 A	19830719	BR19820007810	19820726
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EP0084560 A1	19830803	EP19820902618	19820726
EP0084560 A4	19850610	EP19820902618	19820726
IT1149036 A	19861203	IT19820048941	19820805
IT8248941 A0	19820805	IT19820048941	19820805
JP4027110 B4	19920511	JP19820502544T	19820726
JP58501222 T2	19830728	JP19820502544T	19820726
KR840001095 A	19840328	KR19820003526	19820805
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US4380304 A	19830419	US19810290200	19810805
WO8300475 A1	19830217	WO1982US01013	19820726

Priority:

CA19820408745 19820804 US19810290200 19810805 WO1982US01013 19820726

Probable Assignee: VALSPAR 1101 THIRD STREET SOUTH MINNEAPOLIS MINNESOTA 55415 A DE CORP CORP

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Inventor(s): GEORGE G ANDERSON ; ANDAASON JOOJI SHII

Agent(s): GRIFFITH HACK; SWABEY OGILVY RENAULT

Designated states: AT AU BE BR CH DE FR GB JP LI LU NL SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU198288245 A1	19830222	LSPB	+	published / reissued	
AU548366 B2	19851205	LSGT	+	granted / extensions (spc, cpc, pte)	
BR8207810 A	19830719	LSPB	+	published / reissued	
CA1172977 A1	19840821	LSPB	+	published / reissued	
CA1172977 A1	20010822	LSRE	+MKEC	EXPIRY (CORRECTION)	

CA1172977 A1	20020804	LSLE	-MKEX	EXPIRY	
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EP0084560 A1	19830803	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19830411
EP0084560 A1	19860409	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19860218
EP0084560 A1	19861230	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19860701
EP0084560 A1	20070808	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : ANDERSON, GEORGE C.
IT1149036 A	19861203	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4027110 B4	19920511	LSPB	+	published / reissued	
JP58501222 T2	19830728	LSPB	+	published / reissued	
KR840001095 A	19840328	LSPB	+	published / reissued	
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US4380304 A	19871211	LSAS	AS	ASSIGNMENT	OWNER NAME : VALSPAR CORPORATION, THE, 1101 THIRD STREET SOUTH, DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INSILCO CORPORATION; REEL/FRAME:004797/0537 EFFECTIVE DATE : 19871123
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US4380304 A	19910702	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19910421
WO8300475 A1	19830217	LSPB	+	published / reissued	
WO8300475 A1	19830328	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1982902618 COUNTRY OF REF DOCUMENT : EP
WO8300475 A1	19830803	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1982902618 COUNTRY OF REF DOCUMENT : EP
WO8300475 A1	19860701	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1982902618 COUNTRY OF REF DOCUMENT : EP

Title: HIGH-TEMPERATURE BARRIER PACKAGE

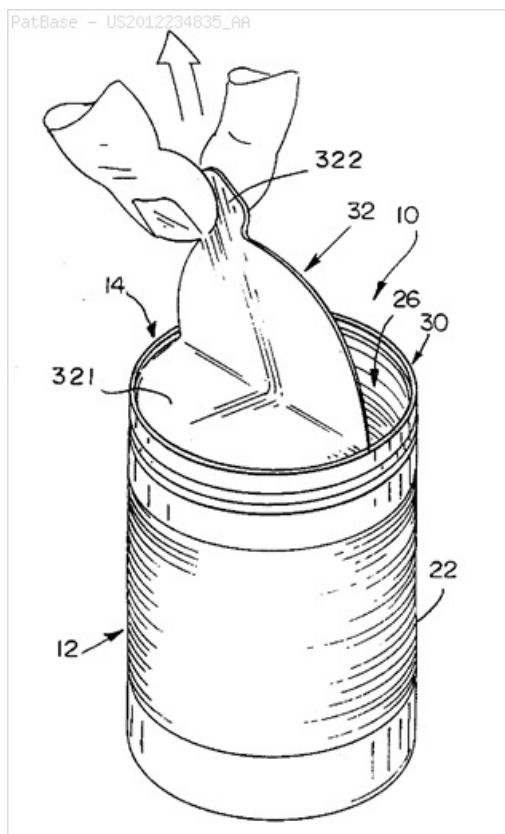
Abstract: Source: US2012234835A A package includes a container and a lid. The package is configured to endure exposure to high sterilization temperatures.

Classifications:

International (IPC 8-9): B65D17/00 B65D17/34 (Advanced/Invention)

CPC: B65D17/12

US: 220/359.1 220/359.2



Family:

Publication number	Publication date	Application number	Application date
US2012234835 AA	20120920	US20120413798	20120307
WO12125361 A2	20120920	WO2012US28010	20120307
WO12125361 A3	20140424	WO2012US28010	20120307

Priority:

US20110452534P 20110314 US20120413798 20120307

Probable Assignee: BERRY PLASTICS CORP

Assignee(s): (std): BERRY PLASTICS CORP ; MINNETTE JEFFREY C

Inventor(s): (std): MINNETTE JEFFREY C

Agent(s): REZEK RICHARD A

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2012234835 AA	20120920	LSPB	+	published / reissued	
US2012234835 AA	20120521	LSAS	AS	ASSIGNMENT	OWNER NAME : BERRY PLASTICS CORPORATION, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MINNETTE, JEFFREY C; REEL/FRAME:028243/0650 EFFECTIVE DATE : 20120521
WO12125361 A2	20120920	LSPB	+	published / reissued	
WO12125361 A2	20140409	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 12757566 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2

Title: CONTAINER ASSEMBLY HAVING A HEAT-SEALED METAL END, A METAL END THEREFOR, AND A METHOD FOR MAKING SAME

Abstract: Source: US2011095030A A container assembly includes a container body having a side wall encircling an axis, and a metal end for attachment to an upper edge of the side wall via heat-sealing. The outer peripheral region is shaped prior to application to the container body such that an annular channel is defined between an inner chuck wall and an outer chuck wall of the metal end. The metal end is pushed straight onto the side wall such that the upper edge of the side wall is received into the channel. The surfaces of the side wall and the opposing surfaces of the chuck walls have heat-sealable material thereon. The metal end is heated to melt and fuse the heat-sealable layers, thereby sealing the metal end onto the side wall. The metal end is shaped such that the free edge of the outer chuck wall is not exposed.

Classifications:

International (IPC 8-9): B23P11/00 B65D21/02 B65D43/00

B65D6/30 B65D8/00 B65D8/22 (Advanced/Invention)

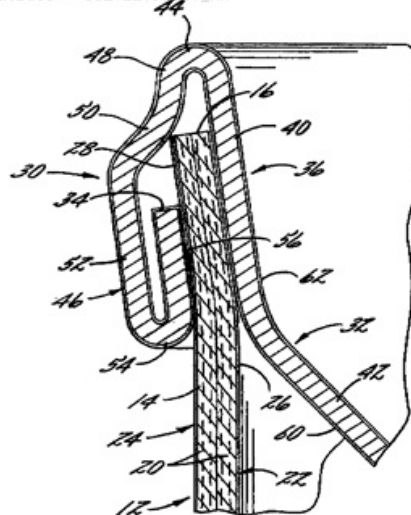
CPC: B65D15/08 B65D21/0222 Y10T29/49826 B65D7/36

B65D21/0209 B65D15/06

European: B65D15/06 B65D15/08 B65D21/02E7C

US: 1/1 206/503 220/359.4 220/359.400P 220/617 29/428 29/428S

PatBase - US2011095030_AA



Family:

Publication number	Publication date	Application number	Application date
CA2778253 AA	20110505	CA20102778253	20101013
CA2778253 C	20140603	CA20102778253	20101013
DE602010015946 D1	20140618	DE201060015946T	20101013
EP2493774 A1	20120905	EP20100771839	20101013
EP2493774 B1	20140507	EP20100771839	20101013
ES2484168 T3	20140811	ES20100771839T	20101013
US2011095030 AA	20110428	US20090607731	20091028
US2015375895 AA	20151231	US20150846250	20150904
US9150328 BB	20151006	US20090607731	20091028
WO11053451 A1	20110505	WO2010US52412	20101013

Priority:

EP20100771839 20101013 US20090607731 20091028 WO2010US52412 20101013
US20150846250 20150904

Probable Assignee: SONOCO DEV INC

Assignee(s): (std): DUNN DAVE ; MEEKS JOHN ; MORIN JEREMY ; PRICE TREVOR ; SONOCO DEV INC

Assignee(s): SONOCO DEVELOPMENT INC ; SONOCO DEVELOPMENT INC HARTSVILLE

Inventor(s): (std): DUNN DAVE ; MEEKS JOHN ; MORIN JEREMY ; PRICE TREVOR

Inventor(s): PRICE TREVOR NORTH CANTON ; MORIN JEREMY CANAL FULTON ; MEEKS JOHN MASSILLON ; DUNN DAVE CARROLLTON

Agent(s): SIM AND MCBURNEY; MARKS AND CLERK LUXEMBOURG LLP; KINSLER MAUREEN CATHERINE; VALLEJO JUAN PEDRO; ALSTON AND BIRD LLP; HILL DONALD M JR ET AL

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CA2778253 AA	20110505	LSPB	+	published / reissued	
CA2778253 AA	20120419	LSSES	+EEER	EXAMINATION REQUEST	
CA2778253 AA	20120614	LSSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20120419
CA2778253 C	20140603	LSGT	+	granted / extensions (spc, cpc, pte)	

EP2493774 A1	20120905	LSPB	+	published / reissued	
EP2493774 A1	20120905	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20120525
EP2493774 A1	20130515	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20130416
EP2493774 A1	20140129	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20140109
EP2493774 A1	20140507	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2493774 A1	20140515	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 666450 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140515
EP2493774 A1	20140604	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2493774 A1	20140618	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602010015946 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140618
EP2493774 A1	20140811	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2484168 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20140811
EP2493774 A1	20140915	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 666450 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140507
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EP2493774 A1	20141023	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20140401564 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20140930
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EP2493774 A1	20141128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20140507
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EP2493774 A1	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE

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EP2493774 A1	20150227	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20140507
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EP2493774 A1	20150521	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602010015946 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20150210
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EP2493774 A1	20150729	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2493774 A1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20140507

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EP2493774 A1	20160129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20151006 YEAR OF FEE PAYMENT : 6
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EP2493774 A1	20160630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140507
EP2493774 A1	20160729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140507
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EP2493774 A1	20160926	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
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EP2493774 A1	20161130	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160926 YEAR OF FEE PAYMENT : 7

EP2493774 A1	20161130	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160926 YEAR OF FEE PAYMENT : 7
EP2493774 A1	20170131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161031 YEAR OF FEE PAYMENT : 7
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EP2493774 B1	20140507	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2484168 T3	20140811	LSGT	+	granted / extensions (spc, cpc, pte)	
US2011095030 AA	20110428	LSPB	+	published / reissued	
US2011095030 AA	20091104	LSAS	AS	ASSIGNMENT	OWNER NAME : SONOCO DEVELOPMENT, INC., SOUTH CAROLINA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUNN, DAVE; MEEKS, JOHN; MORIN, JEREMY; AND OTHERS; SIGNING DATES FROM 20090218 TO 20090406; REEL/FRAME:023467/0520
US2015375895 AA	20151231	LSPB	+	published / reissued	
US2015375895 AA	20160802	LSAS	AS	ASSIGNMENT	OWNER NAME : SONOCO DEVELOPMENT INC., SOUTH CAROLINA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUNN, DAVE; MEEKS, JOHN; MORIN, JEREMY; AND OTHERS; SIGNING DATES FROM 20090218 TO 20090406; REEL/FRAME:039320/0071
US9150328 BB	20151006	LSGT	+	granted / extensions (spc, cpc, pte)	
WO11053451 A1	20110505	LSPB	+	published / reissued	
WO11053451 A1	20120419	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2778253 COUNTRY OF REF DOCUMENT : CA
WO11053451 A1	20120419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2778253 COUNTRY OF REF DOCUMENT : CA
WO11053451 A1	20120430	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: CLOSURE ASSEMBLY AND PACKAGE

Abstract: Source: US4094460A A closure assembly is disclosed which includes a plastic sealing ring having an annular channel in it for receiving and sealing against the entrance mouth of a container, a metal foil liner spanning the sealing ring and a flexible plastic overcap which receives the sealing ring and foil liner therein. The foil liner has a heat seal coating on one or both faces for sealing to the sealing ring and, in some packages, to the plastic overcap. The three-piece closure assembly is positioned on the entrance mouth of a container and the foil liner is induction heated to soften the heat seal coating thereon to seal the liner to the sealing ring. Induction heating may also be employed to adhesively join the foil liner to the undersurface of the overcap and seal the sealing ring to a foil layer in the container body.

Classifications:

International (IPC 8-9): B65D41/18 B65D43/08 B65D51/18 B65D51/20 (Advanced/Invention);

B65D43/08 B65D51/18 (Advanced/Non-invention);

B65D43/08 B65D51/18 (Core/Invention)

International (IPC 1-7): B65D15/08 B65D3/30 B65D41/02

B65D41/18 B65D43/06 B65D43/08 B65D51/18 B65D51/20

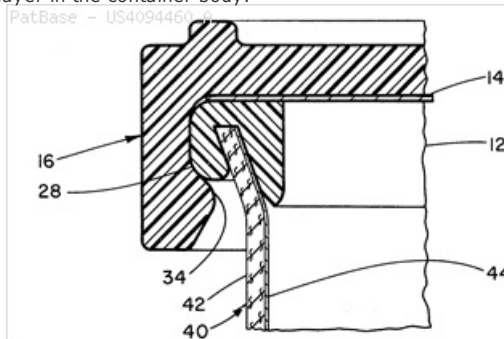
B65D53/02 B65D53/08

CPC: B65D51/20 B65D2251/0015 B65D2251/0093 B65D2543/00435

European: B65D51/20 L65D251/00Y2F L65D251/00Y6M

US: 215/232 215/350 215/352 220/258.1 229/123.1 229/125.05

229/125.13 229/43 229/5.8

**Family:**

Publication number	Publication date	Application number	Application date
AU197723591 A1	19780928	AU19770023591	19770323
AU508289 B2	19800313	AU19770023591	19770324
CA1054562 A1	19790515	CA19770274973	19770329
DE2718692 A1	19771103	DE19772718692	19770425
DE2718692 C2	19820218	DE19772718692	19770425
FR2349510 A1	19771125	FR19770012441	19770425
FR2349510 B1	19800814	FR19770012441	19770425
GB1519939 A	19780802	GB19770015578	19770414
JP52130765 A2	19771102	JP19770047509	19770426
JP56049234 B4	19811120	JP19770047509	19770426
US4094460 A	19780613	US19760680360	19760426

Priority:

GB19760012228 19760326 US19760680360 19760426

Probable Assignee: ALUMINUM CO OF AMERICA

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

Assignee(s): ALUMINUM CO OF AMERICA PITTSBURGH PA ; ALUMINUM COMPANY OF AMERICA ; ALUMINUM COMPANY OF AMERICA PITTSBURGH PA US ; ALUMINUM CY OF AMERICA ; CALLENDER ROBERT E ; PROCESS SCIENTIFIC INNOVATIONS LTD ; SCANGA THEODORE P ; ALUMINIUM CO OF AMERICA

Inventor(s): (std): CALLENDER R E ; CALLENDER ROBERT E ; CALLENDER ROBERT EMERSON ; SCANGA T P ; SCANGA THEODORE P ; SCANGA THEODORE PAUL ; SEODOA POORU SUKIYANGA ; ROBAATO EMAASON KIYARENDAA

Inventor(s): ROBERT EMERSON CALLENDER ; T P SCANGA ; THEODORE PAUL SCANGA ; THEODORE PAUL SCANGA ET ROBERT EMERSON CALLENDER ; TP SCANGA ; WALKER B HUNTER 3 P ; SCANGA THEODORE PAUL LOWER BURRELL US ; CALLENDER ROBERT EMERSON TARENTUM PA ; CALLENDER ROBERT EMERSON TARENTUM PA US ; EMERSON CALLENDER ROBERT ; PAUL SCANGA THEODORE ; R E CALLENDER ; RE CALLENDER

Agent(s): DM

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU197723591 A1	19780928	LSPB	+	published / reissued	
AU508289 B2	19800313	LSGT	+	granted / extensions (spc, cpc, pte)	
CA1054562 A1	19790515	LSPB	+	published / reissued	
DE2718692 A1	19771103	LSPB	+	published / reissued	
DE2718692 A1	19800306	LSES	+OD	REQUEST FOR EXAMINATION	
DE2718692 A1	19820218	LSGT	+D2	GRANT AFTER EXAMINATION	
DE2718692 A1	19820722	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
DE2718692 C2	19820218	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2349510 A1	19771125	LSPB	+	published / reissued	
FR2349510 A1	19850222	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2349510 B1	19800814	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1519939 A	19780802	LSGT	+	granted / extensions (spc, cpc, pte)	

GB1519939 A	19781129	LSGT	+PS	PATENT SEALED
GB1519939 A	19841219	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE
JP52130765 A2	19771102	LSPB	+	published / reissued
JP56049234 B4	19811120	LSPB	+	published / reissued
US4094460 A	19780613	LSGT	+	granted / extensions (spc, cpc, pte)

Title: Tamper indicating closure with adhesive-attached gasket

Abstract: Source: US4747499A A tamper indicating package incorporates a closure, at least a portion of which is transparent, and a seal which is bonded to the container so that the seal is visible through the closure. In some embodiments the closure is fastened also to the seal so that any movement between the closure and container results in fracture of the seal indicating tampering.

