New connection on: : 10-11-2017 : 18:24:03 - Last disconnection on: : 10-11-2017 : 17:38:04

V 4.0.0.44176(LP,U,linux) (Rev:41675 2016-01-15 13:33:59 +0100#(D201713)) (RPM D201713)

Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 43] ..fi epodoc

Database: EPODOC

[EPODOC: SS 43] (bottle or container) and vacuum

Results in EPODOC **45.924**

[SS 44] * and PD<2014-02-20

Results in EPODOC **37.489**

[SS 45] * and base

Results in EPODOC **2.531**

[SS 46] * and ring

Results in EPODOC **255**

[SS 47] * and closure

Results in EPODOC **15**

[SS 48] ..li

1/15 © EPODOC / EPO

PN - US2006186082 A1 20060824

PNFP - US7748551 B2 20100706

PR - US20050061293 20050218

AP - US20050061293 20050218

DT - *; Rep

CT - || R141 (A1)
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USD366417S S 00000000 [ ];
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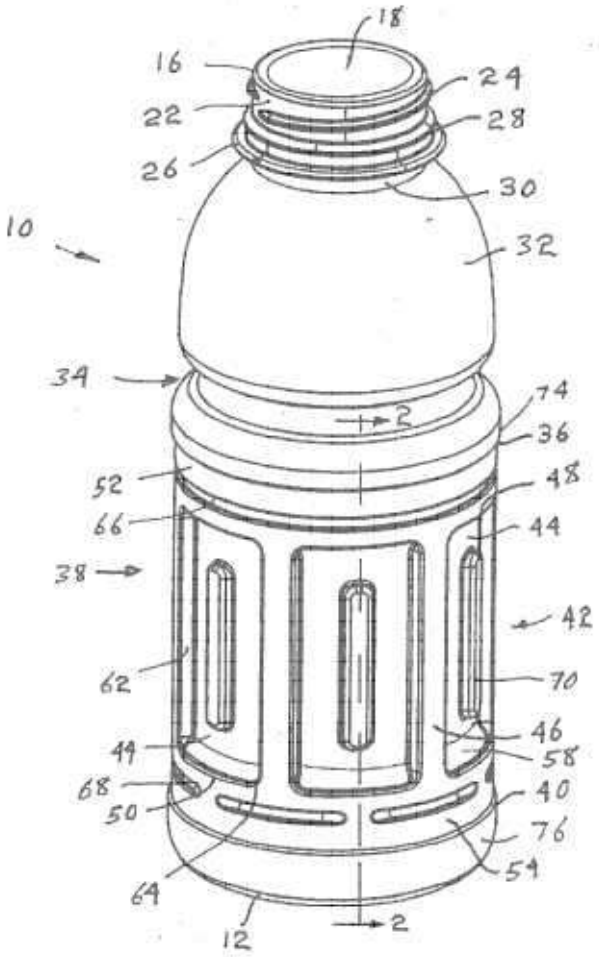

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US6460714 B1 20021008 [
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USD480313S S 20031007 [
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USD352245S S 00000000 [ ];
US5690244 A 19971125 [
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US5975342 A 19991102 [ ] (BRADEEN STEPHEN E [US], et al);
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US5908127 A 19990601 [ ] (WEICK ROBERT D [US], et al);
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US2004200799 A1 20041014 [ ] (YOURIST SHELDON [US], et al);
US2005045645 A1 20050303 [ ] (TSUTSUI NAOKI [JP], et al);
US2005051509 A1 20050310 [ ] (BYSICK SCOTT [US], et al);
US2006054587 A1 20060316 [ ] (OGUCHI HIROKI [JP], et al);
US2006157438 A1 20060720 [ ] (LIVINGSTON JOHN J [US], et al)

CCI - B65D1/0223 ; B65D79/005

PA - (A1)
BALL CORP
- (B2)
BALL CORP [US]

TI - (A1 B2)
Hot fill **container** with restricted corner radius **vacuum** panels

AB - (A1 B2)
A thin walled, plastic hot-fill **container** has a finish to receive a **closure**, a neck supporting the finish, a shoulder situated below the neck, a **base**, and a body between the shoulder and **base**. The body includes upper and lower margins defining a label mount area that includes a plurality of inwardly recessed **vacuum** panels separated by vertical posts. At least one indented reinforcing **ring** separates the upper and lower edges of the **vacuum** panels from the adjacent margins of the label mount area by a distance D. Each **vacuum** panel includes an inclined upper and lower margin of height H that is greater than distance D, and has corners defined by radius R, which is

less than or equal to D. Lateral margins of each **vacuum** panel extend vertically between the corners and connect the adjacent posts to a central depressed region, each lateral margin being essentially perpendicular to the adjacent surface of the **vacuum** panel.