Classifications:

International (IPC 8-9): B65D41/04 B65D47/36 B65D51/14 B65D51/22 B65D53/00 B65D53/04 B65D55/02

B65D55/06 (Advanced/Invention);

B65D41/04 B65D55/02 (Advanced/Non-invention);

B65D51/18 B65D53/00 B65D55/02 (Core/Invention);

B65D (Subclass/Invention)

International (IPC 1-7): B65D41/04 B65D41/34 B65D41/42 B65D41/50 B65D47/36 B65D51/18 B65D51/20 B65D51/22

B65D53/00 B65D53/04 B65D55/02 B65D55/06 B65D55/10

CPC: B65D55/02 B65D51/145 B65D51/228 B65D55/066 B65D2251/0015 B65D2251/0093 B65D51/222

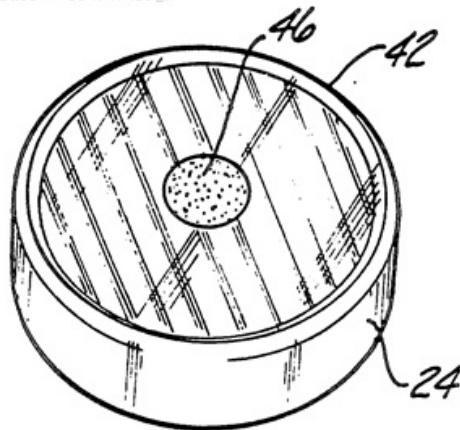
European: B65D51/14B B65D51/22 B65D51/22A1 B65D51/22C

B65D51/22E1 B65D55/02 B65D55/06D L65D251/00Y2D

L65D251/00Y6M

US: 215/250 215/276 215/349 215/350 220/255.1 220/258.3 220/377

PatBase - US4747499_8



Family:

Publication number	Publication date	Application number	Application date
AU198319729 A1	19840927	AU19830019729	19830929
AU198652492 A1	19860731	AU19860052492	19860120
AU198769070 A1	19871203	AU19870069070	19870219
AU587007 B2	19890803	AU19860052492	19860120
CA1254858 A1	19890530	CA19830437599	19830926
DE3343717 A1	19840913	DE19833343717	19831202
DE3601783 A1	19860724	DE19863601783	19860122
DE3714582 A1	19871203	DE19873714582	19870430
FR2540835 A1	19840817	FR19830017061	19831026
FR2540835 B1	19880108	FR19830017061	19831026
FR2576286 A2	19860725	FR19860000755	19860121
FR2576286 B2	19880415	FR19860000755	19860121
FR2602747 A1	19880219	FR19870005843	19870424
GB2134893 A1	19840822	GB19840003499	19840210
GB2134893 B2	19861029	GB19840003499	19840210
GB2171680 A1	19860903	GB19860001378	19860121
GB2171680 B2	19880803	GB19860001378	19860121
GB2190903 A1	19871202	GB19870012712	19870529
GB8403499 A0	19840314	GB19840003499	19840210
GB8601378 A0	19860226	GB19860001378	19860121
GB8712712 A0	19870701	GB19870012712	19870529
JP59152165 A2	19840830	JP19830222278	19831128
JP61203364 A2	19860909	JP19860006632	19860117
JP62287859 A2	19871214	JP19870121476	19870520
NZ205790 A	19870430	NZ19830205790	19830928
NZ214822 A	19880728	NZ19860214822	19860114
NZ219354 A	19900327	NZ19870219354	19870220
US4747499 A	19880531	US19850693328	19850122
US4747500 A	19880531	US19860868713	19860530
ZA8307420 A	19840627	ZA19830007420	19831004
ZA8701909 A	19881026	ZA19870001909	19870314

Priority:

CA19830437599 19830926 US19820439742 19821108 US19850693328 19850122
US19830465817 19830214 US19860868713 19860530

Probable Assignee: SUNBEAM PLASTICS CORP

Assignee(s): (std): SUNBEAM PLASTICS CORP

Assignee(s): SUNBEAM PRODUCTS INC ; GACH PETER P ; JULIAN RANDALL K

Inventor(s): (std): GACH P P ; GACH PETER P ; GACH PETER PAUL ; JIIN HOOKINZU ; JULIAN R K ; JULIAN RANDALL K ; JULIAN RANDALL KEITH ; PETER P GACH ; PIITAA PII GATSUCHI ; RANDAARU KEI JIYURIAN ; RANDALL JULIAN K ; RANDALL K JULIAN ; RANDARU KEI JIYURIAN

Inventor(s): P GACH PETER ; K JULIAN RANDALL ; JULIAN K RANDALL ; RANDALL KEITH JULIAN ; PETER P GACH ET RANDALL K JULIAN ; PETER PAUL GACH

Agent(s): GRIFFITH HACK ; BORDEN LADNER GERVAIS LLP

Legal status (INPADOC)

View legal status timeline

AU198319729 A1	19840927	LSPB	+	published / reissued	
AU198652492 A1	19860731	LSPB	+	published / reissued	
AU198769070 A1	19871203	LSPB	+	published / reissued	
AU587007 B2	19890803	LSGT	+	granted / extensions (spc, cpc, pte)	
CA1254858 A1	19890530	LSPB	+	published / reissued	
CA1254858 A1	20060530	LSLE	-MKEX	EXPIRY	
DE3343717 A1	19840913	LSPB	+	published / reissued	
DE3343717 A1	19901206	LSLE	-8139	DISPOSAL/NON-PAYMENT OF THE ANNUAL FEE	
DE3601783 A1	19860724	LSPB	+	published / reissued	
DE3601783 A1	19900111	LSLE	-8139	DISPOSAL/NON-PAYMENT OF THE ANNUAL FEE	
DE3714582 A1	19871203	LSPB	+	published / reissued	
DE3714582 A1	19910411	LSLE	-8139	DISPOSAL/NON-PAYMENT OF THE ANNUAL FEE	
FR2540835 A1	19840817	LSPB	+	published / reissued	
FR2540835 A1	19900824	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2540835 B1	19880108	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2602747 A1	19880219	LSPB	+	published / reissued	
FR2602747 A1	19910301	LSLE	-ST	NOTIFICATION OF LAPSE	
GB2134893 A1	19840822	LSPB	+	published / reissued	
GB2134893 A1	19861029	LSGT	+PG	PATENT GRANTED	
GB2134893 A1	19901010	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	
GB2134893 B2	19861029	LSGT	+	granted / extensions (spc, cpc, pte)	
GB2171680 A1	19860903	LSPB	+	published / reissued	
GB2171680 A1	19900919	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	
GB2171680 B2	19880803	LSGT	+	granted / extensions (spc, cpc, pte)	
GB2190903 A1	19871202	LSPB	+	published / reissued	
GB2190903 A1	19910213	LSWD	-WAP	APPLICATION WITHDRAWN, TAKEN TO BE WITHDRAWN OR REFUSED ** AFTER PUBLICATION UNDER SECTION 16(1)	
JP59152165 A2	19840830	LSPB	+	published / reissued	
JP61203364 A2	19860909	LSPB	+	published / reissued	
JP62287859 A2	19871214	LSPB	+	published / reissued	
NZ205790 A	19870430	LSPB	+	published / reissued	
NZ214822 A	19880728	LSPB	+	published / reissued	
NZ219354 A	19900327	LSPB	+	published / reissued	
US4747499 A	19880531	LSGT	+	granted / extensions (spc, cpc, pte)	
US4747499 A	19910916	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4747499 A	19951115	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4747499 A	19991122	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4747500 A	19880531	LSGT	+	granted / extensions (spc, cpc, pte)	
US4747500 A	19860530	LSAS	AS	ASSIGNMENT	OWNER NAME : SUNBEAM PLASTICS CORPORATION 3245 KANSAS ROAD, EVA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:GACH, PETER P.; JULIAN, RANDALL K.; REEL/FRAME:004559/0588 EFFECTIVE DATE : 19860521

US4747500 A	19860530	LSAS	AS	ASSIGNMENT	OWNER NAME : SUNBEAM PLASTICS CORPORATION,INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GACH, PETER P.; JULIAN, RANDALL K.; REEL/FRAME:004559/0588 EFFECTIVE DATE : 19860521
US4747500 A	19910923	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4747500 A	19951120	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4747500 A	19991122	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
ZA8307420 A	19840627	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8701909 A	19881026	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: RING SEAL WITH INSERT

Abstract: Source: US2010109260A One embodiment of a seal includes a body portion, a skirt portion, and an insert. The body portion is composed of a first material. The skirt portion extends from the body portion and is also composed of the first material. The skirt portion has an inboard leg and an outboard leg that move toward each other upon collapse in use. The insert is carried by the body portion and is composed of a second material which is more rigid than the first material.

Classifications:

International (IPC 8-9): B60K15/03 B65D53/02 F16J15/02 F16J15/10 F16J15/12 F16J15/32 (Advanced/Invention); B60K15/03 B65D53/00 F16J15/02 F16J15/10 F16J15/12 (Core/Invention)

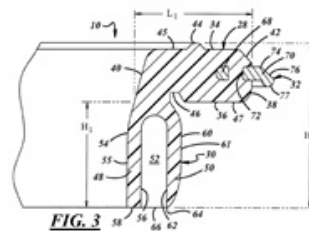
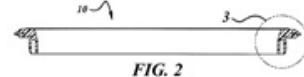
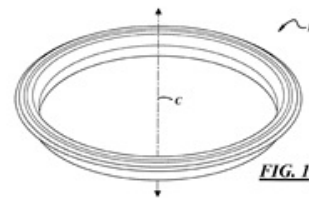
CPC: B60K2015/03447 F16J15/061 B60K15/04

European: F16J15/06B L60K15/04

US: 277/567 277/619 277/619P

PatBase - US2010109260_AA

Patent Application Publication May 6, 2010 Sheet 1 of 3 US 2010/0109260 A1

**Family:**

Publication number	Publication date	Application number	Application date
BRPI0912493 A2	20120228	BR2009PI12493	20091030
DE102009051286 A1	20100602	DE200910051286	20091029
JP2010156457 A2	20100715	JP20090251713	20091102
JP5711880 B2	20150507	JP20090251713	20091102
US2010109260 AA	20100506	US20090607602	20091028
US8419021 BB	20130416	US20090607602	20091028

Priority:

US20080110234P 20081031 US20090607602 20091028

Probable Assignee: TI AUTOMOTIVE LLC

Assignee(s): (std): TI GROUP AUTOMOTIVE SYS LLC ; MELLANDER CARL HUGO M

Assignee(s): TI GROUP AUTOMOTIVE SYSTEMS LLC ; TI GROUP AUTOMOTIVE SYSTEMS L L C ; TI AUTOMOTIVE CANADA INC ; TI AUTOMOTIVE LLC ; TI AUTOMOTIVE LTD ; TI GROUP AUTOMOTIVE SYSTEMS S DE RL DE CV ; CITIBANK NA ; HANIL USA LLC ; JPMORGAN CHASE BANK NA ; JPMORGAN CHASE BANK NA COLLATERAL AGENT AS

Inventor(s): (std): MELLANDER CARL HUGO M

Inventor(s): CARL HUGO M MELLANDER

Agent(s): REISING ETHINGTON PC; REISING ETHINGTON P C

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
BRPI0912493 A2	20120228	LSPB	+	published / reissued	
BRPI0912493 A2	20120228	LSPB	B03A	PUBLICATION OF AN APPLICATION: PUBLICATION OF A PATENT APPLICATION OR OF A CERTIFICATE OF ADDITION OF INVENTION	
DE102009051286 A1	20100602	LSPB	+	published / reissued	
DE102009051286 A1	20161101	LSDW	-R005	APPLICATION DEEMED WITHDRAWN DUE TO FAILURE TO REQUEST EXAMINATION	
JP2010156457 A2	20100715	LSPB	+	published /	

JP2010156457 A2	20120929	LSES	+A621	reissued WRITTEN REQUEST FOR APPLICATION EXAMINATION	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20120928
JP2010156457 A2	20130904	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130903
JP2010156457 A2	20140107	LSRE	A524	WRITTEN SUBMISSION OF COPY OF AMENDMENT UNDER SECTION 19 (PCT)	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A524 EFFECTIVE DATE : 20140106
JP2010156457 A2	20140625	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140624
JP2010156457 A2	20140919	LSRE	A521	WRITTEN AMENDMENT	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140918
JP2010156457 A2	20150209	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2010156457 A2	20150218	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150217
JP2010156457 A2	20150312	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150309
JP5711880 B2	20150507	LSGT	+	granted / extensions (spc, cpc, pte)	
US2010109260 AA	20100506	LSPB	+	published / reissued	
US2010109260 AA	20100111	LSAS	AS	ASSIGNMENT	OWNER NAME : TI GROUP AUTOMOTIVE SYSTEMS, L.L.C.,MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MELLANDER, CARL- HUGO M.; REEL/FRAME:023759/0166 EFFECTIVE DATE : 20100107
US2010109260 AA	20100111	LSAS	AS	ASSIGNMENT	OWNER NAME : TI GROUP AUTOMOTIVE SYSTEMS, L.L.C.,MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MELLANDER, CARL- HUGO M.; US-ASSIGNMENT DATABASE UPDATED:20100513; REEL/FRAME:23759/166 EFFECTIVE DATE : 20100107
US2010109260 AA	20100826	LSAS	AS	ASSIGNMENT	OWNER NAME : CITIBANK N.A., DELAWARE DESCRIPTION : ABL PATENT SECURITY AGREEMENT; ASSIGNOR:TI GROUP AUTOMOTIVE SYSTEMS, L.L.C.; REEL/FRAME:024895/0956 EFFECTIVE DATE : 20100825
US2010109260 AA	20100826	LSAS	AS	ASSIGNMENT	OWNER NAME : CITIBANK N.A., DELAWARE DESCRIPTION : TERM PATENT SECURITY AGREEMENT; ASSIGNOR:TI GROUP AUTOMOTIVE SYSTEMS, L.L.C.; REEL/FRAME:024896/0057 EFFECTIVE DATE : 20100825
US2010109260 AA	20120314	LSAS	AS	ASSIGNMENT	OWNER NAME : JPMORGAN CHASE BANK, N.A., NEW YORK DESCRIPTION : SECURITY AGREEMENT; ASSIGNORS:TI GROUP AUTOMOTIVE SYSTEMS, L.L.C.; TI AUTOMOTIVE LIMITED; TI AUTOMOTIVE CANADA, INC.; AND OTHERS; REEL/FRAME:027864/0968 EFFECTIVE DATE : 20120314

US2010109260 AA	20120314	LSAS	AS	ASSIGNMENT	OWNER NAME : TI GROUP AUTOMOTIVE SYSTEMS, L.L.C., MICHIGAN DESCRIPTION : RELEASE BY SECURED PARTY; ASSIGNOR:CITIBANK, N.A.; REEL/FRAME:027865/0016 EFFECTIVE DATE : 20120314
US8419021 BB	20130416	LSGT	+	granted / extensions (spc, cpc, pte)	
US8419021 BB	20100111	LSAS	AS	ASSIGNMENT	OWNER NAME : TI GROUP AUTOMOTIVE SYSTEMS, L.L.C.,MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MELLANDER, CARL- HUGO M.; REEL/FRAME:023759/0166 EFFECTIVE DATE : 20100107
US8419021 BB	20100111	LSAS	AS	ASSIGNMENT	OWNER NAME : TI GROUP AUTOMOTIVE SYSTEMS, L.L.C., MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MELLANDER, CARL- HUGO M.; REEL/FRAME:023759/0166 EFFECTIVE DATE : 20100107
US8419021 BB	20100826	LSAS	AS	ASSIGNMENT	OWNER NAME : CITIBANK N.A., DELAWARE DESCRIPTION : ABL PATENT SECURITY AGREEMENT; ASSIGNOR:TI GROUP AUTOMOTIVE SYSTEMS, L.L.C.; REEL/FRAME:024895/0956 EFFECTIVE DATE : 20100825
US8419021 BB	20100826	LSAS	AS	ASSIGNMENT	OWNER NAME : CITIBANK N.A., DELAWARE DESCRIPTION : TERM PATENT SECURITY AGREEMENT; ASSIGNOR:TI GROUP AUTOMOTIVE SYSTEMS, L.L.C.; REEL/FRAME:024896/0057 EFFECTIVE DATE : 20100825
US8419021 BB	20120314	LSAS	AS	ASSIGNMENT	OWNER NAME : JPMORGAN CHASE BANK, N.A., NEW YORK DESCRIPTION : SECURITY AGREEMENT; ASSIGNORS:TI GROUP AUTOMOTIVE SYSTEMS, L.L.C.; TI AUTOMOTIVE LIMITED; TI AUTOMOTIVE CANADA, INC.; AND OTHERS; REEL/FRAME:027864/0968 EFFECTIVE DATE : 20120314
US8419021 BB	20120314	LSAS	AS	ASSIGNMENT	OWNER NAME : TI GROUP AUTOMOTIVE SYSTEMS, L.L.C., MICHIGAN DESCRIPTION : RELEASE BY SECURED PARTY; ASSIGNOR:CITIBANK, N.A.; REEL/FRAME:027865/0016 EFFECTIVE DATE : 20120314
US8419021 BB	20150630	LSAS	AS	ASSIGNMENT	OWNER NAME : TI GROUP AUTOMOTIVE SYSTEMS, L.L.C., MICHIGAN DESCRIPTION : TERMINATION AND RELEASE; ASSIGNOR:JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:036013/0775 EFFECTIVE DATE : 20150630
US8419021 BB	20150630	LSAS	AS	ASSIGNMENT	OWNER NAME : TI AUTOMOTIVE, L.L.C., MICHIGAN DESCRIPTION : TERMINATION AND RELEASE; ASSIGNOR:JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:036013/0775 EFFECTIVE DATE : 20150630
US8419021 BB	20150630	LSAS	AS	ASSIGNMENT	OWNER NAME : TI

AUTOMOTIVE CANADA, INC.,
CANADA
DESCRIPTION : TERMINATION
AND RELEASE;
ASSIGNOR:JPMORGAN CHASE
BANK, N.A., AS
ADMINISTRATIVE AGENT;
REEL/FRAME:036013/0775
EFFECTIVE DATE : 20150630

US8419021 BB 20150630 LSAS AS ASSIGNMENT

OWNER NAME : JPMORGAN
CHASE BANK, N.A., AS THE
COLLATERAL AGENT
DESCRIPTION : SECURITY
AGREEMENT; ASSIGNORS:TI
GROUP AUTOMOTIVE
SYSTEMS, L.L.C.; HANIL USA,
L.L.C.; TI AUTOMOTIVE,
L.L.C.;
REEL/FRAME:036013/0666
EFFECTIVE DATE : 20150630

US8419021 BB 20150630 LSAS AS ASSIGNMENT

OWNER NAME : TI
AUTOMOTIVE LIMITED,
UNITED KINGDOM
DESCRIPTION : TERMINATION
AND RELEASE;
ASSIGNOR:JPMORGAN CHASE
BANK, N.A., AS
ADMINISTRATIVE AGENT;
REEL/FRAME:036013/0775
EFFECTIVE DATE : 20150630

US8419021 BB 20150630 LSAS AS ASSIGNMENT

OWNER NAME : TI GROUP
AUTOMOTIVE SYSTEMS S DE
R.L. DE C.V., MEX
DESCRIPTION : TERMINATION
AND RELEASE;
ASSIGNOR:JPMORGAN CHASE
BANK, N.A., AS
ADMINISTRATIVE AGENT;
REEL/FRAME:036013/0775
EFFECTIVE DATE : 20150630

US8419021 BB 20150630 LSAS AS ASSIGNMENT

OWNER NAME : HANIL USA
L.L.C., ALABAMA
DESCRIPTION : TERMINATION
AND RELEASE;
ASSIGNOR:JPMORGAN CHASE
BANK, N.A., AS
ADMINISTRATIVE AGENT;
REEL/FRAME:036013/0775
EFFECTIVE DATE : 20150630

Title: Tear-away canister lid

Abstract: Source: US5511680A The present invention pertains to improved closure arrangements which are durable in construction, yet easy to open and reclose, and which provide an initial hermetic seal with tamper evidency, all utilizing a one-piece lid design. In two embodiments according to the present invention, unique combinations of a mechanical interlocking closure system, heat-sealing or bonding, and a weakened failure zone are employed in the vicinity of the lid/container juncture to achieve these desirable characteristics. In a third embodiment of the present invention, a mechanical interlocking and sealing arrangement is utilized to achieve hermetic sealing of the container without the need for a heat seal or bonded region, and a weakened failure zone is located just inward of the mechanical interlocking connection. With all embodiments according to the present invention, upon tearing the lid open the lid forms a recloseable plug-fit closure to reclose the container, while the rim of the lid once remains attached to the container in its initial position. The resulting container is extraordinarily simple in construction, rendering it easy and cost effective to produce, yet providing superior performance both in maintaining the initial freshness of the product and in providing ease of consumer operation.

Classifications:

International (IPC 8-9): B65D17/40 B65D43/02 B65D43/04

B65D43/06 B65D55/08 (Advanced/Invention);

B65D17/28 B65D43/02 (Core/Invention)

International (IPC 1-7): B65D17/40 B65D43/04 B65D43/06 B65D55/08

CPC: B65D17/163 B65D43/026 B65D2101/0023 B65D2543/00092

B65D2543/00296 B65D2543/00425 B65D2543/00509

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B65D2543/00759 B65D2543/00796

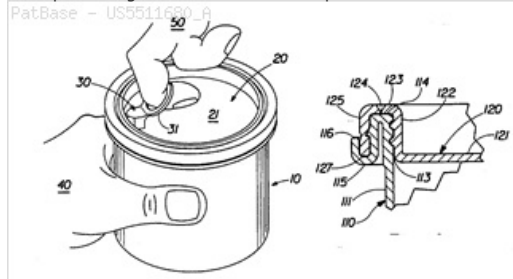
European: B65D17/16B1 B65D43/02T3E6 L65D101/00A3

L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y4

L65D543/00Y8D1C L65D543/00Y8D3N L65D543/00Y8S1B8

L65D543/00Y8S1D2 L65D543/00Y8S3B8 L65D543/00Y8S3D2

US: 206/276 220/306 220/307 220/791



Family:

Publication number	Publication date	Application number	Application date
AU199476017 A1	19950322	AU19940076017	19940824
CA2170590 AA	19960228	CA19942170590	19940824
CA2170590 C	19990316	CA19942170590	19940824
US5511680 A	19960430	US19950383559	19950202
WO9506600 A1	19950309	WO1994US09471	19940824

Priority:

US19930116434 19930903 US19950383559 19950202 WO1994US09471 19940824

Probable Assignee: PROCTER AND GAMBLE

Assignee(s): (std): PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE COMPANY THE ; THE PROCTER AND GAMBLE COMPANY ; KINNE DANIEL JAMES

Inventor(s): (std): KINNE DANIEL J ; KINNE DANIEL JAMES

Inventor(s): DANIEL JAMES KINNE

Agent(s): SIM AND MCBURNEY

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LK LT LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN TD TG TJ TT UA UZ VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU199476017 A1	19950322	LSPB	+	published / reissued	
CA2170590 AA	19960228	LSPB	+	published / reissued	
CA2170590 AA	19960228	LSNP	+AFNE	NATIONAL PHASE ENTRY	
CA2170590 AA	19960228	LSSE	+EEER	EXAMINATION REQUEST	
CA2170590 AA	20050824	LSLE	-MKLA	LAPSED	
CA2170590 C	19990316	LSGT	+	granted / extensions (spc, cpc, pte)	
US5511680 A	19960430	LSGT	+	granted / extensions (spc, cpc, pte)	
US5511680 A	19970909	LSRE	CC	CERTIFICATE OF CORRECTION	
US5511680 A	19991004	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5511680 A	20030926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5511680 A	20080430	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5511680 A	20080617	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20080430

WO9506600 A1	19950309	LSPB	+	published / reissued	
WO9506600 A1	19960228	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA REF DOCUMENT NUMBER : 2170590 KIND CODE OF REF DOCUMENT : A FORMAT OF REF DOCUMENT (F/P) : F
WO9506600 A1	19960228	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2170590 COUNTRY OF REF DOCUMENT : CA

Title: INDICATING INSTRUMENT

Abstract: Source: US5003914A In an indicating instrument, a channel (4) of light-opaque material is fastened on a cap (2) held on a pointer shaft (1), the channel being open towards the observer, a pointer (5) of light-conducting material being inserted into it. The pointer (5) has a detent projection (6) by which it is secured to the cap (2).

Classifications:

International (IPC 8-9): B05B11/00 B32B15/12 B65D47/34 B65D5/56 B65D51/18 B65D51/20 B65D8/02 B65D83/00 B65D83/14 B65D85/72 G01D13/22 G12B11/04 (Advanced/Invention); B32B15/12 B65D47/34 B65D51/18 B65D83/00 (Advanced/Non-invention);

B05B11/00 B32B15/12 B65D47/34 B65D5/56 B65D51/18 B65D8/00 B65D83/00 B65D83/14 B65D85/72 G01D13/00 G12B11/00 (Core/Invention)

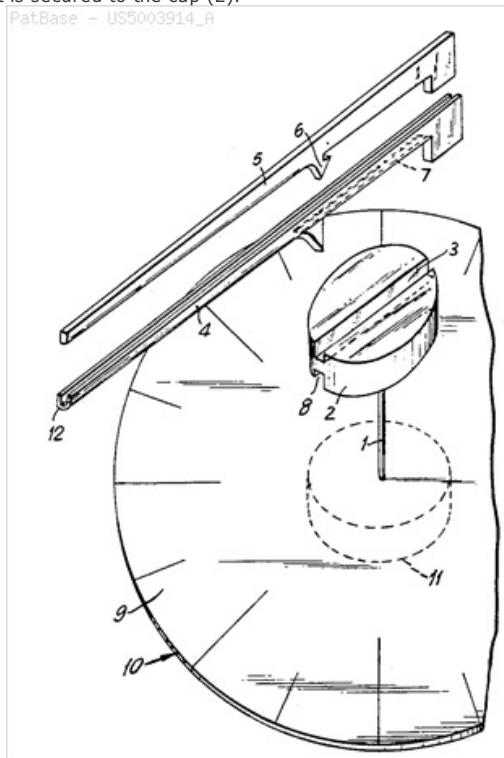
International (IPC 1-7): B05B11/00 B05B9/04 B32B15/12 B65D25/14 B65D3/00 B65D3/10 B65D41/04 B65D47/00 B65D47/06 B65D47/34 B65D5/56 B65D51/18 B65D51/20 B65D51/22 B65D8/02 B65D83/00 B65D83/14 B65D85/72 B67D5/40 G01D13/22 G12B11/4

CPC: Y02W30/807 G12B11/04 B65D15/04 B05B11/0037

European: B05B11/00B5 B65D15/04 G12B11/04

US: 116/288 116/328 116/332 220/258 220/289 222/321 222/321.7 222/325 222/382 222/541 222/541.1 222/562 229/125.05 229/4.5 229/5.5

PatBase - US5003914_R



Family:

Publication number	Publication date	Application number	Application date
AU198827509 A1	19890629	AU19880027509	19881223
AU199210080 A1	19920227	AU19920010080	19920107
AU626820 B2	19920813	AU19880027509	19881223
CA1320458 A1	19930720	CA19880586471	19881220
DE3804144 A1	19890824	DE19883804144	19880211
DE3842909 A1	19890706	DE19883842909	19881221
DE3881678 D1	19930715	DE19883881678	19880817
DE8716940 U1	19880218	DE19870016940U	19871224
DK706488 A	19890625	DK19880007064	19881220
DK706488 A0	19881220	DK19880007064	19881220
EP0322709 A2	19890705	EP19880121284	19881220
EP0322709 A3	19900606	EP19880121284	19881220
EP0327668 A2	19890816	EP19880113292	19880817
EP0327668 A3	19900131	EP19880113292	19880817
EP0327668 B1	19930609	EP19880113292	19880817
ES2041288 T3	19931116	ES19880113292T	19880817
JP2004679 A2	19900109	JP19880325686	19881223
US5003914 A	19910402	US19900492376	19900308
US5012970 A	19910507	US19880287484	19881220
US5123573 A	19920623	US19910637680	19910107
ZA8809576 A	19890927	ZA19880009576	19881222

Priority:

AU19880027509 19881223	DE19870016940U 19871224	DE19878716940 19871224
DE19883842909 19881221	US19880287474 19881219	DE19883804144 19880211
DE19883881678 19880817	DE19880029080U 19880827	DE19883829080 19880827
US19910637680 19910107	US19880287484 19881220	

Probable Assignee: KUCHERER HELMUT

Assignee(s): (std): VDO SCHINDLING ; WEIDENHAMMER PACKUNGEN ; WEIDENHAMMER PACKUNGEN G M KG ; WEIDENHAMMER PACKUNGEN GMBH KG ; WEIDENHAMMER PACKUNGEN KG AND CO ; WEIDENHAMMER PACKUNGEN KG GMBH AND CO ; WEIDENHAMMER PACKUNGEN KG G M B H AND CO ; WEIDENHAMMER PACKUNGEN AND CO KG

Assignee(s): WEIDENHAMMER PACKUNGEN KG GMBH AND CO 6832 HOCKENHEIM DE ; WEIDENHAMMER PACKUNGEN GMBH AND CO KG ; WEIDENHAMMER PACKUNGEN KG GMBH ; WEIDENHAMMER PACKUNGEN KG GMBH AND CO 6832 HOCKENH ; KUCHERER HELMUT ; KUCHERER HELMUT DR HERMANN BRUNN STR ; VDO ADOLF SCHINDLING AG ; VDO ADOLF SCHINDLING AG 6000 FRANKFURT DE

Inventor(s): (std): MAYER KLAUS ; KUECKERER HELMUT ; KUECKERER HELMUT ; KUCHERER HELMUT ; HERUMUUTO KUUHERAA ; HELMUT KUECKERER ; BRUNN HERMANN ; HERMANN BRUNN ; HELMUT KUCHERER

Inventor(s): MAYER KLAUS W 6053 OBERTSHAUSEN 1 DE ; MAYER KLAUS 6053 OBERTSHAUSEN DE ; KUECKERER HELMUT 6905 SCHRIESHEIM DE

Agent(s): PHILLIPS ORMONDE FITZPATRICK
Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU198827509 A1	19890629	LSPB	+	published / reissued	
AU199210080 A1	19920227	LSPB	+	published / reissued	
AU626820 B2	19920813	LSGT	+	granted / extensions (spc, cpc, pte)	
CA1320458 A1	19930720	LSGT	+	granted / extensions (spc, cpc, pte)	
CA1320458 A1	19970721	LSLE	-MKLA	LAPSED	
DE3804144 A1	19890824	LSPB	+	published / reissued	
DE3804144 A1	19950511	LSLE	-8141	DISPOSAL/NO REQUEST FOR EXAMINATION	
DE3842909 A1	19890706	LSPB	+	published / reissued	
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DE3881678 D1	19971127	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	OWNER NAME : MANNESMANN VDO AG, 60326 FRANKFURT, DE
DE3881678 D1	20020404	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	OWNER NAME : SIEMENS AG, 80333 MUENCHEN, DE
DE8716940 U1	19880218	LSGT	+	granted / extensions (spc, cpc, pte)	
DK706488 A	19890625	LSPB	+	published / reissued	
DK706488 A	19940822	LSWD	-AHB	APPLICATION SHELVED DUE TO NON-PAYMENT	
EP0322709 A2	19890705	LSPB	+	published / reissued	
EP0322709 A2	19900509	LSRE	RHK1	MAIN CLASSIFICATION (CORRECTION)	IPC : B65D 51/22
EP0322709 A2	19910109	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19901112
EP0322709 A2	19921119	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19921005
EP0322709 A2	19930317	LSWD	-18W	WITHDRAWN	WITHDRAWEL DATE : 19930120
EP0327668 A2	19890816	LSPB	+	published / reissued	
EP0327668 A2	19900228	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19891229
EP0327668 A2	19920520	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19920402
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EP0327668 A2	19940601	LSGT	+26N	NO OPPOSITION FILED	
EP0327668 A2	19950802	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 19950802 YEAR OF FEE PAYMENT : 8
EP0327668 A2	19960818	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : ES NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19960818
EP0327668 A2	19970717	LSFE	+PGFP	POSTGRANT: ANNUAL	COUNTRY OF REF DOCUMENT

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EP0327668 A2	20040316	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 19970912
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EP0327668 A2	20080131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20071022 YEAR OF FEE PAYMENT : 20
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EP0327668 B1	19930609	LSGT	+	granted / extensions (spc, cpc, pte)	REF DOCUMENT NUMBER : 327668 COUNTRY OF REF DOCUMENT : ES
ES2041288 T3	19931116	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2041288 T3	19931116	LSGT	+FG2A	DEFINITIVE PROTECTION	
JP2004679 A2	19900109	LSPB	+	published / reissued	
US5003914 A	19910402	LSGT	+	granted / extensions (spc, cpc, pte)	
US5003914 A	19940919	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5003914 A	19990404	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5003914 A	19990615	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19990402
US5012970 A	19910507	LSGT	+	granted / extensions (spc, cpc, pte)	
US5012970 A	19881220	LSAS	AS	ASSIGNMENT	OWNER NAME : WEIDENHAMMER PACKUNGEN KG GMBH AND CO., D-6832 HOCKE DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:KUCHERER, HELMUT; REEL/FRAME:004999/0997 EFFECTIVE DATE : 19881206
US5012970 A	19881220	LSAS	AS	ASSIGNMENT	OWNER NAME : WEIDENHAMMER PACKUNGEN KG GMBH AND CO., GERMANY DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:KUCHERER, HELMUT; REEL/FRAME:004999/0997 EFFECTIVE DATE : 19881206

US5012970 A	19881220	LSAS	AS	ASSIGNMENT	OWNER NAME : WEIDENHAMMER PACKUNGEN KG GMBH AND CO.,GERMANY DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:KUCHERER, HELMUT; REEL/FRAME:4999/997 EFFECTIVE DATE : 19881206
US5012970 A	19920929	LSRE	CC	CERTIFICATE OF CORRECTION	
US5012970 A	19941031	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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US5012970 A	19990706	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19990507
US5123573 A	19920623	LSGT	+	granted / extensions (spc, cpc, pte)	
US5123573 A	19930831	LSRE	CC	CERTIFICATE OF CORRECTION	
US5123573 A	19951226	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5123573 A	19960205	LSAS	AS	ASSIGNMENT	OWNER NAME : KUCHERER, HELMUT, GERMANY DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WEIDENHAMMER PACKUNGEN KG GMBH AND CO.; REEL/FRAME:007795/0001 EFFECTIVE DATE : 19960117
US5123573 A	20000625	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
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ZA8809576 A	19890927	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: RING

Abstract: Source: US4614371A A ring for the leak-proof and traction-resistant joining of the ends of two pipes which surround one another at a radial distance, made of a basic body of soft-elastic, resilient material having cylindrical contact surfaces engaging the pipes, and of a cone ring of unyielding material embedded therein, which is defined radially inwardly and outwardly by cone surfaces, in which cone ring the cone surfaces are inclined in the same direction and are at a distance from the surface of the oppositely-lying or confronting pipe which diminishes increasingly with increasing distance from its end.

Classifications:

International (IPC 8-9): B65D45/00 F16B21/08 F16J13/14 F16J15/10 F16L17/00 F16L21/02 F16L21/08 F16L37/092 F16L41/08 F16L5/02 F28F9/06 (Advanced/Invention);

B65D45/00 F16B21/00 F16J13/00 F16J15/10 F16L17/00 F16L21/02 F16L21/08 F16L37/00 F16L41/08 F16L5/02 F28F9/04 (Core/Invention)

International (IPC 1-7): B65D39/04 B65D45/00 B65D51/14

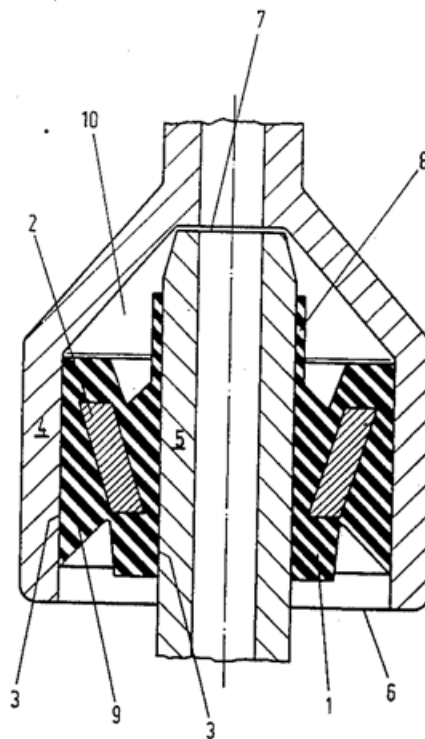
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CPC: F16L37/092 Y10S285/91 Y10S285/915 F16L21/02 B65D45/00 F16L41/088

European: B65D45/00 F16L21/02 F16L37/092 F16L41/08E Y02T30/34

US: 277/235R 277/626 277/627 285/110 285/231 285/345 285/910 285/915

PatBase - US4614371_A



Family:

Publication number	Publication date	Application number	Application date
AT28842 E	19870815	AT19840105609T	19840517
AT32940 E	19880315	AT19840106161T	19840530
BRPI8400474 A	19850326	BR1984PI00474	19840203
BRPI8403868 A	19850709	BR1984PI03868	19840802
BRPI8403871 A	19850709	BR1984PI03871	19840802
CA1244502 A1	19881108	CA19840460330	19840803
CA1252810 A1	19890418	CA19840460329	19840803
DE3373524 D1	19871015	DE19833373524	19831125
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DE3408835 C2	19870129	DE19843408835	19840310
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DE3409906 C2	19861009	DE19843409906	19840317
DE3409907 A1	19850919	DE19843409907	19840317
DE3409982 A1	19850926	DE19843409982	19840319
DE3409982 C2	19861016	DE19843409982	19840319
DE3413155 A1	19850221	DE19843413155	19840407
DE3465282 D1	19870917	DE19843465282	19840517
DE3469795 D1	19880414	DE19843469795	19840530
DE8322349 U1	19831117	DE19830022349U	19830803
EP0133455 A2	19850227	EP19840105609	19840517
EP0133455 A3	19850710	EP19840105609	19840517
EP0133455 B1	19870812	EP19840105609	19840517
EP0133459 A2	19850227	EP19840106161	19840530
EP0133459 A3	19850918	EP19840106161	19840530
EP0133459 B1	19880309	EP19840106161	19840530
EP0133627 A2	19850306	EP19830111811	19831125
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EP0133627 B1	19870909	EP19830111811	19831125
EP0133627 B2	19911218	EP19830111811	19831125
JP1619971 C3	19910930	JP19840153317	19840725
JP1700661 C3	19921014	JP19840153316	19840725
JP2047636 B4	19901022	JP19840153317	19840725
JP3069037 B4	19911030	JP19840153316	19840725
JP60053278 A2	19850326	JP19840160202	19840730
JP60078189 A2	19850502	JP19840153317	19840725
JP60078195 A2	19850502	JP19840153316	19840725

JP6037655 U1	19940520	JP19910026429U	19910419
MX158840 A	19890316	MX19840201327	19840511
MX159390 A	19890522	MX19840201684	19840615
MX160397 A	19900215	MX19840201878	19840702
US4614371 A	19860930	US19840632716	19840720

Priority:

CA19840460329 19840803	CA19840460330 19840803	DE19830022349U 19830803
DE19833373524 19831125	DE19843409906 19840317	DE19843409907 19840317
DE19843408835 19840310	DE19843413155 19840407	DE19843409982 19840319
EP19840105609 19840517	EP19840106161 19840530	DE19843465282 19840517
DE19843469795 19840530		

Probable Assignee: FREUDENBERG CARL FA

Assignee(s): (std): FREUDENBERG CARL ; FREUDENBERG CARL FA ; CARL FREUDENBERG KG

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Inventor(s): (std): BAUDER KURT ; KURT BAUDER ; KURUTO BAUDEERU