2/15 © EPODOC / EPO

PN - WO9923007 A1 19990514

PR - GB19970022898 19971030

AP - WO1998GB03075 19981012

DT - *; Rep

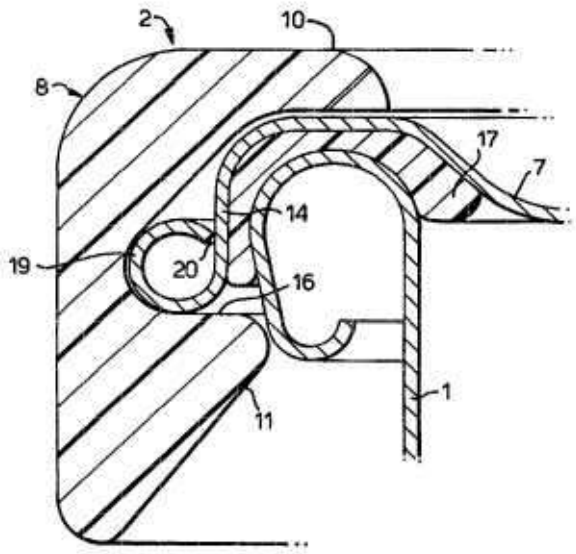
CT - |EP| ISR (A1)
WO9313990 A1 19930722
[XA] (ANCHOR HOCKING PACKAGING [US])
[X] 1,2
* page 30, line 13 - page 33, line 25; figures 1,2,5 *
[A] 3;
EP0366617 A2 19900502
[A] (ITALCAPS SPA [IT])
[A] 1-3
* column 3, line 51 - column 4, line 14; figure - *;
FR2314872 A1 19770114
[A] (MASSILLY USINE METALLURG [FR])
[A] 3
* page 2, line 36 - page 3, line 23; figure 1 *

CCI - B65D51/145

PA - CROWN CORK & SEAL TECH CORP [US]; METAL BOX PLC [GB]; COLLINS MALCOLM GEORGE [GB]

TI - **VACUUM** CLOSURES

AB - A press-on/pry-off **vacuum closure** in combination with a **container** body (1) comprises a moulded plastics **ring** (8) having a downardly dependent skirt portion (9). The skirt portion includes a channel (12) having a substantialy horizontal **base**



(16). The **closure** further includes a metal disc (7) with a down turned rim (14) having an outwardly turned component such as an outer curl (19). A periphery of the metal disc lies on the horizontal **base** of the channel (12) such that the **closure** can be removed from the **container** body by pressing upwardly on the plastics skirt portion (9). The **closure** can be removed with an opening force of less than 50N, despite the presence of a **vacuum** of less than 0.8 atm (24 inches Hg) within the **container**.

3/15 © EPODOC / EPO

PN - GB1211719 A 19701111

PR - DE1966S107518 19661221

AP - GB19670057748 19671220

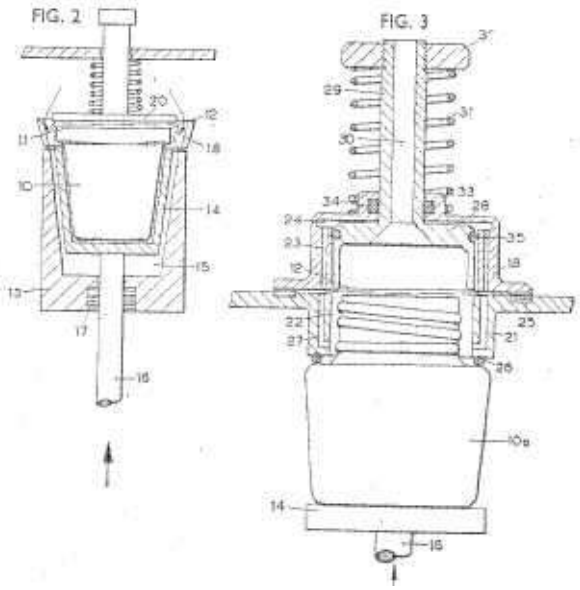
DT - *

CCI - B65B7/2878 ; B65B7/28

PA - SEITZ WERKE GMBH [DE]

TI - IMPROVEMENTS IN AND RELATING TO **CLOSURE** MEMBERS FOR CONTAINERS

AB - 1,211,719. Sealing covers to containers. SEITZ-WERKE G.m.b. H. 20 Dec., 1967 [21 Dec., 1966], No. 57748/67. Heading B8C. A plastics cover is sealed to a **container** mouth by plasticizing it, bringing the mouth into contact with it and then using **vacuum** to draw cover material extending beyond the mouth against the **container** neck or rim. In one embodiment, the **container** 10 is placed in a holder 14, initially resting on the **base** of a cylinder 13 and the cover 12, which may be part of a web or a separate disc, placed over the cylinder mouth. It is then secured by an annular