Inventor(s): BAUDER KURT 6940 WEINHEIM DE

Agent(s): BORDEN LADNER GERVAIS LLP

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT28842 E	19870815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT28842 E	19990215	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT32940 E	19880315	LSGT	+	granted / extensions (spc, cpc, pte)	
AT32940 E	19990215	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
BRPI8400474 A	19850326	LSPB	+	published / reissued	
BRPI8400474 A	20080708	LSLE	-B21A	EXPIRY ACC. ART. 78, ITEM I OF IPL- EXPIRY OF THE TERM OF PROTECTION	DESCRIPTION : PATENTE EXTINTA EM 03/02/99
BRPI8403868 A	19850709	LSPB	+	published / reissued	
BRPI8403868 A	20080708	LSLE	-B21A	EXPIRY ACC. ART. 78, ITEM I OF IPL- EXPIRY OF THE TERM OF PROTECTION	DESCRIPTION : PATENTE EXTINTA EM 02/08/99
BRPI8403871 A	19850709	LSPB	+	published / reissued	
BRPI8403871 A	20080708	LSLE	-B21A	EXPIRY ACC. ART. 78, ITEM I OF IPL- EXPIRY OF THE TERM OF PROTECTION	DESCRIPTION : PATENTE EXTINTA EM 02/08/99
CA1244502 A1	19881108	LSPB	+	published / reissued	
CA1244502 A1	20051108	LSLE	-MKEX	EXPIRY	
CA1252810 A1	19890418	LSPB	+	published / reissued	
CA1252810 A1	20060418	LSLE	-MKEX	EXPIRY	
DE3373524 D1	19880915	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
DE3373524 D1	19920227	LSOP	+8366	RESTRICTED MAINTAINED AFTER OPPOSITION PROCEEDINGS	
DE3408835 A1	19850919	LSPB	+	published / reissued	
DE3408835 A1	19850919	LSSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3408835 A1	19870129	LSGT	+D2	GRANT AFTER EXAMINATION	
DE3408835 A1	19870723	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3408835 A1	19910718	LSLI	8320	WILLINGNESS TO GRANT LICENCES DECLARED (PARAGRAPH 23)	
DE3408835 C2	19870129	LSGT	+	granted / extensions (spc, cpc, pte)	

DE3409906 A1	19850919	LSPB	+	published / reissued	
DE3409906 A1	19850919	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3409906 A1	19861009	LSGT	+D2	GRANT AFTER EXAMINATION	
DE3409906 A1	19870409	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3409906 C2	19861009	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3409907 A1	19850919	LSPB	+	published / reissued	
DE3409907 A1	19850919	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3409907 A1	19880825	LSWD	-8130	WITHDRAWAL	
DE3409982 A1	19850926	LSPB	+	published / reissued	
DE3409982 A1	19850926	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3409982 A1	19861016	LSGT	+D2	GRANT AFTER EXAMINATION	
DE3409982 A1	19870416	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3409982 C2	19861016	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3413155 A1	19850221	LSPB	+	published / reissued	
DE3413155 A1	19850221	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3413155 A1	19871126	LSWD	-8130	WITHDRAWAL	
DE3465282 D1	19880901	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3465282 D1	19910725	LSLI	8320	WILLINGNESS TO GRANT LICENCES DECLARED (PARAGRAPH 23)	
DE3469795 D1	19890413	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3469795 D1	19910725	LSLI	8320	WILLINGNESS TO GRANT LICENCES DECLARED (PARAGRAPH 23)	
DE8322349 U1	19831117	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0133455 A2	19850227	LSPB	+	published / reissued	
EP0133455 A2	19850807	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19850521
EP0133455 A2	19880727	LSGT	+26N	NO OPPOSITION FILED	
EP0133455 A2	19970409	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : SE PAYMENT DATE : 19970409 YEAR OF FEE PAYMENT : 14
EP0133455 A2	19970410	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : DE PAYMENT DATE : 19970410 YEAR OF FEE PAYMENT : 14
EP0133455 A2	19970418	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : GB PAYMENT DATE : 19970418 YEAR OF FEE PAYMENT : 14
EP0133455 A2	19970507	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : LU PAYMENT DATE : 19970507 YEAR OF FEE PAYMENT : 14
EP0133455 A2	19970512	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : AT PAYMENT DATE : 19970512 YEAR OF FEE PAYMENT : 14
EP0133455 A2	19970515	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : BE PAYMENT DATE : 19970515 YEAR OF FEE PAYMENT : 14
EP0133455 A2	19970516	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : FR PAYMENT DATE : 19970516 YEAR OF FEE PAYMENT : 14

EP0133455 A2	19970530	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : NL PAYMENT DATE : 19970530 YEAR OF FEE PAYMENT : 14
EP0133455 A2	19970717	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : DE EFFECTIVE DATE : 19970717
EP0133455 A2	19970728	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : CH PAYMENT DATE : 19970728 YEAR OF FEE PAYMENT : 14
EP0133455 A2	19980517	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : GB DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980517
EP0133455 A2	19980517	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : LU DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980517
EP0133455 A2	19980517	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : AT DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980517
EP0133455 A2	19980518	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : SE DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980518
EP0133455 A2	19980531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : FR DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980531
EP0133455 A2	19980531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : CH DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980531
EP0133455 A2	19980531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : LI DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980531
EP0133455 A2	19980531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : BE DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980531
EP0133455 A2	19981130	LSLE	-BERE	BE: LAPSED	OWNER NAME : FIRMA CARL FREUDENBERG EFFECTIVE DATE : 19980531
EP0133455 A2	19981201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : NL DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19981201
EP0133455 A2	19990106	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON- PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 19980517
EP0133455 A2	19990115	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0133455 A2	19990201	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF DOCUMENT NUMBER : 84105609.6 FORMAT OF REF DOCUMENT (F/P) : F
EP0133455 A2	19990201	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	EFFECTIVE DATE : 19981201
EP0133455 A2	19990305	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST

EP0133455 B1	19870812	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0133459 A2	19850227	LSPB	+	published / reissued	
EP0133459 A2	19851002	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19850726
EP0133459 A2	19861210	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19861027
EP0133459 A2	19890308	LSGT	+26N	NO OPPOSITION FILED	
EP0133459 A2	19970409	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : SE PAYMENT DATE : 19970409 YEAR OF FEE PAYMENT : 14
EP0133459 A2	19970410	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : DE PAYMENT DATE : 19970410 YEAR OF FEE PAYMENT : 14
EP0133459 A2	19970418	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : GB PAYMENT DATE : 19970418 YEAR OF FEE PAYMENT : 14
EP0133459 A2	19970507	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : LU PAYMENT DATE : 19970507 YEAR OF FEE PAYMENT : 14
EP0133459 A2	19970512	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : AT PAYMENT DATE : 19970512 YEAR OF FEE PAYMENT : 14
EP0133459 A2	19970515	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : BE PAYMENT DATE : 19970515 YEAR OF FEE PAYMENT : 14
EP0133459 A2	19970516	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : FR PAYMENT DATE : 19970516 YEAR OF FEE PAYMENT : 14
EP0133459 A2	19970530	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : NL PAYMENT DATE : 19970530 YEAR OF FEE PAYMENT : 14
EP0133459 A2	19970717	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : DE EFFECTIVE DATE : 19970717
EP0133459 A2	19970728	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : CH PAYMENT DATE : 19970728 YEAR OF FEE PAYMENT : 14
EP0133459 A2	19980530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : AT DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980530
EP0133459 A2	19980530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : LU DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980530
EP0133459 A2	19980530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : GB DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980530
EP0133459 A2	19980531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : SE DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980531
EP0133459 A2	19980531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : CH DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980531
EP0133459 A2	19980531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : BE DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980531
EP0133459 A2	19980531	LSLE	-PG25	LAPSED IN A	REF COUNTRY CODE : FR

				CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980531
EP0133459 A2	19980531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : LI DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980531
EP0133459 A2	19981130	LSLE	-BERE	BE: LAPSED	OWNER NAME : FIRMA CARL FREUDENBERG EFFECTIVE DATE : 19980531
EP0133459 A2	19981201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : NL DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19981201
EP0133459 A2	19990115	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0133459 A2	19990120	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON- PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 19980530
EP0133459 A2	19990201	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF DOCUMENT NUMBER : 84106161.7 FORMAT OF REF DOCUMENT (F/P) : F
EP0133459 A2	19990201	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	EFFECTIVE DATE : 19981201
EP0133459 A2	19990305	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0133459 B1	19880309	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0133627 A2	19850306	LSPB	+	published / reissued	
EP0133627 A2	19850626	LSRE	RHK1	MAIN CLASSIFICATION (CORRECTION)	IPC : F16L 5/02
EP0133627 A2	19850807	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19850514
EP0133627 A2	19860430	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19860318
EP0133627 A2	19880810	LSOP	-26	OPPOSITION FILED	OPPONENT NAME : SUEDEDEUTSCHE KUEHLERFABRIK JULIUS FR. BEHR GMBH AND EFFECTIVE DATE : 19880609
EP0133627 A2	19910102	LSOP	-R26	OPPOSITION FILED (CORRECTION)	OPPONENT NAME : BEHR GMBH AND CO. EFFECTIVE DATE : 19880609
EP0133627 A2	19911218	LSRE	27A	MAINTAINED AS AMENDED	EFFECTIVE DATE : 19911218
EP0133627 A2	20021025	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : DE PAYMENT DATE : 20021025 YEAR OF FEE PAYMENT : 20
EP0133627 A2	20021119	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : FR PAYMENT DATE : 20021119 YEAR OF FEE PAYMENT : 20
EP0133627 A2	20021125	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : SE PAYMENT DATE : 20021125 YEAR OF FEE PAYMENT : 20
EP0133627 A2	20040107	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	
EP0133627 B1	19870909	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0133627 B2	19911218	LSGT	+	granted / extensions (spc, cpc, pte)	
JP1619971 C3	19910930	LSGT	+	granted / extensions (spc, cpc, pte)	
JP1700661 C3	19921014	LSGT	+	granted / extensions (spc, cpc, pte)	
JP2047636 B4	19901022	LSPB	+	published / reissued	

JP3069037 B4	19911030	LSPB	+	published / reissued	
JP60053278 A2	19850326	LSPB	+	published / reissued	
JP60078189 A2	19850502	LSPB	+	published / reissued	
JP60078195 A2	19850502	LSPB	+	published / reissued	
JP6037655 U1	19940520	LSPB	+	published / reissued	
MX158840 A	19890316	LSGT	+	granted / extensions (spc, cpc, pte)	
MX159390 A	19890522	LSGT	+	granted / extensions (spc, cpc, pte)	
MX160397 A	19900215	LSGT	+	granted / extensions (spc, cpc, pte)	
US4614371 A	19860930	LSGT	+	granted / extensions (spc, cpc, pte)	
US4614371 A	19840720	LSAS	AS	ASSIGNMENT	OWNER NAME : FIRMA CARL FREUDENBERG HOHNERWEG 2, 6940 WEINHEIM/ DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:BAUDER, KURT; REEL/FRAME:004291/0154 EFFECTIVE DATE : 19840712
US4614371 A	19900316	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4614371 A	19940328	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4614371 A	19980927	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4614371 A	19981208	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19980930

Title: PRESS-ON CLOSURE WITH PEELABLE END PANEL

Abstract: Source: US5246134A A press-on closure 10 for a tubular container 12. The closure includes a molded plastic frame 14 having a ledge 28 on which an end panel 16 is seated and to which the end panel is peelably secured. The end panel has a free outer peripheral edge unbonded to the frame. The resultant closed container is subject to retorting with the result that heretofore the end panel could axially outwardly deform and possibly initiate internal peeling. To prevent this peeling, the frame is provided with a thin flexible integral flange 36 forming a continuation of the ledge on which the end panel is seated. The end panel is also peelably bonded to the flange and the flange deforms or deflects with the end panel. The frame has a press fit onto the container, which is preferably in the form of a metal can, which at the end thereof to be closed by the closure is provided with a radially outwardly directed curl 48. The curl terminates in a raw edge 54 and is so shaped that when it is seated within a groove in the underside of the frame, the raw edge is embedded in a skirt portion of the frame to permanently and sealingly lock the curl within the frame.

Classifications:

International (IPC 8-9): B65D17/34 B65D17/347 B65D17/353 B65D17/40 B65D17/50 B65D43/02 B65D53/04 B65D77/20 B65D79/00 (Advanced/Invention);

B65D17/00 B65D17/28 B65D43/02 B65D53/00 B65D77/10 B65D79/00 (Core/Invention)

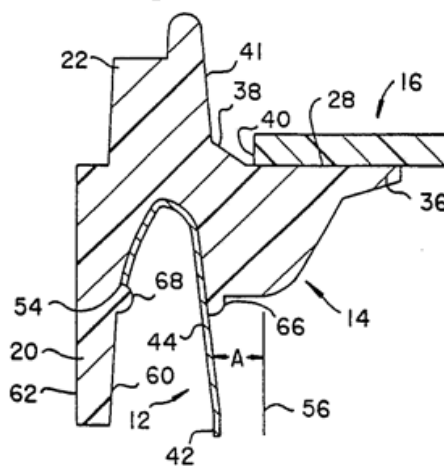
International (IPC 1-7): B65D17/16 B65D17/34 B65D17/347 B65D17/353 B65D17/50 B65D41/00 B65D41/48 B65D43/06 B65D53/04

CPC: B65D43/0212 B65D77/2024 B65D79/005 B65D2543/00027 B65D2543/00092 B65D2543/0024 B65D2543/00296 B65D2543/00314 B65D2543/0049 B65D2543/00537 B65D2543/00555 B65D2543/00657 B65D2543/00685 B65D2543/0074 B65D2543/00796 B65D2577/205

European: B65D43/02S3E B65D77/20E B65D79/00B L65D543/00Y1A L65D543/00Y1F2C L65D543/00Y1H2 L65D543/00Y1M10 L65D543/00Y1M6 L65D543/00Y8D1 L65D543/00Y8D3 L65D543/00Y8D5 L65D543/00Y8S1B10 L65D543/00Y8S1D2 L65D543/00Y8S3B4 L65D543/00Y8S3D2 L65D577/20M1

US: 215/232 220/270 220/359 220/359.2 229/125.17

PatBase - US5246134_A

**Family:**

Publication number	Publication date	Application number	Application date
AT164137 E	19980415	AT19920902729T	19921223
AU199334196 A1	19930728	AU19930034196	19921223
AU683010 B2	19971030	AU19930034196	19921223
CA2126682 AA	19940623	CA19922126682	19921223
CA2126682 C	20040224	CA19922126682	19921223
DE69224846 D1	19980423	DE19926024846	19921223
DE69224846 T2	19980917	DE19926024846T	19921223
EP0618872 A1	19941012	EP19930902729	19921223
EP0618872 B1	19980318	EP19930902729	19921223
JP2001527487 T2	20011225	JP19930511879T	19921223
JP3547131 B2	20040728	JP19930511879T	19921223
US5246134 A	19930921	US19910812026	19911223
WO9312978 A1	19930708	WO1992US11178	19921223

Priority:

US19910812026 19911223 WO1992US11178 19921223

Probable Assignee: SILGAN CONTAINERS CORP

Assignee(s): (std): POLYSTAR PACKAGING INC

Assignee(s): POLYSTAR PACKAGING INC NORWALK CONN US ; ROTH DONALD J ; SILGAN CONTAINERS CORP ; SAUER DONALD G ; DEUTSCHE BANK TRUST CO ; FRASER ROBERT W

Inventor(s): (std): FRASER ROBERT ; FRASER ROBERT W ; ROTH DONALD ; ROTH DONALD J ; SAUER DONALD ; SAUER DONALD G

Inventor(s): ROBERT W FRASER ; DONALD G SAUER ; DONALD J ROTH

Agent(s): LORD AND CO ; RICHES MCKENZIE AND HERBERT LLP

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

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT164137 E	19980415	LSGT	+	granted / extensions (spc, cpc, pte)	
AT164137 E	19980915	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AU199334196 A1	19930728	LSPB	+	published / reissued	
AU683010 B2	19971030	LSGT	+	granted / extensions (spc, cpc, pte)	
AU683010 B2	20040219	LSAS	PC	ASSIGNMENT	OWNER NAME : SILGAN

REGISTERED					CONTAINERS CORPORATION DESCRIPTION : FORMER OWNER WAS: POLYSTAR PACKAGING, INC.
CA2126682 AA	19940623	LSPB	+	published / reissued	
CA2126682 AA	19940623	LSNP	+AFNE	NATIONAL PHASE ENTRY	
CA2126682 AA	19990916	LSES	+EEER	EXAMINATION REQUEST	
CA2126682 AA	20091223	LSLE	-MKLA	LAPSED	
CA2126682 C	20040224	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69224846 D1	19990415	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69224846 D1	20040617	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	OWNER NAME : SILGAN CONTAINERS CORP. (N.D.GES.D.STAATES DELAWARE
DE69224846 D1	20091022	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69224846 T2	19980917	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0618872 A1	19941012	LSPB	+	published / reissued	
EP0618872 A1	19941012	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19940715
EP0618872 A1	19960228	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19960116
EP0618872 A1	19980318	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19980318
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EP0618872 A1	19980318	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 19980318
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EP0618872 A1	19980331	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0618872 A1	19980618	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19980618
EP0618872 A1	19980618	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT

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EP0618872 A1	19980715	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : 79381
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EP0618872 A1	20040130	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTY TYPE : OWNER REF COUNTRY CODE : CH OWNER : SILGAN CONTAINERS CORPORATION REF LEGAL EVENT CODE : PUE OLD PARTY : POLYSTAR PACKAGING INCORPORATED #2 TESTA PLACE # NORWALK, CT 06854 (US) -TRANSFER TO- SILGAN CONTAINERS CORPORATION #4 LANDMARK SQUARE # STAMFORD, CT 06901 (US)
EP0618872 A1	20040701	LSAS	NLS	NL: ASSIGNMENTS OF EP-PATENTS	PARTY TYPE : OWNER REF COUNTRY CODE : EP OWNER : SILGAN CONTAINERS CORPORATION
EP0618872 A1	20080131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20071203 YEAR OF FEE PAYMENT : 16
EP0618872 A1	20080229	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20071213 YEAR OF FEE PAYMENT : 16
EP0618872 A1	20080430	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20071210 YEAR OF FEE PAYMENT : 16
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EP0618872 A1	20090731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL

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EP0618872 A1	20090901	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON- PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20090701
EP0618872 A1	20091002	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20090831
EP0618872 A1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20081231
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EP0618872 B1	19980318	LSGT	+	granted / extensions (spc, cpc, pte)	
JP2001527487 T2	20011225	LSPB	+	published / reissued	
JP3547131 B2	20040728	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3547131 B2	20040129	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20040109
JP3547131 B2	20040219	LSRE	A521	WRITTEN AMENDMENT	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20040129
JP3547131 B2	20040317	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP3547131 B2	20040330	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20040330
JP3547131 B2	20040422	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20040413
JP3547131 B2	20040423	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: R150
JP3547131 B2	20070403	LSFE	+R250	RECEIPT OF ANNUAL FEES	DESCRIPTION : JAPANESE INTERMEDIATE CODE: R250
JP3547131 B2	20080430	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF	DESCRIPTION : PAYMENT UNTIL: 20090423 YEAR OF FEE PAYMENT : 5

DATABASE)					
JP3547131 B2	20090423	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
US5246134 A	19930921	LSGT	+	granted / extensions (spc, cpc, pte)	
US5246134 A	19911223	LSAS	AS	ASSIGNMENT	OWNER NAME : POLYSTAR PACKAGING, INCORPORATED, CONNECTICUT DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:ROTH, DONALD J.; SAUER, DONALD G.; FRASER, ROBERT W.; REEL/FRAME:005961/0908 EFFECTIVE DATE : 19911218
US5246134 A	19970321	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5246134 A	20010320	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5246134 A	20020806	LSAS	AS	ASSIGNMENT	OWNER NAME : DEUTSCHE BANK TRUST COMPANY AMERICAS, NEW YORK DESCRIPTION : SECURITY AGREEMENT; ASSIGNOR:SILGAN CONTAINERS CORPORATION; REEL/FRAME:013146/0703 EFFECTIVE DATE : 20020628
US5246134 A	20030916	LSAS	AS	ASSIGNMENT	OWNER NAME : SILGAN CONTAINERS CORPORATION, CONNECTICUT DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:POLYSLAR PACKAGING, INC.; REEL/FRAME:013974/0530 EFFECTIVE DATE : 20030910
US5246134 A	20041208	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5246134 A	20050705	LSAS	AS	ASSIGNMENT	OWNER NAME : SILGAN CONTAINERS CORPORATION, CONNECTICUT DESCRIPTION : PATENT RELEASE; ASSIGNOR:DEUTSCHE BANK TRUST COMPANY AMERICAS, AS COLLATERAL AGENT; REEL/FRAME:016460/0944 EFFECTIVE DATE : 20050630
WO9312978 A1	19930708	LSPB	+	published / reissued	
WO9312978 A1	19940623	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA REF DOCUMENT NUMBER : 2126682 KIND CODE OF REF DOCUMENT : A FORMAT OF REF DOCUMENT (F/P) : F
WO9312978 A1	19940623	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2126682 COUNTRY OF REF DOCUMENT : CA
WO9312978 A1	19940715	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1993902729 COUNTRY OF REF DOCUMENT : EP
WO9312978 A1	19941012	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1993902729 COUNTRY OF REF DOCUMENT : EP
WO9312978 A1	19941020	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9312978 A1	19980318	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1993902729 COUNTRY OF REF DOCUMENT : EP

Title: PLASTIC CLOSURE FOR CONTAINERS

Abstract: Source: US2006219652A A plastic closure for receipt on a container includes a plastic ring having an internal recess adapted to be received by snap fit over an external crown or bead on the container finish such that the ring lies at or below the end of the finish and is retained against axial movement on the container finish. A plastic lid is coupled by a hinge to the ring, with the ring, the lid and the hinge being of one-piece integrally molded plastic construction. The lid has a skirt that is adapted releasably to be snapped to the ring in a closed position of the lid over the ring. The lid skirt preferably has an external bead that is adapted to be received by snap-fit within an internal channel on the ring in the closed position of the lid over the ring, and a conical internal surface on the ring preferably is provided to guide the bead on the lid into the channel on the ring.