clamp 18 and a heater is sited above it temporarily. The heater is replaced by a spring-loaded plate 20 and the holder 14 is raised to press the **container** against the film and the plate. As the holder rises a low pressure space 15 is created which is in communication with the space between the **container** rim and the film margin. The margin is therefore drawn against the rim. In another embodiment, the **container** 10a is supported on a plate 16 with its neck surrounded by an annulus 21 having a seal **ring** 26 abutting the **container**. Prior to positioning the **container**, a cover 12 is placed on the annulus and heated as before from beneath the latter. A chamber 18 seats on the annulus from above and contains a piston 28 having a hollow shaft 30 through which its interior communicates with the atmosphere. When the **container** is in position beneath the heated cover, the piston 28 descends, pushing the cover on to the **container** mouth and about its rim. In so doing, it creates a low pressure space behind it which communicates with the space 22 about the **container** neck, via passages 23, 24, 27. The cover material is thus drawn against the neck.

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PN - GB1248974 A 19711006

PR - GB19680050538 19681024

AP - GB19680050538 19681024

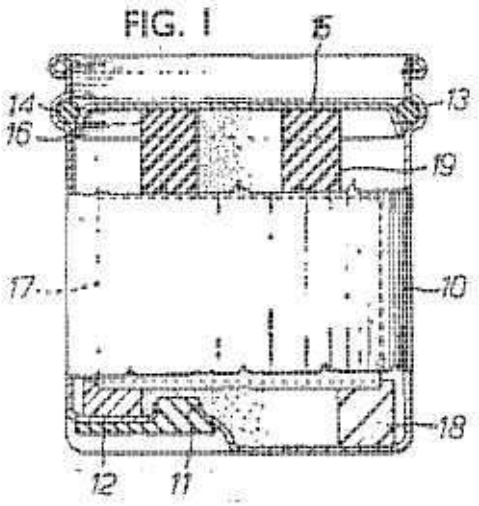
DT - *

CCI - B65D39/04 ; B65D81/20

PA - BULPITT AND SONS LTD

TI - IMPROVEMENTS IN SEALED CONTAINERS

AB - 1,248,974. **Closure** for pressurized or evacuated **container**. BULPITT & SONS Ltd. 20 Oct., 1969 [24 Oct., 1968], No. 50538/68. Headings B8C and B8T. A **container** has a body 10 provided at one end with a lid 15 adapted to make a seal with a sealing element 14 located in a peripheral recess 13 which faces itself across the interior of the body, the opposite end being provided with a stoppered hole 11. The **container** may be pressurized, Fig. 1, or evacuated, Fig. 2 (not shown), the lid 15 having a stepped peripheral lip 16 which forms a seal with an O **ring** 14 located in the peripheral recess, the lid beng held in sealing position by the pressure difference. A plastics, apertured spacer 18 and sponge rubber **ring** 19 restrain the contents, e.g. an object 17, from moving. With the lid 15 placed, lip downwards, and the O **ring** 14 inserted in the recess 13, a **base** plug 12 is removed and gas, e.g. nitrogen, is applied to the lid end of the inverted **container** to force the lid inwardly, and away from the 0 **ring**, so purging the **container**. The plug is then replaced causing the pressure in the **container** to rise until, together with the pressure of the sponge rubber **ring** on the lid, it



is equal to the applied gas pressure, when the lid again abuts the sealing **ring**. If the **container** is to be evacuated the lid is placed with its lip facing upwards and is evacuated from that end, a spring bearing on top of the lid to hold it on to the O **ring** when the required **vacuum** is attained. Two O rings may be used with a reversible lid located between them. The plug 12 may be used to release the pressure or **vacuum**.

5/15 © EPODOC / EPO

PN - GB1003169 A 19650902

PR - GB19620048823 19621228

AP - GB19620048823 19621228

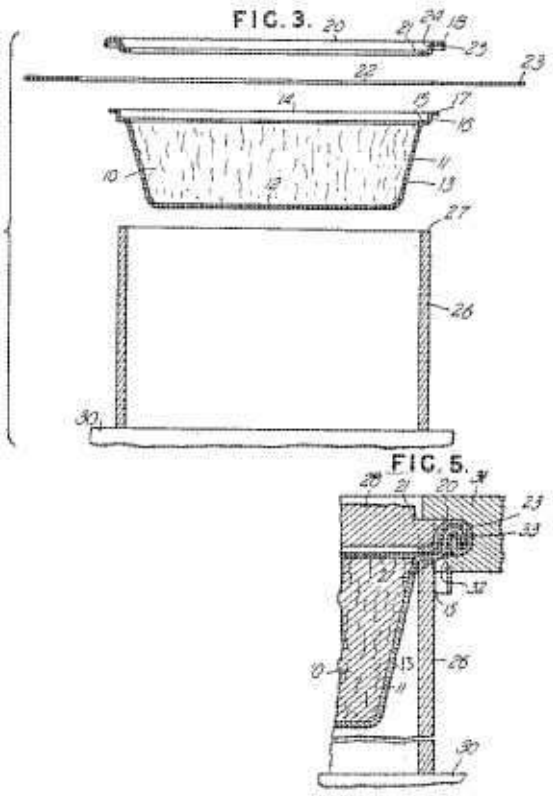
DT - *

CCI - B65D77/202 ; B65B7/2857

PA - OSCAR MAYER KARTRIDG PAK S A

TI - Package and method of forming same

AB - 1,003,169. Food package. OSCAR MAYERKARTRIDG PAK, S.A. Dec. 28, 1962, No. 48823/62. Heading B8C. [Also in Division B3] An hermetically sealed food package comprises a **container** 11 of deformable sheet material, e.g. thin gauge sheet metal, having a **base** 12 and side wall 13 with a flange formation 14, a transparent plastics film 22, and a metal **closure ring** 20. The flange formation 14 comprises inner and outer flanges 15, 17 connected by an outwardly tapering wall 16, and the **ring** 20 has a corresponding flange formation 18 with a lip 25. The package is formed by filling the **container** with a food product 12 and supporting it by the flange 15 on a tubular form 26. The film and **closure ring** are



then placed in position on the **container** and held by a clamp 28 whilst rolls 31 roll the flange formations 14 and 18 into the shape shown in Fig. 5, any excess film being removed by knife edges 32 on the rolls. The rolling process may be carried out in a **vacuum** sealing head and in this case the transparent film is drawn into contact with the food product on removal. A gasket may be inserted between the film and one of the flange formations, and when a **vacuum** head is used this gasket may be of tacky material to help hold the film in position. The inner edge of the inner flange 21 of **ring** 20 is arranged to be in vertical alignment with the wall 13 so that when the film is cut adjacent to this edge the whole contents of the package may be removed in a solid mass. Specification 1,003,170 is referred to.

6/15 © EPODOC / EPO

PN - GB1021494 A 19660302

PR - FR19620916388 19621123; SE19610011659 19611123

AP - GB19620044183 19621122

DT - *; Rep

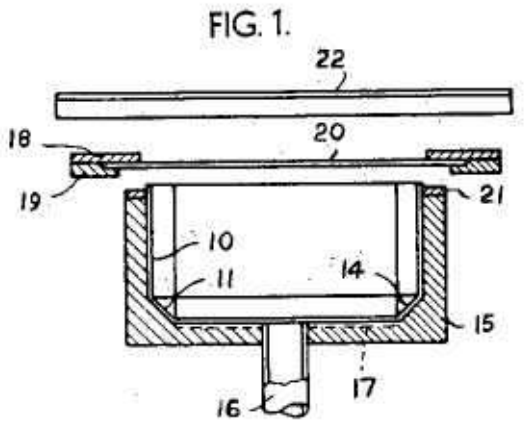
CCI - B29C51/162

CCA - B31B2105/00 ; B31B2120/406

PA - CHRISTENSSON O W

TI - An improved method of producing cartons consisting of an outer **container** of cardboard or a material of similar stiffness and an inner lining of synthetic plastics material

AB - 1,021,494. Lined boxes. O. W. CHRISTENESON. Nov. 22, 1962 [Nov. 23, 1961], No. 44183/62.



Heading B8P. [Also in Division B5] A method of producing cartons consisting of an outer cardboard or the like **container** and an inner plastics lining comprises positioning a plastics sheet over the open top of the **container**, which is formed with apertures at the perimeter of the **base** therein and is held in a matrix, heating the sheet and deep pressing or drawing it into the outer **container**, the final thickness of the sheet being not greater than 0À1 mm. The **base** edges of the **container** may be bevelled to prevent damage to the lining during formation. As described, a cardboard **container** 10 with apertures at the comers 11, 12, 13, 14 is placed in a matrix 15 and a plastics sheet 20 is clamped between frames 18, 19 and heated by a heater 22. The frames are then brought downwardly on to a resilient **ring** 21 on top of the matrix and **vacuum** is applied through a tube 16 in the bottom. The matrix bottom has diagonal channels 17 which are in communication with the apertures at the corners. Alternatively the lining can be pressed into the **container** by super-atmospheric pressure above it. The lining extends over the upper edge of the **container** to facilitate sealing on a plastics **closure** (not shown).