Classifications:

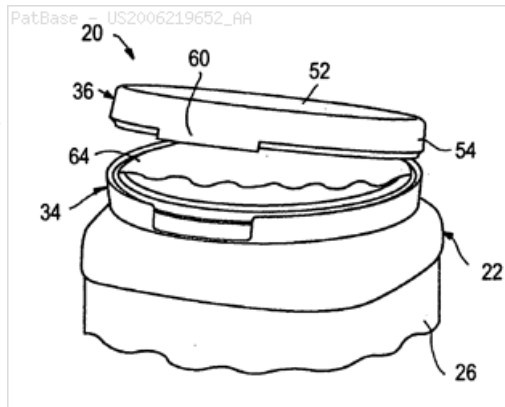
International (IPC 8-9): B60S1/00 B65D17/00 B65D39/00 B65D41/00 B65D41/18 B65D43/14 B65D43/16 B65D47/00 B65D47/08 B65D51/18 B65D51/20 B65D55/00 B65D55/16 (Advanced/Invention); B60S1/00 B65D17/00 B65D39/00 B65D41/00 B65D43/16 B65D47/08 B65D51/18 B65D55/00 (Core/Invention); B65D (Subclass/Invention)

International (IPC 1-7): B65D43/16 B65D43/16 B65D47/08 B65D47/08 B65D55/16 B65D55/16

CPC: Y10S220/13 B65D47/0838 B65D51/20 B65D55/16 B65D2251/105 B65D2251/205

European: B65D47/08B4C B65D51/20 B65D55/16 L65D251/10D4 L65D251/20B

US: 215/232 215/235 215/237 220/254.3 220/258.1 220/359.1 220/780 220/837 220/DIG.13 222/556 222/562



Family:

Publication number	Publication date	Application number	Application date
AR053038 AA	20070418	AR2006P101172	20060327
AR061697 AA	20080917	AR2007P102799	20070625
AU2006233134 AA	20061012	AU20060233134	20060207
BRPI0609617 A2	20090616	BR2006PI09617	20060207
CL2006000681 A1	20070525	CL20060000681	20060327
CL2007001859 A1	20080404	CL20070001859	20070625
CN101151191 A	20080326	CN200680009871	20060207
EP1868910 A1	20071226	EP20060734409	20060207
EP2040990 A2	20090401	EP20070796093	20070614
IN04861CN2007 A	20080125	IN2007CN04861	20071030
MX2007009743 A1	20070925	MX20070009743	20060207
RU2007139901 A	20090510	RU20070139901	20060207
TH90940 A	20080804	TH20071003085	20070621
US2006219652 AA	20061005	US20050095961	20050330
US2007221605 AA	20070927	US20060474754	20060626
US7823736 BA	20101102	US20060474754	20060626
WO06107391 A1	20061012	WO2006US04086	20060207
WO08002399 A2	20080103	WO2007US13942	20070614
WO08002399 A3	20080529	WO2007US13942	20070614
ZA200707398 A	20081126	ZA20070007398	20060207

Priority:

US20050095961 20050330 US20060474754 20060626 WO2006US04086 20060207
WO2007US13942 20070614

Probable Assignee: BERRY PLASTICS CORP

Assignee(s): (std): BROZELL LEONORA M ; GRANT EDWARD A ; OWENS ILLINOIS CLOSURE INC ; PUGNE DARIN M ; REXAM CLOSURE SYSTEMS INC

Assignee(s): REXAM CLOSURE SYSTEMS LLC ; BERRY PLASTICS CORP

Inventor(s): (std): DARIN M PUGNE LEONORA M BROZEL ; BROZELL LEONORA M ; PUGNE DARIN M ; GRANT EDWARD A

Inventor(s): DARIN M PUGNE ; DARIN M PUGNE LEONORA M BROZELL EDWARD A GRANT ; DARIN MPUGNE ; DARIN MPUGNE LEONORA M BROZELL EDWARD AGRANT ; EDWARD A GRANT ; EDWARD A GRANT DARIN M PUGNE ; EDWARD AGRANT ; GRANT EDWARD ; LEONORA M BROZELL ; PUGNE DARIN

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; JOHANSSON; MERGEL VOLKER; OWENS ILLINOIS INC; REISING ETHINGTON PC; SMITH SUSAN L

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR053038 AA	20070418	LSPB	+	published / reissued	
AR053038 AA	20091229	LSWD	-FB	SUSPENSION OF GRANTING	

PROCEDURE					
AR061697 AA	20080917	LSPB	+	published / reissued	
AR061697 AA	20100715	LSWD	-FB	SUSPENSION OF GRANTING PROCEDURE	
AU2006233134 AA	20061012	LSPB	+	published / reissued	
AU2006233134 AA	20100325	LSLE	-MK1	APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION IN RELEVANT PERIOD	
BRPI0609617 A2	20090616	LSPB	+	published / reissued	
BRPI0609617 A2	20110215	LSAS	B25D	REQUESTED CHANGE OF NAME OF APPLICANT APPROVED	OWNER NAME : REXAM CLOSURE SYSTEMS INC. (US) DESCRIPTION : ALTERADO DE: OWENS-ILLINOIS CLOSURE INC.
BRPI0609617 A2	20120605	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	DESCRIPTION : REFERENTE AS 5A E 6A ANUIDADES.
BRPI0609617 A2	20121023	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)	DESCRIPTION : REFERENTE AO DESPACHO 8.6 PUBLICADO NA RPI 2161 DE 05/06/2012.
CL2006000681 A1	20070525	LSPB	+	published / reissued	
CL2007001859 A1	20080404	LSPB	+	published / reissued	
CN101151191 A	20080326	LSPB	+	published / reissued	
CN101151191 A	20080326	LSPB	+C06	PUBLICATION	
CN101151191 A	20100818	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EP1868910 A1	20071226	LSPB	+	published / reissued	
EP1868910 A1	20071226	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20070829
EP1868910 A1	20080423	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : GRANT, EDWARD, A.
EP1868910 A1	20080423	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : PUGNE, DARIN, M.
EP1868910 A1	20080917	LSAS	RAP1	TRANSFER OF RIGHTS OF AN EP PUBLISHED APPLICATION	OWNER NAME : REXAM CLOSURE SYSTEMS INC.
EP1868910 A1	20081217	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20081118
EP1868910 A1	20090923	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20090331
EP2040990 A2	20090401	LSPB	+	published / reissued	
EP2040990 A2	20090401	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090115
EP2040990 A2	20110622	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20110104
IN04861CN2007 A	20080125	LSPB	+	published / reissued	
MX2007009743 A1	20070925	LSPB	+	published / reissued	
MX2007009743 A1	20141031	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
RU2007139901 A	20090510	LSPB	+	published / reissued	

TH90940 A	20080804	LSPB	+	published / reissued	
US2006219652 AA	20061005	LSPB	+	published / reissued	
US2006219652 AA	20050330	LSAS	AS	ASSIGNMENT	OWNER NAME : OWENS-ILLINOIS CLOSURE INC., OHIO DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GRANT, EDWARD A.; PUGNE, DARIN M.; REEL/FRAME:016475/0564 EFFECTIVE DATE : 20050324
US2007221605 AA	20070927	LSPB	+	published / reissued	
US2007221605 AA	20060626	LSAS	AS	ASSIGNMENT	OWNER NAME : OWENS-ILLINOIS CLOSURE INC., OHIO DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:PUGNE, DARIN M.; BROZELL, LEONORA M.; GRANT, EDWARD A.; REEL/FRAME:018021/0102 EFFECTIVE DATE : 20060623
US7823736 BA	20101102	LSGT	+	granted / extensions (spc, cpc, pte)	
US7823736 BA	20060626	LSAS	AS	ASSIGNMENT	OWNER NAME : OWENS-ILLINOIS CLOSURE INC., OHIO DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:PUGNE, DARIN M.; BROZELL, LEONORA M.; GRANT, EDWARD A.; REEL/FRAME:018021/0102 EFFECTIVE DATE : 20060623
US7823736 BA	20100927	LSAS	AS	ASSIGNMENT	OWNER NAME : REXAM CLOSURE SYSTEMS INC., OHIO DESCRIPTION : CHANGE OF NAME; ASSIGNOR:OWENS-ILLINOIS CLOSURE INC.; REEL/FRAME:025044/0215 EFFECTIVE DATE : 20070801
US7823736 BA	20120803	LSAS	AS	ASSIGNMENT	OWNER NAME : REXAM CLOSURE SYSTEMS LLC, NORTH CAROLINA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:REXAM CLOSURE SYSTEMS INC.; REEL/FRAME:028715/0079 EFFECTIVE DATE : 20110815
US7823736 BA	20120809	LSAS	AS	ASSIGNMENT	OWNER NAME : BERRY PLASTICS CORPORATION, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:REXAM CLOSURE SYSTEMS LLC; REEL/FRAME:028768/0442 EFFECTIVE DATE : 20120529
US7823736 BA	20140502	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
WO06107391 A1	20061012	LSPB	+	published / reissued	
WO06107391 A1	20070723	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006233134 COUNTRY OF REF DOCUMENT : AU
WO06107391 A1	20070810	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2007/009743 COUNTRY OF REF DOCUMENT : MX
WO06107391 A1	20070816	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2006233134 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20060207 KIND CODE OF REF DOCUMENT : A
WO06107391 A1	20071002	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO06107391 A1	20071030	LSNP	+WWE	WIPO	REF DOCUMENT NUMBER :

				INFORMATION: ENTRY INTO NATIONAL PHASE	2007139901 COUNTRY OF REF DOCUMENT : RU
WO06107391 A1	20090616	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0609617 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2
WO08002399 A2	20080103	LSPB	+	published / reissued	
WO08002399 A3	20081230	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO08002399 A3	20090126	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : RU
ZA200707398 A	20081126	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: ASSEMBLY FOR SEALING A COMPONENT AND METHOD

Abstract: Source: US2009127805A An assembly is provided that has a first component at least partially defining a first generally tubular cavity or channel. A barrier layer is embedded within the first component to separate the first component into an inner layer and an outer layer. The first component has a terminal end at which the barrier layer is exposed to the first cavity. A second component at least partially defines a second cavity. The second component is positioned with respect to the first component such that the first cavity is in communication with the second cavity. A seal is used to seal the second component to the first component substantially at the barrier layer. The barrier layer and the seal thereby block at least some of the first component from permeation from the first cavity. A method is also provided.

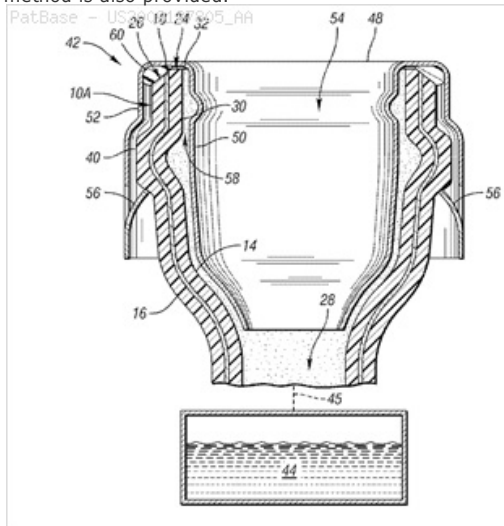
Classifications:

International (IPC 8-9): B29C49/50 B60K15/03 B60K15/04
B67D7/54 F16J15/06 F16J15/10 (Advanced/Invention);
B60K15/03 B60K15/04 (Advanced/Non-invention);
B29C49/50 B60K15/03 B60K15/04 F16J15/10 (Core/Invention)

CPC: B60K15/04

European: B60K15/04

US: 264/279.1 264/279.100S 277/627 277/627P



Family:

Publication number	Publication date	Application number	Application date
CN101868368 A	20101020	CN200880116835	20081120
CN201415942 Y	20100303	CN200820176285U	20081120
DE112008003040 T5	20101007	DE200811003040T	20081120
JP2011511906 T2	20110414	JP20100534560T	20081120
KR20100089849 A	20100812	KR20107010941	20081120
US2009127805 AA	20090521	US20070943218	20071120
WO09066156 A2	20090528	WO2008IB03146	20081120
WO09066156 A3	20090709	WO2008IB03146	20081120

Priority:

US20070943218 20071120 WO2008IB03146 20081120

Probable Assignee: EATON CORP

Assignee(s): (std): BENJEY ROBERT PHILIP ; EATON CORP

Inventor(s): (std): BENJ R P ; BENJEY ROBERT PHILIP ; PHILIP BENJEY ROBERT ; BENJEY ROBERT P

Inventor(s): R P BENJ

Agent(s): QUINN LAW GROUP PLLC

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN101868368 A	20101020	LSPB	+	published / reissued	
CN101868368 A	20101020	LSPB	+C06	PUBLICATION	
CN101868368 A	20131016	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
CN201415942 Y	20100303	LSGT	+	granted / extensions (spc, cpc, pte)	
CN201415942 Y	20100303	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN201415942 Y	20140108	LSLE	-C17	CESSATION OF PATENT RIGHT	
DE112008003040 T5	20101007	LSPB	+	published / reissued	
DE112008003040 T5	20130912	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP	EFFECTIVE DATE : 20130601

					RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE
JP2011511906 T2	20110414	LSPB	+	published / reissued	
JP2011511906 T2	20111122	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20111121
JP2011511906 T2	20111122	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20111121
JP2011511906 T2	20111221	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20111220
JP2011511906 T2	20111221	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20111220
KR20100089849 A	20100812	LSPB	+	published / reissued	
KR20100089849 A	20131221	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
US2009127805 AA	20090521	LSPB	+	published / reissued	
US2009127805 AA	20071204	LSAS	AS	ASSIGNMENT	OWNER NAME : EATON CORPORATION, OHIO DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR: BENJAY, ROBERT PHILIP; REEL/FRAME: 020195/0502 EFFECTIVE DATE : 20071126
WO09066156 A2	20090528	LSPB	+	published / reissued	
WO09066156 A2	20100520	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2010534560 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A
WO09066156 A3	20100519	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20107010941 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A
WO09066156 A3	20100520	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2010534560 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A
WO09066156 A3	20100520	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010534560 COUNTRY OF REF DOCUMENT : JP
WO09066156 A3	20101215	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 08852355 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2

Title: CLOSURES

Abstract: Source: US3254785A (Claim 1) 1. A closure for a bottle having an upper portion generally circular in cross section and comprising an interior throat extending to an annular top portion and then to a bulbous portion having an undercut locking ledge therebeneath, said closure being formed of plastic and comprising, as integrally formed components, a top portion to overlie the top portion of the bottle, a peripheral skirt depending from the closure top portion to be telescoped over the bulbous portion of the bottle, a locking lip canted downwardly and inwardly from the lower end of the skirt and terminating in a circular outline larger than the top portion of the bottle and smaller than the bulbous portion thereof, whereby the locking lip will be folded to an essentially upright position as the skirt is telescoped over the bulbous portion of the bottle, the length of said lip being such to engage the locking ledge, a converging sealing cone depending from the undersurface of the closure top portion to be inserted into the interior throat of the bottle, said cone being open ended with a relatively thin wall to provide a pressure assist seal with a wide range of interior throat diameters, a lift tab projecting laterally and outwardly of said skirt, and a spacing rib on the inner surface of said skirt adjacent said lift tab, said spacing rib being engageable with the major diameter of the bulbous portion of the bottle, whereby finger pressure or the like on the lift tab will tilt the closure from the bottle with the locking lip remaining in its upright position.

Classifications:

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

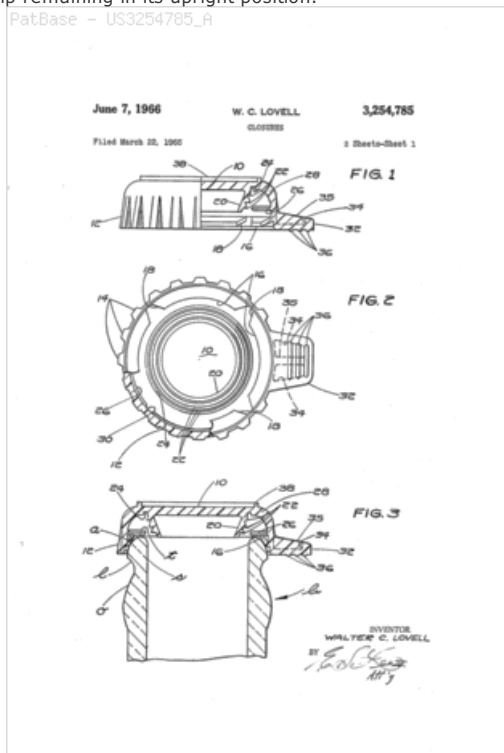
International (IPC 1-7): B65D41/60

CPC: B65D41/185

European: B65D41/18B

US: 215/305 215/320 D9/443

PatBase - US3254785_R

**Family:**

Publication number	Publication date	Application number	Application date
US3254785 A	19660607	US19650441628	19650322

Priority:

US19650441628 19650322

Probable Assignee:

LOVELL WALTER C

Assignee(s): (std):

LOVELL WALTER C

Inventor(s): (std):

LOVELL WALTER C

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US3254785 A	19660607	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: LONG-TERM PACKAGING OF FOOD FOR CONSUMER USE

Abstract: Source: US2012048825A Long-term packaging using a combination of an induction seal and a reseal without release layers, both of which are activated by the induction heating process. The exemplary induction seal comprises a laminate of a heat-sealing layer, an aluminum foil layer, and a foam backing. The exemplary reseal comprises a low-density polyethylene foam core sandwiched between first and second layers of solid low-density polyethylene film. The reseal deforms during the induction heating process to be shaped to engage the outer and inner peripheral surfaces of the finish, so that the reseal is hermetic even after the induction seal is removed. Preferred containers are PETE with PP compression closures. Replaceable desiccant and oxygen scavengers may be used with food or other contained material. Precise timing of induction heating is required to achieve the desired result. Kits for making such packaging are disclosed.