PN - GB1108263 A 19680403

PR - GB19630041297 19631018

AP - GB19630041297 19631018

DT - *

CCI - B65D81/2015 ; B65D51/18 ; F42B39/00

CCA - B65D2251/0018 ; B65D2251/0081

PA - E P S RES & DEV LTD

TI - Thermoplastic and like **vacuum** sealable containers

AB - 1,108,263. Portable containers; **container** closures. E. P.S. (RESEARCH & DEVELOPMENT) Ltd. 14 Oct., 1964 [18 Oct., 1963], No. 41297/63. Headings B8D and B8T. [Also in Division F3] A **container**, e.g. for an explosive, has a tubular body 1 with a **base** 2 permanently secured to it, an inner lid 4 resting on the **container** contents but held down by a sealing **ring** 5 retained by an abutment formed on a neck 3 secured to the body 1, and a **closure** 7 having a resilient **ring** 6 forming a seal against the neck 3 when the interior of the **container** is subject to **vacuum**. A tamper-proof cap 18 has fingers 19 sprung into engagement with the lower end 21 of the neck and retained by a wire (not shown). An aperture in the **closure** 7 is closed by a resilient bung 17 which may be pulled out to release the **vacuum**, and also allows the insertion of a hollow needle of a gauge to test the **vacuum**. The body 1 may be extruded from thermoplastics material, or be made of a thermoplastics sheet welded at its opposite edges to form a tube. In a modification, the neck 3 may be omitted, Fig. 3 (not shown), retaining rings (23, 24) being

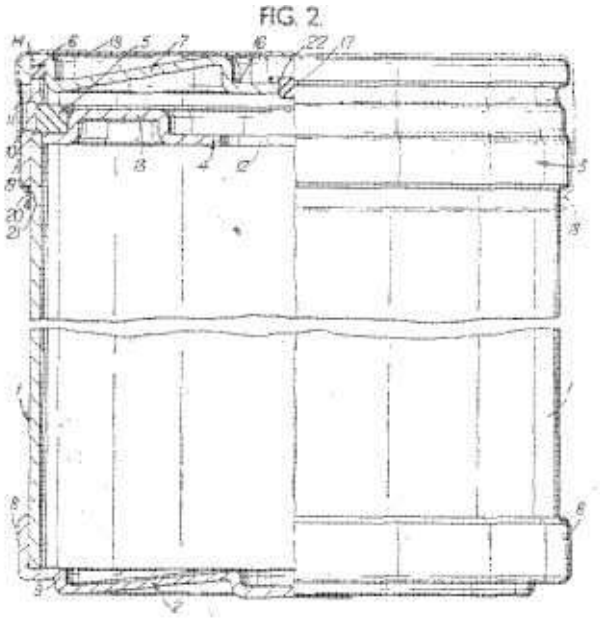
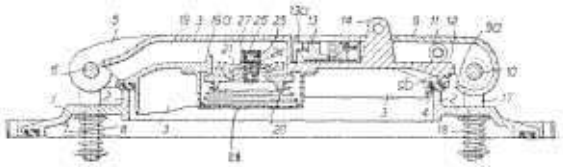


FIG. 2.

secured to the outer and inner surfaces respectively of the body 1; or a neck 3, Fig. 4 (not shown), may have an external flange (25) under which the fingers (19) are secured.

8/15 © EPODOC / EPO



PN - GB1175875 A 19700101

PR - GB19670034510 19670727

AP - GB19670034510 19670727

DT - *

CCI - F16J13/16

PA - WHESSOE LTD

TI - Improvements relating to vessel closures

AB - 1,175,875. **Container** closures. WHESSOE Ltd. 26 July, 1968 [27 July, 1967], No. 34510/67 Heading B8T. A **closure** for a vessel (e.g. a manhole cover of a road or rail tanker) comprises an apertured **base**-plate 1 provided with an upstanding rim 2 and designed to fit around the neck **ring** of an opening in the vessel, a lid 3 hinged about a pin 6 urged towards the **base**-plate 1 by springs 8, and a locking lever 9 hinged about a pin 10 urged towards the **base**-plate 1 by springs 18, the lid in its closed condition seating upon a gasket 4. The locking lever 9 and the lid 3 are provided with latching means 13, 13a and an aperture in the lever 9 accommodates an apertured lug 14 on the lid 3 for receiving a padlock or the like. A heel 9a on the lever 9 engages an abutment 9b on the lid when the lever is opened to lift the lid off the gasket 4. The lid 3 is provided with a vent opening leading to atmosphere via inclined passage 19, the vent opening having a **vacuum** valve

20 and a pressure valve 21 therein, the **vacuum** valve 20 opening when the pressure inside the vessel decreases a predetermined amount below the external pressure, and the pressure valve opening when the pressure inside increases a predetermined amount above the external pressure. The pressure valve 21 is additionally provided with a spring-biased ball-bearing valve 23, 24, and a free ball 26, retained in a casing 25 provided with a washer 27 to seat the ball, prevents spilling of the contents of the vessel should it overturn.