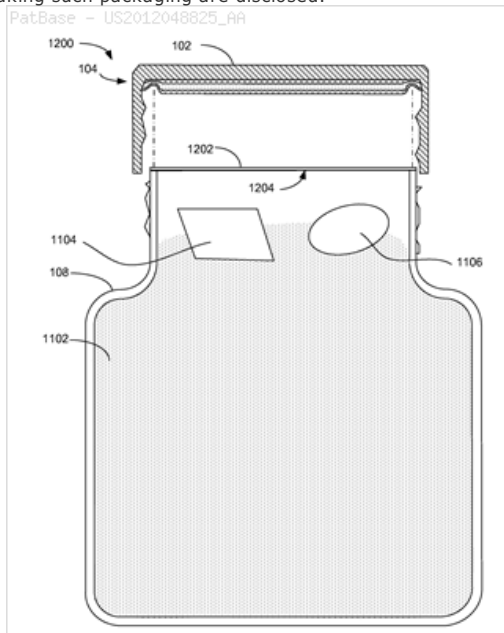
Classifications:

International (IPC 8-9): B65B51/22 B65B55/19 B65B7/28 B65D1/10 B65D41/04 B65D51/14 B65D53/04 B65D81/26 (Advanced/Invention)

CPC: B65B7/2835 B65B51/227 B65B55/19 B65D41/045 B65D53/04 B65D81/266

European: B65B51/22D B65B55/19 B65B7/28E B65D41/04D2 B65D53/04 B65D81/26F

US: 1/1 215/232 53/428 53/428S 53/471 53/471S 53/478 53/478S



Family:

Publication number	Publication date	Application number	Application date
US2012048825 AA	20120301	US20110220409	20110829
US9302796 BB	20160405	US20110220409	20110829

Priority:

US20100378750P 20100831 US20110220409 20110829

Probable Assignee: FOODWISE TRN LLC

Assignee(s): (std): AVERETT KRISTI BINA ; FOODWISE TRN LLC

Inventor(s): (std): AVERETT KRISTI BINA

Agent(s): KEITH L JENKINS REGISTERED PATENT ATTORNEY LLC; KEITH L

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2012048825 AA	20120301	LSPB	+	published / reissued	
US2012048825 AA	20140929	LSAS	AS	ASSIGNMENT	OWNER NAME : FOODWISE TRN, LLC, ARIZONA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AVERETT, KRISTI BINA; REEL/FRAME:033847/0452 EFFECTIVE DATE : 20130913
US9302796 BB	20160405	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Pry-off closure cap

Abstract: Source: US3930589A An improved pry-off closure cap is described. The cap has a composite structure comprising a metal cover disc held in a molded plastic ring. The plastic ring has an inner groove for retaining the metal cover and container engaging means consisting of either spaced lugs or a continuous bead positioned on a depending skirt portion of the ring and positioned below the cover retaining groove.

Classifications:

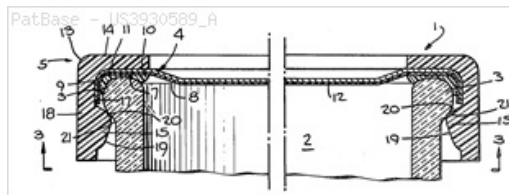
International (ipc 8-9): B65D45/30 B65D51/14 B65D51/18 B65D53/02 (Advanced/Invention); B65D45/00 B65D51/00 B65D51/18 (Core/Invention)

International (ipc 1-7): B65D41/02 B65D41/16 B65D41/22 B65D43/06 B65D45/30 B65D51/14 B65D51/18 B65D53/00 B65D53/02 B65D85/30

CPC: B65D45/30 B65D51/145

European: B65D45/30 B65D51/14B

US: 215/347 215/349 215/352



Family:

Publication number	Publication date	Application number	Application date
AU197472477 A1	19760219	AU19740072477	19740819
BE819519 A1	19741231	BE19740148184	19740904
BR7407259 A0	19750708	BR19740007259	19740830
CA1037422 A1	19780829	CA19740206701	19740809
DE2442342 A1	19750313	DE19742442342	19740904
ES224222 U	19770116	ES19740224222U	19740907
ES224222 Y	19770516	ES19740224222U	19740907
FR2243124 A1	19750404	FR19740030104	19740904
FR2243124 B1	19790928	FR19740030104	19740904
GB1477902 A	19770629	GB19740037804	19740829
IT1019195 A	19771110	IT19740052887	19740905
JP1194763 C3	19840312	JP19740102165	19740906
JP50054488 A2	19750514	JP19740102165	19740906
JP58024351 B4	19830520	JP19740102165	19740906
LU70875 A	19750102	LU19740070875	19740906
NL7411727 A	19750311	NL19740011727	19740904
SE7411275 A	19750310	SE19740011275D	19740906
SE7411275 L	19750310	SE19740011275	19740906
US3930589 A	19760106	US19750567483	19750414
ZA7405174 A	19750827	ZA19740005174	19740813

Priority:

US19730394967 19730907 US19750567483 19750414

Probable Assignee: ANCHOR HOCKING CORP

Assignee(s): (std): ANCHOR HOCKING CORP ; ANCHOR HOCKING CORP US ; ANCHOR HOCKING TE LANCASTER OHIO VER S CORP

Assignee(s): ANCHOR HOCKING TE LANCASTER OHIO VER ST V AM CORP ; KOONTZ CARL E ; ANCHOR HICKING CORP ; ANCHOR HOCKING PACKAGING CO ; ANCHOR HOCKING CORP LANCASTER OHIO V ST A

Inventor(s): (std): CARL EDGAR KOONTZ ; KAARU II KUUNTSU ; KOONTZ C ; KOONTZ C E ; KOONTZ CARL E ; KOONTZ CARL EDGAR

Inventor(s): KOONTZ CARL E THORNVILLE OHIO V ST A

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU197472477 A1	19760219	LSPB	+	published / reissued	
BE819519 A1	19741231	LSPB	+	published / reissued	
BE819519 A1	19940101	LSLE	-RE20	PATENT EXPIRED	OWNER NAME : ANCHOR HOCKING CORP. EFFECTIVE DATE : 19940904
CA1037422 A1	19780829	LSPB	+	published / reissued	
DE2442342 A1	19750313	LSPB	+	published / reissued	
DE2442342 A1	19811029	LSSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
DE2442342 A1	19880714	LSRV	-8131	REJECTION	
ES224222 U	19770116	LSPB	+	published / reissued	
ES224222 Y	19770516	LSGT	+	granted / extensions (spc, cpc, pte)	

FR2243124 A1	19750404	LSPB	+	published / reissued	
FR2243124 B1	19790928	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1477902 A	19770629	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1477902 A	19771109	LSGT	+PS	PATENT SEALED	
GB1477902 A	19940928	LSLE	-PE20	PATENT EXPIRED AFTER TERMINATION OF 20 YEARS	EFFECTIVE DATE : 19940828
IT1019195 A	19771110	LSGT	+	granted / extensions (spc, cpc, pte)	
IT1019195 A	19991027	LSFE	TA	FEE PAYMENT DATE (SITUATION AS OF PRS-DATE), DATA COLLECTED SINCE 19931001	EFFECTIVE DATE : 19930929
JP1194763 C3	19840312	LSGT	+	granted / extensions (spc, cpc, pte)	
JP50054488 A2	19750514	LSPB	+	published / reissued	
JP58024351 B4	19830520	LSPB	+	published / reissued	
LU70875 A	19750102	LSGT	+	granted / extensions (spc, cpc, pte)	
NL7411727 A	19750311	LSPB	+	published / reissued	
NL7411727 A	19811001	LSES	+BA	A REQUEST FOR SEARCH OR AN INTERNATIONAL- TYPE SEARCH HAS BEEN FILED	
NL7411727 A	19831003	LSES	BB	A SEARCH REPORT HAS BEEN DRAWN UP	
NL7411727 A	19840301	LSES	+BC	A REQUEST FOR EXAMINATION HAS BEEN FILED	
NL7411727 A	19870701	LSWD	-BN	A DECISION NOT TO PUBLISH THE APPLICATION HAS BECOME IRREVOCABLE	
SE7411275 A	19750310	LSPB	+	published / reissued	
SE7411275 A	19950228	LSLE	-NAV	PATENT APPLICATION HAS LAPSED	REF DOCUMENT NUMBER : 7411275-6 EFFECTIVE DATE : 19790926 FORMAT OF REF DOCUMENT (F/P) : F
SE7411275 A	19950228	LSLE	-NAV	PATENT APPLICATION HAS LAPSED	REF DOCUMENT NUMBER : 7411275-6 EFFECTIVE DATE : 19790926 FORMAT OF REF DOCUMENT (F/P) : F
US3930589 A	19760106	LSGT	+	granted / extensions (spc, cpc, pte)	
US3930589 A	19910131	LSAS	AS	ASSIGNMENT	OWNER NAME : ANCHOR HOCKING PACKAGING COMPANY, 1765 WEST FAIR A DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:ANCHOR HOCKING CORPORATION, A DE CORP.; REEL/FRA:005581/0330 EFFECTIVE DATE : 19901228
ZA7405174 A	19750827	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: CONTAINER CLOSED BY A MEMBRANE TYPE SEAL

Abstract: Source: US4044941A The open top of a container is surrounded by a rim having a curved upwardly presented surface and a slight ridge projecting upwardly from the curved surface. A seal membrane containing a metal foil extends over the open top of the container and seats against the ridge on the container rim. A flexible lid fits over the membrane and interlocks with the rim so that the membrane is interposed between the ridge and the lid. The lid has a downwardly opening annular groove which receives the container rim and this causes the seal to wrap generally around the curved upper surface of the rim. Once the lid and membrane are in place, the membrane is induction heated above the melting point of the container material, while a downwardly directed force is applied to the lid. The ridge, which is in contact with the seal membrane, melts down and thereafter is allowed to cool while the force is maintained on it, so that when the material solidifies, it is bonded to the membrane.

Classifications:

International (IPC 8-9): B29C65/02 B65D43/02 B65D51/20

B65D77/20 (Advanced/Invention);

B29C65/02 B65D43/02 B65D51/18 B65D77/10 (Core/Invention)

International (IPC 1-7): B65D3/06 B65D5/64 B65D53/00

CPC: Y10S215/01 B29C66/53421 B29C66/542 B65D51/20

B29C65/3644 B29C65/3656 B29C65/368 B29C66/72321

B65D43/0212 B65D2251/0018 B65D2251/0093 B65D2543/00027

B65D2543/00092 B65D2543/00296 B65D2543/00527

B65D2543/00537 B65D2543/00657 B65D2543/00685

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B29C66/5412

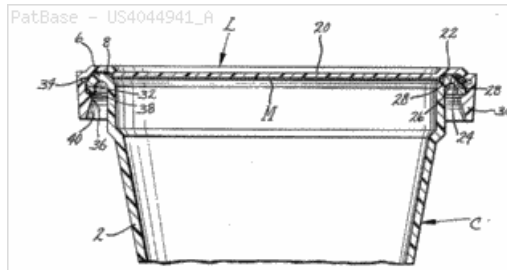
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L29C66/30223 L65D251/00Y2F L65D251/00Y6M L65D543/00Y1A L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y8D1N

L65D543/00Y8D3 L65D543/00Y8S1B10 L65D543/00Y8S1D2 L65D543/00Y8S3B4 L65D543/00Y8S3D2

US: 206/515 215/232 215/341 215/DIG.1 220/258.1 220/258.3 220/359.4 220/795 229/125.05 229/125.35 229/43 383/48 383/94



Family:

Publication number	Publication date	Application number	Application date
US4044941 A	19770830	US19760675798	19760412

Priority:

US19760675798 19760412

Probable Assignee:

KNUDSEN DAVID S

Assignee(s): (std):

KNUDSEN DAVID S

Inventor(s): (std):

KNUDSEN DAVID S

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US4044941 A	19770830	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Leak-proof container

Abstract: Source: US5954215A A closure for a container having an open top surrounded by a container wall. The closure includes a top wall from which a hollow insert depends for reception within the opening of the container and further includes an outer skirt that depends from the top wall for releasably engaging an outer face of the container wall. The insert has a first seal and a second seal for sealingly engaging the inner face of the container wall. The second seal is formed upwardly of the first seal, and a channel is formed between the seals to prevent leakage through capillary action. Additional embodiments include a bulbous first seal, a reinforced closure for pressurization or vacuum applications, flat-bottomed external screw threads formed on the container to prevent a pulling force from separating the closure from the container, and an annular concavity formed in the closure to enable internal threads formed in the outer skirt to slip over the external threads formed in the container during attachment of the closure to the container by a pushing action.

Classifications:

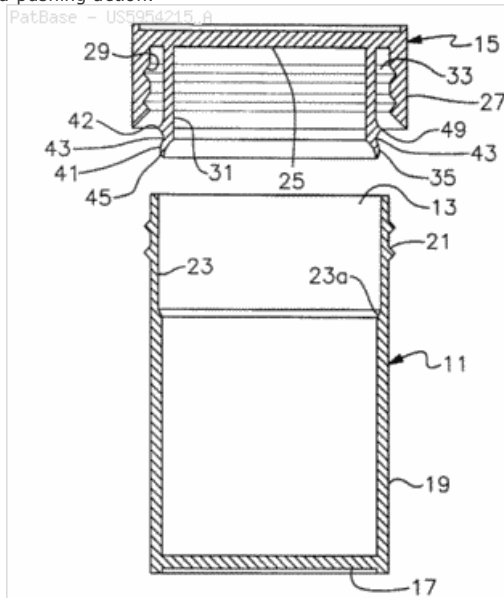
International (IPC 8-9): B65D41/17 B65D41/18 (Advanced/Invention); B65D41/02 (Core/Invention)

International (IPC 1-7): B65D41/16

CPC: B65D41/17 B65D41/185

European: B65D41/17 B65D41/18B

US: 215/318 215/320 215/354



Family:

Publication number	Publication date	Application number	Application date
US5954215 A	19990921	US19960764689	19961211

Priority:

US19960764689 19961211

Probable Assignee: CLEGG JOHN

Assignee(s): (std): CLEGG JOHN ; MARLEY ROBERT D ; NUJENKO PTY LTD ; SCHWARTZ JAMES A

Assignee(s): SCHWARTZ JAMES A 1705 INDIAN ROCKS ROADBELLEAIR FL

Inventor(s): (std): ALTER KONRAD G

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US5954215 A	19990921	LSGT	+	granted / extensions (spc, cpc, pte)	
US5954215 A	19970611	LSAS	AS	ASSIGNMENT	OWNER NAME : CLEGG, JOHN, AUSTRALIA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ALTER, KONRAD GEORGE; REEL/FRAME:008552/0022 EFFECTIVE DATE : 19961204
US5954215 A	19970611	LSAS	AS	ASSIGNMENT	OWNER NAME : MARLEY, ROBERT D., FLORIDA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ALTER, KONRAD GEORGE; REEL/FRAME:008552/0022 EFFECTIVE DATE : 19961204
US5954215 A	19970611	LSAS	AS	ASSIGNMENT	OWNER NAME : NUJENKO PTY. LTD., AUSTRALIA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ALTER, KONRAD GEORGE; REEL/FRAME:008552/0022 EFFECTIVE DATE : 19961204
US5954215 A	19970611	LSAS	AS	ASSIGNMENT	OWNER NAME : SCHWARTZ, JAMES A., FLORIDA DESCRIPTION : ASSIGNMENT OF

ASSIGNORS INTEREST;
ASSIGNOR:ALTER, KONRAD GEORGE;
REEL/FRAME:008552/0022
EFFECTIVE DATE : 19961204

US5954215 A	20030922	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5954215 A	20031118	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20030921

Title: Composite container construction

Abstract: Source: US4459793A A container for vacuum packaging of products includes an outer container and an inner liner which conforms generally to the configuration of the outer container and is secured to the upper open end thereof while the remainder of the container and liner are unattached. A vent is provided between the atmosphere and the space between the container and liner so that the liner can expand and collapse as differential pressures are applied to the product sealed in the liner by a plastic film secured open end thereof.

Classifications:

International (IPC 8-9): B65D25/18 B65D8/06

B65D90/04 (Advanced/Invention);

B65D25/14 B65D8/04 B65D90/04 (Core/Invention)

International (IPC 1-7): B65B3/00 B65B31/04 B65B7/28 B65D25/18 B65D51/20 B65D90/04

CPC: B65D25/18

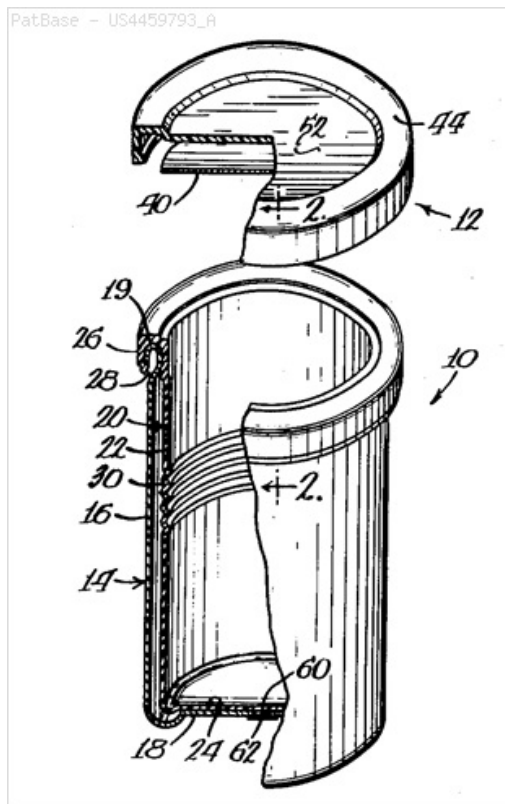
European: B65D25/18

US: 206/524.8 206/583 220/258 220/258.2 220/288 220/306

220/404 220/426 220/461 220/495.04 220/495.08 220/609 220/666

220/672 229/117.29 426/398 426/404 426/411 53/432 53/434

53/449 53/469



Family:

Publication number	Publication date	Application number	Application date
AU198171751 A1	19811126	AU19810071751	19810416
EP0050667 A1	19820505	EP19810901427	19810416
GB2090220 A1	19820707	GB19810037786	19810416
US4459793 A	19840717	US19820385242	19820604
US4466553 A	19840821	US19810299982	19810908
WO8103163 A1	19811112	WO1981US00501	19810416

Priority:

US19800144545 19800428 US19810299982 19810908 US19820385242 19820604
 WO1981US00501 19810416

Probable Assignee: NAT CAN CORP

Assignee(s): (std): NAT CAN CORP ; NATIONAL CAN CORP

Assignee(s): AMERICAN NATIONAL CAN CORP

Inventor(s): (std): ZENGER R ; ZENGER R D ; ZENGER RICHARD D

Designated states: AU DE FR GB JP NL SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU198171751 A1	19811126	LSPB	+	published / reissued	
EP0050667 A1	19820505	LSPB	+	published / reissued	
EP0050667 A1	19821013	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19820628
EP0050667 A1	20070808	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : ZENGER, RICHARD D.
GB2090220 A1	19820707	LSPB	+	published / reissued	
GB2090220 A1	19850703	LSWD	-WAP	APPLICATION WITHDRAWN, TAKEN	

					TO BE WITHDRAWN OR REFUSED ** AFTER PUBLICATION UNDER SECTION 16(1)
US4459793 A	19840717	LSGT	+	granted / extensions (spc, cpc, pte)	
US4459793 A	19871116	LSAS	AS	ASSIGNMENT	OWNER NAME : AMERICAN NATIONAL CAN CORPORATION, A CORP OF DE. DESCRIPTION : MERGER; ASSIGNORS:AMERICAN CAN PACKAGING INC., A CORP. OF DE.; TRAFALGAR INDUSTRIES INC., (INTO); NATIONAL CAN CORPORATION; REEL/FRA:004813/0201 EFFECTIVE DATE : 19870430
US4459793 A	19880114	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4459793 A	19911213	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4459793 A	19960714	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4459793 A	19960924	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19960717
US4466553 A	19840821	LSGT	+	granted / extensions (spc, cpc, pte)	
US4466553 A	19871116	LSAS	AS	ASSIGNMENT	OWNER NAME : AMERICAN NATIONAL CAN CORPORATION, A CORP OF DE. DESCRIPTION : MERGER; ASSIGNORS:AMERICAN CAN PACKAGING INC., A CORP. OF DE.; TRAFALGAR INDUSTRIES INC., (INTO); NATIONAL CAN CORPORATION; REEL/FRA:004813/0201 EFFECTIVE DATE : 19870430
US4466553 A	19880222	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4466553 A	19911213	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4466553 A	19960818	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4466553 A	19961029	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19960821
WO8103163 A1	19811112	LSPB	+	published / reissued	

Title: Gasket with a self-supporting protrusion

Abstract: Source: US5325985A A gasket for sealing a channel of a mounting cup to a container bead including at least one protrusion at an end of the gasket for retaining the mounting cup in position on a container bead prior to clinching. Six such protrusions can be equidistantly positioned about the gasket. A gasketed mounting cup including such protrusions is also disclosed. A method for manufacturing such a gasketed mounting cup is disclosed as well.

Classifications:

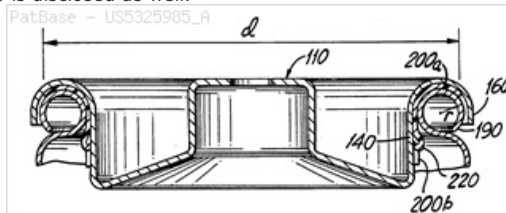
International (IPC 8-9): B21D39/03 B21D51/38 B21D53/20 B65D83/14 (Advanced/Invention); B21D51/38 B65D83/14 (Core/Invention)

International (IPC 1-7): B21B15/00 B21D39/03 B21D53/20 B65D39/04 B65D53/00 B65D53/02 B65D83/14 B65D83/38

CPC: B21D51/38 B65D83/38

European: B21D51/38 B65D83/38

US: 215/341 215/346 220/308 220/358 220/378 220/614



Family:

Publication number	Publication date	Application number	Application date
AU199333345 A1	19930728	AU19930033345	19921223
CN1075460 A	19930825	CN19921015372	19921224
GB2263315 A1	19930721	GB19920025727	19921209
GB2263315 B2	19950104	GB19920025727	19921209
GB9225727 A0	19930203	GB19920025727	19921209
MX9207073 A1	19930601	MX19920007073	19921207
PT101151 A	19940630	PT19920101151	19921222
TH15178 A	19941220	TH19921001864	19921216
TW245665 B	19950421	TW19920110349	19921224
US5325985 A	19940705	US19930140966	19931025
WO9312982 A1	19930708	WO1992US11186	19921223
ZA9209466 A	19930610	ZA19920009466	19921207

Priority:

US19910814370 19911226 US19930140966 19931025 WO1992US11186 19921223

Probable Assignee: PRECISION VALVE CORP

Assignee(s): (std): PRECISION VALVE CORP

Inventor(s): (std): ABPLANALP ROBERT HENRY ; O TOOLE TIMOTHY ; RADTKE CHARLES S

Inventor(s): ROBERT HENRY ABPLANALP ; TIMOTHY O TOOLE ; PRECISION VALVE CORP ; Radtke ; CHARLES S RADTKE ; Charles S.

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IE IT JP KR LU MC NL NO PT RU SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
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CN1075460 A	19930825	LSPB	+	published / reissued	
CN1075460 A	19930825	LSPB	+C06	PUBLICATION	
CN1075460 A	19970716	LSDW	-C01	DEEMED WITHDRAWAL OF PATENT APPLICATION (PATENT LAW 1993)	
GB2263315 A1	19930721	LSPB	+	published / reissued	
GB2263315 B2	19950104	LSGT	+	granted / extensions (spc, cpc, pte)	
MX9207073 A1	19930601	LSPB	+	published / reissued	
PT101151 A	19940630	LSPB	+	published / reissued	
PT101151 A	19940630	LSPB	+BB1A	LAYING OPEN OF PATENT APPLICATION	EFFECTIVE DATE : 19940106
PT101151 A	19991029	LSRV	-FC3A	REFUSAL	EFFECTIVE DATE : 19990728
TH15178 A	19941220	LSPB	+	published / reissued	
TW245665 B	19950421	LSGT	+	granted / extensions (spc, cpc, pte)	
US5325985 A	19940705	LSGT	+	granted / extensions (spc, cpc, pte)	
US5325985 A	19980705	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5325985 A	19980915	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19980708
WO9312982 A1	19930708	LSPB	+	published / reissued	

WO9312982 A1	19950826	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA
ZA9209466 A	19930610	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: FLEXIBLE SEALING RING

Abstract: Source: US3445024A ABSTRACT OF THE DISCLOSURE

A removable sealing ring of flexible material having a grooved portion backed by an air chamber to compensate for and effectively seal irregular rim surfaces of a glass container. B

Classifications:

International (IPC 8-9): B65D53/02 (Advanced/Invention);

B65D53/00 (Core/Invention)

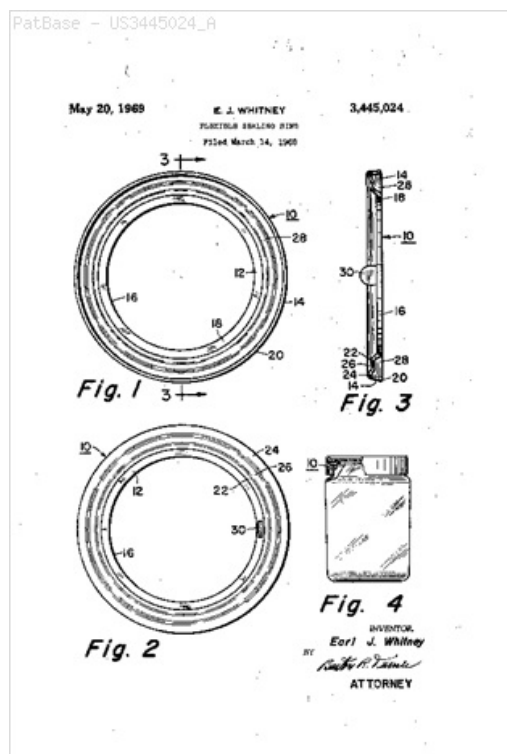
International (IPC 1-7): B65D41/12 B65D41/32 B65D53/00

B65D53/02 F16J13/02 F16J15/32

CPC: Y10S277/928 B65D53/02

European: B65D53/02

US: 215/345 215/40 277/641 277/928



Family:

Publication number	Publication date	Application number	Application date
BE743071 A	19700514		19691212
FR2003893 A1	19691114	FR19690007150	19690313
US3445024 A	19690520	US19680713187	19680314

Priority:

US19683445024 19680314 US19680713187 19680314 FR19690007150 19690313

Probable Assignee: CORNING GLASS WORKS

Assignee(s): (std): CORNING GLASS WORKS

Inventor(s): (std): WHITNEY EARL J

Inventor(s): EARL J WHITNEY

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
BE743071 A	19700514	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2003893 A1	19691114	LSPB	+	published / reissued	
FR2003893 A1	19730330	LSAS	TP	TRANSMISSION OF PROPERTY	
FR2003893 A1	19770520	LSLE	-ST	NOTIFICATION OF LAPSE	
US3445024 A	19690520	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: RECYCLABLE COMPOST CONTAINER

Abstract: Source: US2014263304A The present invention provides a recyclable composite container. The recyclable composite container comprises a cardboard hollow body having an open end defining an opening. The body is formed by a sidewall having an inwardly rolled rim at the open end. The container also comprises a framing element which is removably connectable to the open end of the cardboard hollow body. The framing element has a peripheral portion and a hook-shaped connector linked to this peripheral portion. The connector is for engaging with the inwardly rolled rim of the cardboard hollow body. Such construction thereby allows connection of the framing element to the cardboard hollow body by hooking the connector to the rim of the cardboard hollow body, and disconnection of the framing element from the cardboard hollow body by pulling the framing element so as to disengage the connector from the rim.

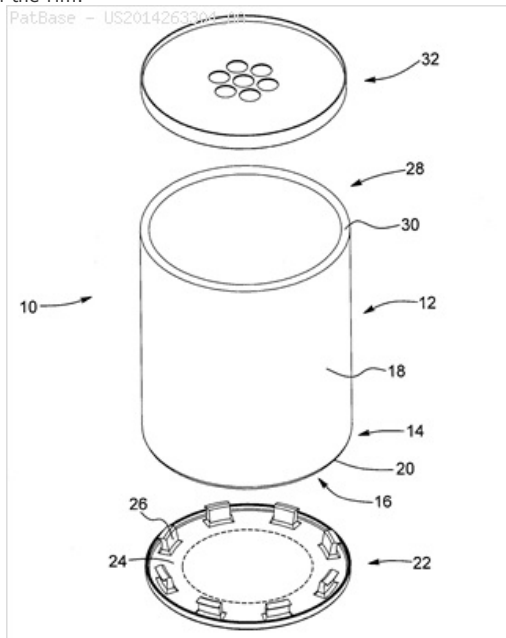
Classifications:

International (IPC 8-9): B65D25/16 B65D3/04 B65D3/26 B65D41/04 B65D41/16 B65D43/04 B65D6/02 B65D6/34 B65D8/00 B65D88/08 B65D88/52 B65D90/08 (Advanced/Invention)

CPC: B65D15/08 B65D25/16 B65D3/04 B65D2543/00435 B65D2565/385 Y02W90/14

European: B65D15/08 B65D25/16

US: 220/345.3 220/4.28 220/495.08 220/625



Family:

Publication number	Publication date	Application number	Application date
CA2799800 AA	20121119	CA20112799800	20110516
CA2799800 C	20141021	CA20112799800	20110516
US2014263304 AA	20140918	US20130938876	20130710
WO11143754 A1	20111124	WO2011CA00580	20110516

Priority:

US20100345305P 20100517 US20130938876 20130710 WO2011CA00580 20110516

Probable Assignee: ABZAC CANADA INC

Assignee(s): (std): ABZAC CANADA INC ; D ANGLADE PIERRE MICHEL ; EXAME EVANS ; GUERTIN RICHARD

Assignee(s): GUERTIN RICHARD190, DE LA FALAISEBEAUPORTQ1G1E 3H6CA

Inventor(s): (std): D ANGLADE PIERRE MICHEL ; EXAME EVANS ; GUERTIN RICHARD

Inventor(s): GUERTIN RICHARD190, DE LA FALAISEBEAUPORTQ1G1E 3H6CA

Agent(s): MBM INTELLECTUAL PROPERTY LAW LLP; ROBIC

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 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

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Patent	Date recorded	Event group	Code	Event	Details
CA2799800 AA	20121119	LSPB	+	published / reissued	
CA2799800 AA	20131009	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20131003
CA2799800 C	20141021	LSGT	+	granted / extensions (spc, cpc, pte)	
US2014263304 AA	20140918	LSPB	+	published / reissued	
WO11143754 A1	20111124	LSPB	+	published / reissued	
WO11143754 A1	20121119	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2799800 COUNTRY OF REF DOCUMENT : CA
WO11143754 A1	20121119	LSNE	NENP	NON-ENTRY INTO THE NATIONAL	REF COUNTRY CODE

				PHASE IN:	: DE
WO11143754 A1	20130605	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 11782811 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1

Title: Drum closure assembly

Abstract: Source: US4252265A An improved drum closure assembly which includes a ring member and a cover member, the cover member being cooperatively sized for a fitted, overlapping relationship with the ring member. The ring member comprises outer and inner ring portions which are angularly displaced from parallel to one another. The cover member includes a top cover member and an annular wall member designed to abut the outer ring portion of the ring member and to seal the assembly when in use.

Classifications:

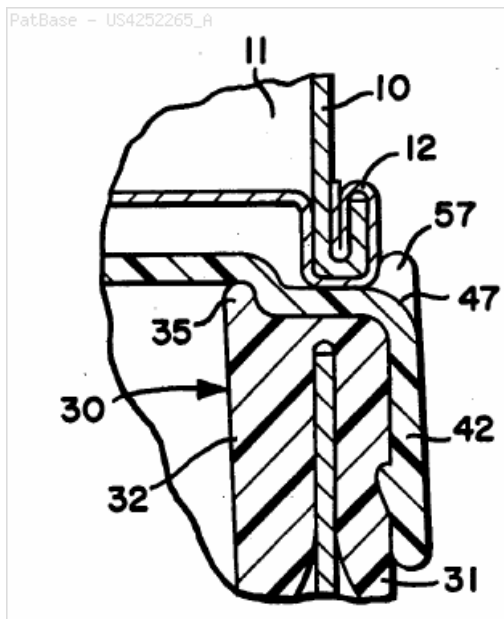
International (IPC 8-9): B65D21/02 B65D43/02 (Advanced/Invention); B65D21/02 B65D43/02 (Core/Invention)

International (IPC 1-7): B65D41/16 B65D5/02

CPC: B65D21/0222 B65D43/0212 B65D2543/00296
B65D2543/00435 B65D2543/00518 B65D2543/00527
B65D2543/00537 B65D2543/00555 B65D2543/00564
B65D2543/0062 B65D2543/00657 B65D2543/00685 B65D2543/0074
B65D2543/00796

European: B65D21/02E7C B65D43/02S3E L65D543/00Y1M6
L65D543/00Y6 L65D543/00Y8D1E L65D543/00Y8D1N
L65D543/00Y8D3 L65D543/00Y8D5 L65D543/00Y8G
L65D543/00Y8S1B10 L65D543/00Y8S1B2 L65D543/00Y8S1D2
L65D543/00Y8S3B4 L65D543/00Y8S3D2

US: 206/508 220/780 229/5.7 229/5.8



Family:

Publication number	Publication date	Application number	Application date
US4252265 A	19810224	US19790078116	19790924
US4305535 A	19811215	US19800188800	19800919

Priority:

US19790078116 19790924 US19800188800 19800919

Probable Assignee: MEAD CORP

Assignee(s): (std): MEAD CORP

Assignee(s): ROCK TENN CO

Inventor(s): (std): BRUNDIGE DANIEL G ; FREUND DONALD F ; NELSON DOUGLAS G

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Patent	Date recorded	Event group	Code	Event	Details
US4252265 A	19810224	LSGT	+	granted / extensions (spc, cpc, pte)	
US4252265 A	19880127	LSAS	AS	ASSIGNMENT	OWNER NAME : ROCK-TENN COMPANY, A CORP. OF TN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:MEAD CORPORATION, THE;; REEL/FRAME:004823/0060 EFFECTIVE DATE : 19871229
US4305535 A	19811215	LSGT	+	granted / extensions (spc, cpc, pte)	
US4305535 A	19880127	LSAS	AS	ASSIGNMENT	OWNER NAME : ROCK-TENN COMPANY, A CORP. OF TN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:MEAD CORPORATION, THE;; REEL/FRAME:004823/0060 EFFECTIVE DATE : 19871229

Title: Device for evacuating and filling final storage containers for radioactive materials

Abstract: Source: US4582674A A device for evacuating, filling and closing final storage containers for radioactive materials mixed with molten glass, comprising a suction pipe connected to the container, a meltable closure for said pipe and a closable evacuation connection fitting mounting in said meltable closure. The container is evacuated through the fitting whereupon the fitting is sealed closed to preserve the vacuum. When the suction pipe is dipped into the molten glass to fill the container, the closure melts and with the glass is sucked into the container. In another form the device also includes a protective sleeve surrounding the fitting, closed at its outer end with a meltable plate which also serves as a heat radiation shield. The shield prevents premature melting of the meltable closure, i.e. melting from the heat in the glass furnace prior to immersion of the suction pipe in the molten glass. The invention also includes a closure for the filled container which may be soldered at its periphery to the container wall by induction heating to seal the container.