9/15 © EPODOC / EPO

PN - GB808995 A 19590218

PR - GB19560033739 19561105

AP - GB19560033739 19561105

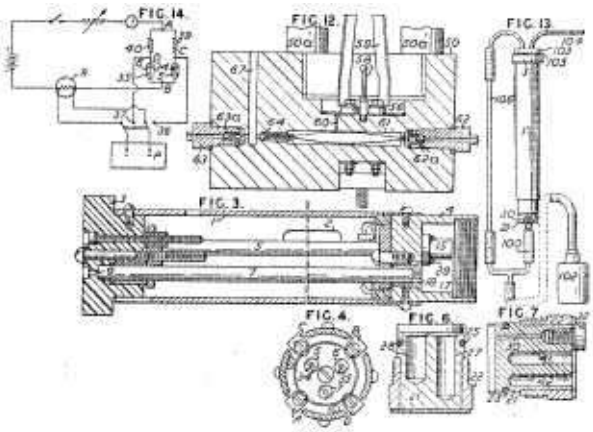
DT - *

CCI - G01N15/088

PA - MORGAN CRUCIBLE CO

TI - Measuring porosity and distribution of pore size

AB - 808,995. Determining porosity of materials. MORGAN CRUCIBLE CO. Ltd. Nov. 5, 1956, No. 33739/56. Class 106 (2). [Also in Group XXXVIII] A method of determining the distribution of pores of a given diameter and the porosity of a sample of material comprises placing the sample in a vertical dilatometer tube, partly filling it with an electrically conductive liquid which does not wet the sample, e. g. mercury, and measuring the difference between the resistance of a wire extending along the bore of the dilatometer tube and that of a wire of identical resistance per unit



length extending along the bore of a second vertical dilatometer tube filled with the liquid to the same initial level as the first tube, while both tubes are maintained under identical conditions of temperature and pressure. Dilatometer.-This is shown in Figs. 3, 4, 6 and 7, and comprises a vertical casing 1 having vents 2 to allow oil to flow freely between its interior and exterior and having upper and lower **closure** members 3, 4. An end portion 21 (Figs. 6 and 7), has a screwed retaining-**ring** 22 which screws into the member 4, and a sealing-**ring** 25 provides a fluid-tight connection between them. Inside the casing 1 are three capillary tubes 5, 6, 7, each communicating with a recess 9 in the member 3, and forming a triangle in crosssection. Tubes 5, 6 project at their lower ends into bushes 15, only one of which is shown, in a cavity 17 formed between the member 4 and the end portion 21. These bushes 15 are in axial alignment with chambers 27, 28 in the end portion, and sealing-rings 29 provide a fluid-tight joint when the end portion is screwed home. The tube 7 is located in a bush 18 which does not project into the cavity 17, and a vent 30 with a detachable plug 32 is provided in the end portion. Inside the capillary tubes 5, 6, are resistance wires, which are anchored at their upper ends to terminals 36, 37 (not shown), insulated from the body of the dilatometer, and at their lower ends to anchorages inside the bushes 15. Four contacts A, B, C, D, (see Figs. 4 and 14) project from the lower end of the casing

1 and are connected as follows. Contact A is connected to two balance resistances 39, 40, fixed within the casing 1 and these are in turn connected to contacts 36, 37, respectively. Contact B is earthed to the dilatometer body 1 and thus connected to the liquid in the tubes 5, 6, and contacts C, D, are connected to terminals 36, 37, respectively, and also to resistance wires 34, 35. Porosimeter.-This is shown in Fig. 12 and comprises an upright cylindrical pressure vessel (not shown), open at its lower end, which screws into a **base** 50 and is maintained in a vertical position by two stanchions 50a. The **base** 50 has a recess 56 containing two upright supports 58 which fit into sockets 41, 42, of the end portion 21 of the dilatometer, Fig. 7, whilst a spring (not shown) on the centre support holds the dilatometer against the top of the pressure vessel cavity. The **base** 50 also contains a bore 61 communicating, as shown in Fig. 12, by means of a passage 60 and non-return ball valves 62a, 63a, 64, with the recess 56, connections 62, 63, to a compressed air supply and an oil reservoir respectively, and with the bore 67 of a hand-worked pump. Spring contacts 59 rest against the contacts A, B, C, D, on the dilatometer body 1 and are connected electrically to a terminal block on the exterior of the **base** 50. A safety-valve and a pressure-gauge are also fitted to the bore 61. Operation.-A sample of predetermined dimensions is placed in chamber 27, which is larger than chamber 28 by the size of the sample, and the end