Classifications:

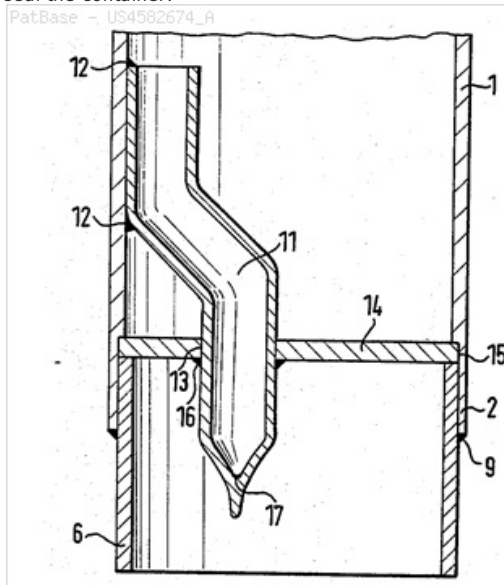
International (IPC 8-9): G21F9/00 G21F9/36 (Advanced/Invention)

International (IPC 1-7): B23K1/18 B23K13/00 B65D53/00 C09K11/04 C09K3/00 E06B5/18 G21C19/40 G21F5/00 G21F9/00 G21F9/22 G21F9/30 G21F9/34 G21F9/36

CPC: G21F9/36

European: G21F9/36

US: 219/604 219/672 219/85A 219/9.5 252/628 252/629 376/272 976/DIG.385



Family:

Publication number	Publication date	Application number	Application date
BE892041 A1	19820527	BE19820207248	19820205
DE3104366 A1	19820819	DE19813104366	19810207
DE3104366 C2	19861204	DE19813104366	19810207
DE3153345 C2	19880601	DE19813153345	19810207
FR2499754 A1	19820813	FR19820001431	19820129
FR2499754 B1	19850726	FR19820001431	19820129
GB2100915 A1	19830106	GB19820003452	19820205
GB2100915 B2	19850918	GB19820003452	19820205
GB2139407 A1	19841107	GB19840003981	19840215
GB2139407 B2	19850918	GB19840003981	19840215
GB8403981 A0	19840321	GB19840003981	19840215
JP1040960 B4	19890901	JP19820016490	19820205
JP1086099 A2	19890330	JP19880197294	19880809
JP1556805 C3	19900423	JP19820016490	19820205
JP1741682 C3	19930315	JP19880197294	19880809
JP4027520 B4	19920512	JP19880197294	19880809
JP57148300 A2	19820913	JP19820016490	19820205
JP64086099 A2	19890330	JP19880197294	19880809
US4582674 A	19860415	US19820343827	19820129
US4638134 A	19870120	US19840662344	19841018

Priority:

DE19813104366 19810207 DE19813153345 19810207 GB19820003452 19820205
US19820343827 19820129 JP19820016490 19820205

Probable Assignee: GES DEUTSCHE

Assignee(s): (std): GES DEUTSCHE ; WIEDERAUFARBEITUNG VON KERNBRE ; VON KERNBRENNSTOFFEN MBH DEUTS

Assignee(s): DEUTSCHE WIEDERAUFARBEITUNG ; DOITSUCHE G FUYUURU UIIDERUAUFUARUBAITONGU FUON KE ; WIEDERAUFARBEITUNG VON KERNBRENNSTOFFEN GMBH DEUTS ; DOITSUCHIE G FUYUURU UIIDERUAUFUARUBAITONGU FUON ; DEUTSCHE GESELLSCHAFT FUR WIEDERAUFARBEITUNG VONKE ; DEUTSCHE GESELLSCHAFT FUR WIEDERAUFARBEITUNG VONKERNBRENNSTOFFEN M B H ; DEUTSCHE GESELLSCHAFT FUR WIEDERAUFARBEITUNG VON KERNBRE ; DOITSUCHE G FUYUURU UIIDERUAUFUARUBAITONGU FUON KERUNBURENSHUTOTSUFUEN MBH ; DOITSUCHE G FUYUURU UIIDERUAUFUARUBAITONGU FUON KERUNBURENSHUTOTSUFUEN MBH ; WIEDERAUFARBEITUNG VON KERNBRENNSTOFFEN GMBH DEUTSCHE ; DEUTSCHE GES ; DEUTSCHE GES FUR WIEDERAUFARBEITUNG VON KERNBRENNSTOFFEN ; DEUTSCHE GES FUR WIEDERAUFARBEITUNG VON KERNBRENNSTOFFEN MBH ; DEUTSCHE GESELLSCHAFT FUER WIEDERAUFARBEITUNG VON ; DEUTSCHE GESELLSCHAFT ; DEUTSCHE GES WIEDERAUFARB VON KERNBRENNST MBH ; DEUTSCHE GESELLSCHAFT FUR WIEDERAUFARBEITUNG VON K ; DEUTSCHE GESELLSCHAFT FUER WIEDERAUFARBEITUNG VON KERNBRENNSTOFFEN MBH ; DEUTSCHE GESELLSCHAFT FUER WIEDERAUFARBEITUNG VON KERNBRENNSTOFFEN MBH 3000 HANNOVER DE

Inventor(s): (std): DETOREFU SHIYUTORITSUTSUKE ; STRITZKE DETLEF ; STRITZKE DETLEF DR ; DETOREFU SHUTORITSUTSUKE

Inventor(s): DETLEF STRITZKE ; STRITZKE DETLEF DR MOL BE

Legal status (INPADOC)
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Patent	Date recorded	Event group	Code	Event	Details
BE892041 A1	19820527	LSPB	+	published / reissued	
BE892041 A1	19960831	LSLE	-RE	LAPSED	OWNER NAME : DEUTSCHE GESELLSCHAFT FUR WIEDERAUFARBEITUNG VONK EFFECTIVE DATE : 19960228
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DE3104366 A1	19831215	LSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
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DE3104366 A1	19870527	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE3153345 C2	19880601	LSGT	+D2	GRANT AFTER EXAMINATION	
DE3153345 C2	19881124	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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FR2499754 A1	19941125	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2499754 B1	19850726	LSGT	+	granted / extensions (spc, cpc, pte)	
GB2100915 A1	19830106	LSPB	+	published / reissued	
GB2100915 A1	19850918	LSGT	+PG	PATENT GRANTED	
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GB2139407 A1	19841107	LSPB	+	published / reissued	
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JP1086099 A2	19890330	LSPB	+	published / reissued	
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JP1741682 C3	19930315	LSGT	+	granted / extensions (spc,	

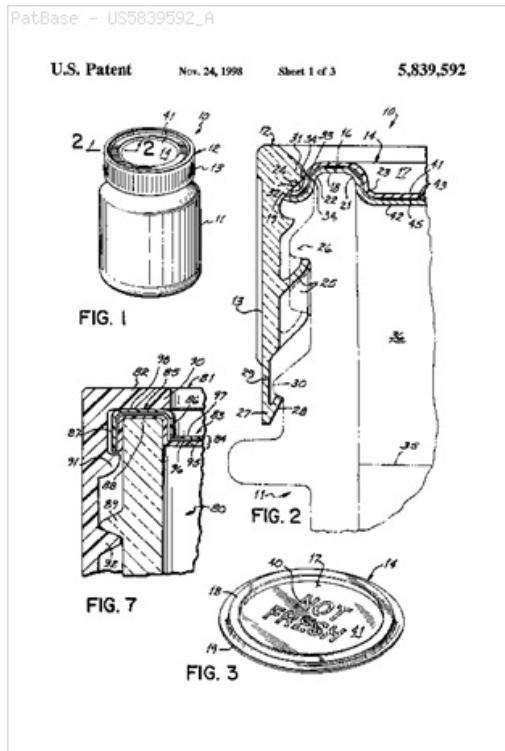
JP4027520 B4	19920512	LSPB	+	cpc, pte) published / reissued	
JP57148300 A2	19820913	LSPB	+	published / reissued	
JP64086099 A2	19890330	LSPB	+	published / reissued	
US4582674 A	19860415	LSGT	+	granted / extensions (spc, cpc, pte)	
US4582674 A	19820329	LSAS	AS	ASSIGNMENT	OWNER NAME : DEUTSCHE GESELLSCHAFT FUR WIEDERAUFARBEITUNG VON K DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:STRITZKE, DETLEF; REEL/FRAME:003967/0129 EFFECTIVE DATE : 19720209
US4582674 A	19891016	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4582674 A	19930930	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4582674 A	19980412	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4582674 A	19980623	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19980415
US4638134 A	19870120	LSGT	+	granted / extensions (spc, cpc, pte)	
US4638134 A	19900720	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4638134 A	19940627	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4638134 A	19990117	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4638134 A	19990330	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19990120

Title: Plastic closure

Abstract: Source: US5839592A A closure is formed from a laminate or composite. The laminate is sufficiently flexible to permit it to assume the surface configuration of the rim of a closure without the need for a gasket. The laminate may include an upper layer which is rigid and a lower layer which is softer and has a lower softening temperature than the upper layer. An optional intermediate oxygen-impermeable layer such as ethylene vinyl alcohol can be included between the upper and lower layers. Preferably, the upper layer is a rigid material such as polyethylene terephthalate or polyvinyl chloride and the lower layer is a soft material such as linear low-density polyethylene. The upper layer provides the necessary strength, while the lower layer provides a tight seal on the rim of the container. The intermediate or bottom layer can also include an oxygen indicator which changes color upon exposure to oxygen.

Classifications:

International (IPC 8-9): B32B27/08 B65D51/14 B65D53/04 B65D79/02 (Advanced/Invention); B32B27/08 B65D51/00 B65D53/00 B65D79/00 (Core/Invention)
International (IPC 1-7): B65D51/14 B65D53/04
CPC: B65D51/145 B65D2101/0023 B32B27/08 B65D53/04 B65D79/02
European: B32B27/08 B65D51/14B B65D53/04 B65D79/02 L65D101/00A3
US: 215/230 215/276 215/347 215/349



Family:

Publication number	Publication date	Application number	Application date
AU199660094 A1	19970109	AU19960060094	19960607
GB9511706 A0	19950802	GB19950011706	19950609
US5839592 A	19981124	US19950488874	19950609
WO9641751 A1	19961227	WO1996GB01353	19960607

Priority:

GB19950011706 19950609 US19950488874 19950609 WO1996GB01353 19960607

Probable Assignee: ANCHOR HOCKING PACKAGING CO

Assignee(s): (std): CARNAUDMETALBOX SA ; CARNAUDMETALBOX NV ; METAL BOX PLC ; SAUNDERS CYRIL ; HAYES THOMAS ; ANCHOR HOCKING PACKAGING ; CARNAUDMETALBOX HOLDINGS USA

Assignee(s): CARNAUDMETALBOX HOLDINGS USA INC ; ANCHOR HOCKING PACKAGING CO ; CROWN CORK AND SEAL TECHNOLOGIES ; DEUTSCHE BANK AG ; CITICORP NORTH AMERICA INC COLLATERAL AGENT AS ; DEUTSCHE BANK NEW YORK BRANCH AGENT AG AS ; CROWN PACKAGING TECHNOLOGY INC ; CHASE MANHATTAN BANK AS COLLATERAL AGENT ; CITICORP NORTH AMERICA INC ; CARNAUDMETALBOX S A ; CARNAUDMETALBOX N V ; CARNAUDMETALBOX PLC ; CHASE MANHATTAN BANK COLLATERAL AGENT AS

Inventor(s): (std): HAYES THOMAS ; HAYES THOMAS H ; SAUNDERS CYRIL

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU199660094 A1	19970109	LSPB	+	published / reissued	
US5839592 A	19981124	LSGT	+	granted / extensions (spc, cpc, pte)	
US5839592 A	19951006	LSAS	AS	ASSIGNMENT	OWNER NAME : ANCHOR HOCKING PACKAGING COMPANY, OHIO DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HAYES, THOMAS H.;

					REEL/FRAME:007661/0337 EFFECTIVE DATE : 19951002
US5839592 A	20010411	LSAS	AS	ASSIGNMENT	OWNER NAME : CHASE MANHATTAN BANK, AS COLLATERAL AGENT, THE, NE DESCRIPTION : SECURITY INTEREST; ASSIGNOR:CROWN CORK AND SEAL TECHNOLOGIES CORPORATION; REEL/FRAME:011667/0001 EFFECTIVE DATE : 20010302
US5839592 A	20020422	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5839592 A	20030311	LSAS	AS	ASSIGNMENT	OWNER NAME : CROWN CORK AND SEAL TECHNOLOGIES, ILLINOIS DESCRIPTION : RELEASE OF SECURITY INTEREST; ASSIGNOR:JPMORGAN CHASE BANK; REEL/FRAME:013798/0522 EFFECTIVE DATE : 20030226
US5839592 A	20030312	LSAS	AS	ASSIGNMENT	OWNER NAME : CITICORP NORTH AMERICA, INC., AS COLLATERAL AGENT, DESCRIPTION : SECURITY INTEREST; ASSIGNOR:CROWN CORK AND SEAL TECHNOLOGIES CORPORATION; REEL/FRAME:013791/0846 EFFECTIVE DATE : 20030226
US5839592 A	20050527	LSAS	AS	ASSIGNMENT	OWNER NAME : CITICORP NORTH AMERICA, INC., NEW YORK DESCRIPTION : SECURITY AGREEMENT; ASSIGNOR:CROWN TECHNOLOGIES PACKAGING CORPORATION; REEL/FRAME:016283/0612 EFFECTIVE DATE : 20040901
US5839592 A	20051215	LSAS	AS	ASSIGNMENT	OWNER NAME : DEUTSCHE BANK AG NEW YORK BRANCH, AS AGENT, NEW JE DESCRIPTION : SECOND AMENDED AND RESTATED PATENT SECURITY AGREEMEN; ASSIGNOR:CROWN PACKAGING TECHNOLOGY, INC.; REEL/FRAME:017097/0001 EFFECTIVE DATE : 20051118
US5839592 A	20051215	LSAS	AS	ASSIGNMENT	OWNER NAME : DEUTSCHE BANK AG NEW YORK BRANCH, AS AGENT, NEW JER DESCRIPTION : SECOND AMENDED AND RESTATED PATENT SECURITY AGREEMEN; ASSIGNOR:CROWN PACKAGING TECHNOLOGY, INC.; REEL/FRAME:17097/1 EFFECTIVE DATE : 20051118
US5839592 A	20060411	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5839592 A	20101124	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5839592 A	20110111	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20101124
US5839592 A	20140305	LSAS	AS	ASSIGNMENT	OWNER NAME : CROWN PACKAGING TECHNOLOGY, INC., ILLINOIS DESCRIPTION : RELEASE OF SECURITY INTEREST; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:032389/0380 EFFECTIVE DATE : 20131219
US5839592 A	20140314	LSAS	AS	ASSIGNMENT	OWNER NAME : CROWN PACKAGING TECHNOLOGY, INC., ILLINOIS DESCRIPTION : RELEASE BY SECURED PARTY; ASSIGNOR:CITICORP NORTH AMERICA, INC.; REEL/FRAME:032449/0281 EFFECTIVE DATE : 20140314
US5839592 A	20140314	LSAS	AS	ASSIGNMENT	OWNER NAME : CROWN PACKAGING TECHNOLOGY, INC., ILLINOIS DESCRIPTION : RELEASE BY SECURED PARTY; ASSIGNOR:CITICORP NORTH AMERICA, INC.; REEL/FRAME:032449/0248 EFFECTIVE DATE : 20140314
WO9641751 A1	19961227	LSPB	+	published / reissued	
WO9641751 A1	19980409	LSWD	REG	REFERENCE TO NATIONAL	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642

CODE					
WO9641751 A1	19981209	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA

Title: BOTTLE STOPPER

Abstract: Source: GB1061220A 1,061,220. Bottle stoppers. W. HEUBL. Oct. 30, 1964 [Nov. 7, 1963], No. 44445/64. Heading B8T. A synthetic resin bottle stopper 1 comprises a hollow stopper-part 2 having a wall 5 tapered at 15, 16 which is pressed into the neck 4 of a bottle and a skirt part 3 which encloses the neck 4, there being a diaphragm wall 6 extending across the stopper-part 2 externally from the thickest section 17 of the wall 5, while the skirt comprises a wall 7 with an inwardly projecting bead 9 for engaging a groove 10 in the bottle. The stopper is injection moulded from low-pressure polyethylene or polypropylene and is heated before insertion into the bottle. Other embodiments show an annular groove (20), Fig. 4 (not shown), running around the skirt and wall (8), a stopper-part having a curved outer surface on the wall (5), (Fig. 3, not shown), and reinforcing ribs (21), (22), Fig. 5 (not shown), on the diaphragm (6) and wall (5).

Classifications:

International (IPC 8-9): B65D41/18 C02F3/12 (Advanced/Invention); B65D41/02 C02F3/12 (Core/Invention)

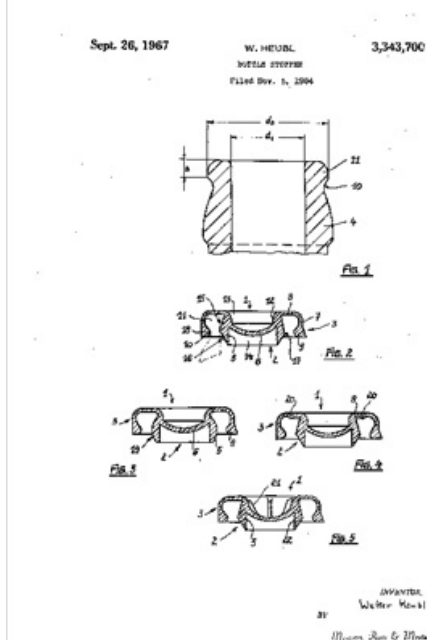
International (IPC 1-7): B65D41/28 B65D41/30 B67B

CPC: Y02W10/15 C02F3/1257 B65D41/185

European: B65D41/18B C02F3/12N6

US: 215/320 215/344

PatBase - US3343700_A



Family:

Publication number	Publication date	Application number	Application date
AT263560 B	19680725	AT19640009279	19641102
BE655208 A	19650301		19641103
CH436001 A	19670515	CH19640014171	19641102
DE1432178 A1	19681219	DE19631432178	19631107
DK123579 B	19720710	DK19640005486	19641106
GB1061220 A	19670308	GB19640044445	19641030
LU47294 A	19650106	LU19640047294	19641106
NL6412793 A	19650510	NL19640012793	19641104
US3343700 A	19670926	US19640409326	19641105

Priority:

DE1963H050774 19631107

Probable Assignee: WALTER HEUBL FA

Assignee(s): (std): HEUBL W ; HEUBL WALTER ; WALTER HEUBL ; WALTER HEUBL FA

Assignee(s): WALTER HEUBL FABRIKANT ; FIRMA WALTER HEUBL

Inventor(s): (std): HEUBL W ; WALTER HEUBL ; HEUBL WALTER

Inventor(s): WALTER HEUBL FABRIKANT

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT263560 B	19680725	LSGT	+	granted / extensions (spc, cpc, pte)	
BE655208 A	19650301	LSGT	+	granted / extensions (spc, cpc, pte)	
CH436001 A	19670515	LSGT	+	granted / extensions (spc, cpc, pte)	
DE1432178 A1	19681219	LSPB	+	published / reissued	
DK123579 B	19720710	LSPB	+	published / reissued	
GB1061220 A	19670308	LSGT	+	granted / extensions (spc, cpc, pte)	
LU47294 A	19650106	LSGT	+	granted / extensions (spc, cpc, pte)	
NL6412793 A	19650510	LSPB	+	published / reissued	

Title: JAR SEAL

Abstract: Source: US3235114A (Claim 1) 1. A container closure comprising a cover member having a generally circular panel portion and a peripheral skirt depending from the outer edge of said panel portion, a separate flexible plastic insert member secured within said cover directly adjacent the underside of said panel portion and substantially coextensive therewith, said insert member having a central flat disc portion which is integral at its circumference with a continuous peripheral resilient annulus that has a generally endwise S-configuration in cross-section, and a ring of sealing composition positioned in the arcuate leaf of the S-shaped annulus which is closest to the central disc portion.

Classifications:

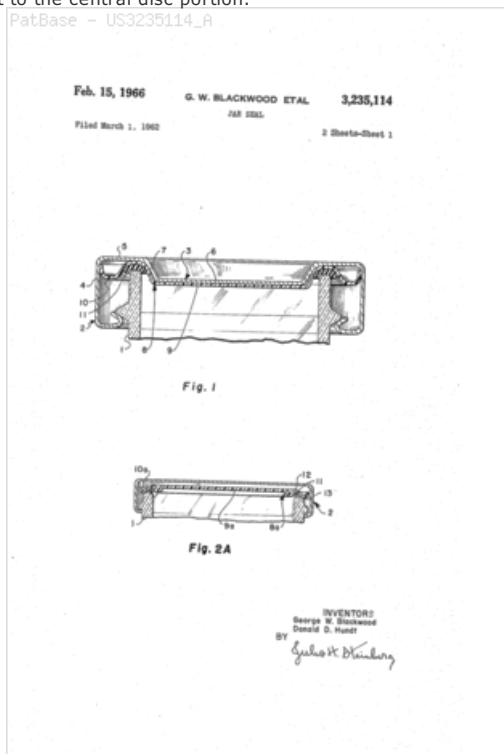
International (IPC 8-9): B65D41/04 (Advanced/Invention);
B65D41/04 (Core/Invention)

International (IPC 1-7): B65D53/04

CPC: B65D41/045

European: B65D41/04D2

US: 215/350 215/352



Family:

Publication number	Publication date	Application number	Application date
US3235114 A	19660215	US19620176538	19620301

Priority:

US19620176538 19620301

Probable Assignee: GRACE W R AND CO

Assignee(s): (std): GRACE W R AND CO

Assignee(s): W R GRACE AND CO

Inventor(s): (std): HUNDT DONALD D ; BLACKWOOD GEORGE W

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US3235114 A	19660215	LSGT	+	granted / extensions (spc, cpc, pte)	