portion 21 lightly replaced. As shown in Fig. 13, a filling tube 100 connected to a closed mercury **container** 102 is screwed into vent 30 and a hollow cap 103, connected by a pipe 104 to a source of **vacuum**, is placed on the member 3 and sealed by an 0-**ring** 105. A glass tube 106 is connected to the pipes 104, 100 and serves to show the height of mercury in the capillary tubes 5, 6 and 7, the apparatus is evacuated, and mercury then introduced by raising the **container** 102. The end portion 21 is then tightened up, thus sealing the capillary tubes 5, 6, and the chambers 27, 28 from the rest of the apparatus at their lower ends, the **container** 102 lowered, and the **vacuum** released. When the pressure on the upper surface of the mercury in the tubes 5, 6, is again atmospheric, slight absorption of mercury into the larger pores of the sample takes place, and this gives a measure of the size of these pores. The filling apparatus can then be disconnected from the dilatometer 1 and the plug 32 replaced. The dilatometer is then placed in the recess 56 of the porosimeter and the pressure vessel screwed down. Air under pressure is then admitted through connection 62 into the space surrounding the dilatometer to prevent oil getting in the capillary tubes and contaminating the mercury. Oil is then pumped in through connection 63 by the hand pump, to a desired pressure. The mercury in tube 5 then sinks owing to absorption in those pores whose diameter is greater

than or equal to the diameter of the smallest pore into which mercury would penetrate at the pressure then obtaining, and the volume of such pores is measured by the increase in resistance in the connection between contacts C and B due to this fall in level of the mercury. The measurement is made by means of a potentiometer P, having a double-throw switch, which compares the potential difference between contacts C and D with that between the ends of a standard resistance R.

10/15 © EPODOC / EPO

PN - GB1350546 A 19740418

PR - US19710167151 19710729

AP - GB19720033110 19720714

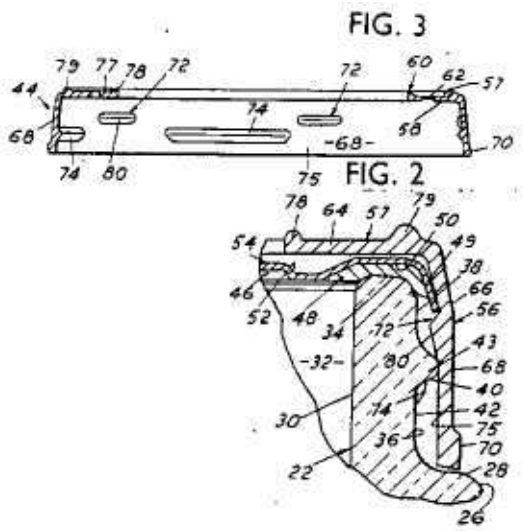
DT - **

CCI - B65D51/1677 ; B65D51/145

PA - CONTINENTAL CAN CO

TI - CLOSURES FOR CONTAINERS

AB - 1350546 **Container** closures; portable containers CONTINENTAL CAN CO Inc 14 July 1972 [29 July 1971] 33110/72 Headings B8T and B8D A **closure** for a **container** 22 having an annular flange 43 has a resilient plastics fitment 44 and a more rigid **closure** member 46, the fitment 44 having lugs 72 for retaining the member 46 and lugs 74 for engaging below the **container** flange 43, and the fitment 44 having an integral lifting **ring** 60 hinged at 64. The **ring** 60 is also joined initially to the remainder of the fitment by frangible bridges (62), Fig. 1 (not shown). The member 46, which retains a gasket 48, is hinged above a particular lug 80, Fig. 2, which is one of the lugs



72, so that when the **ring** 60 is lifted the force concentrated at the lug 80 raises the margin of the member 46, thereby breaking any **vacuum** within the **container**. In a modification, a further **vacuum**-relieving device is formed by a spot of adhesive (92), Fig. 7 (not shown), on the underside of the hinge (64<SP>1</SP>) which is broken away from an opening (90) in the **closure** member (46<SP>1</SP>) as the **ring** is lifted. Beads 78, 79 provide a stacking **ring** engageable by the **base** of a glass **container** similar to the glass **container** 22.

11/15 © EPODOC / EPO

PN - GB712842 A 19540804

PR - AUX712842 19501130

AP - GB19510028045 19511129

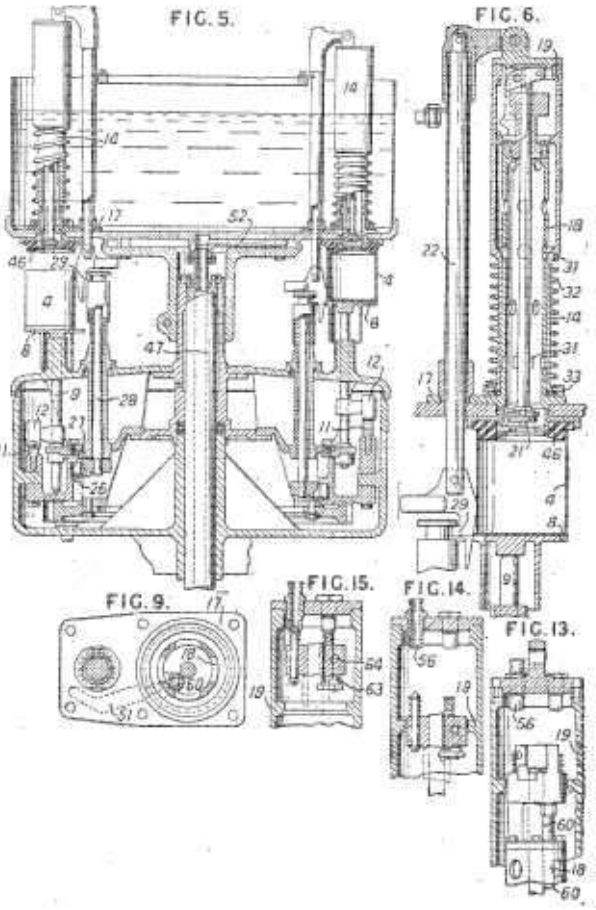
DT - *

CCI - A23B7/085

PA - DAVID WILLIAM BINGHAM

TI - Improvements relating to syruping apparatus for use in the canning of fruit

AB - 712,842. Filling cans with liquid. BINGHAM, D. W. Nov. 29, 1951 [Nov. 30, 1950]. No. 28045/51. Class 125 (2) Apparatus (Figs. 6, 14 and 15) for introducing syrup, brine or the like into containers 4 packed with fruit or vegetables is characterised by a filling head 14 which includes a stationary cylinder 18 having a discharge valve 21, a reciprocating sleeve 19 on the cylinder, a valve controlled air vent 56 and a valve 63 for periodically subjecting the cylinder to **vacuum**, so arranged that movement of the sleeve in one direction closes the discharge



valve and allows admission of syrup or the like to the cylinder, through ports 31 therein, while the air vent is open and the **vacuum** valve closed, and completion of the movement of the sleeve in the other direction causes **closure** of the ports 31 and admission of syrup or the like to the cylinder, opening of the discharge valve. **closure** of the air vent, and subjection of the cylinder to **vacuum**. The cylinder 18 is carried on a **base** plate 17 ; the sleeve 19 is slid along the cylinder under the influence of a spring 32 ; a sealing **ring** 33 on the **base** plate 17 is engaged by the lower end of the sleeve ; the seating of the discharge valve 21 preferably carries a resilient member 46 fitting within the top of a **container** 4 to ensure that sufficient space is left, on filling the **container** with syrup or the like, for insertion of the lid of the **container**. In the apparatus of Fig. 5, a rotatable mounting carries circumferentially spaced platforms 8 for the containers and the platforms are carried for up and down movement on vertically slidable posts 9 fitted with rollers 12 which roll upon a stationary cam track 11 ; a supply bowl of syrup or the like is carried by the rotatable mounting above the platforms and in the bowl are filling heads 14 in registry with the platforms ; a main passage 47 from a **vacuum** pump communicates by way of passages 52, 51, 60 and 64 (Figs. 9 and 13) with the filling heads ; vertically slidable rods 22 are connected at the upper ends to the sleeves 19 and are provided at their lower ends

with latches 29 operated by the containers 4, which latches engage vertical sliding -posts 28 fitted with rollers 27 rolling upon a parallel stationary cam track 26. With this apparatus, 'a packed **container** on a platform 8 rises on rotation of the mounting, strikes a latch 29, and couples together the slidable rods 22 and 28 ; during such movements the discharge valve 21 of the corresponding filling head 14 is closed, the sleeve 19 is raised, and syrup' or the like enters the cylinder 18 ; continued rotation ' of the mounting causes downward movement of the sleeve 19 and raising of the discharge valve 21 without cutting off supply of the syrup or the like to the cylinder, and syrup or the like flows into the **container** ; continued downward movement of the sleeve against'the spring 32 causes engagement of the sleeve with the sealing **ring** 33, whereupon the air vent 56 is closed and the **vacuum** valve 63 is actuated to subject the filling head to **vacuum**, air trapped within the **container** being withdrawn therefrom while the syrup or the like continues to flow in ; before the **container** is filled, the sleeve 19 begins to 'rise and so close the **vacuum** valve and allow admission of air to the cylinder 18, and so cause forcing of remaining syrup or the like into the **container** before closing of the discharge valve 21 occurs and the sleeve returns to its uppermost position.

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PN - GB355397 A 19310827

PR - GB19300017292 19300604

AP - GB19300017292 19300604

DT - *

CCI - **B21D51/2661**

PA - BRITISH SURE SEAL COMPANY LTD; JOSEPH HAROLD HUXLEY

TI - Improvements in and relating to the manufacture of containers and closures therefor

AB - 355,397. Tins and closures therefor. BRITISH SURE SEAL CO., Ltd. and HUXLEY, J. J., 132, Lots Road, Chelsea, London. June 4, 1930, No. 17292. [Classes 66 and 125 (iii).] In a tin **container** having a groove near the mouth for the reception of the lower flange of a jointed locking **ring**, the body is formed with a lap joint over the area of the groove. The remainder of the joint may be wholly or in part a lock joint, or all the joints may be lapped and soldered. In forming the tin, portions such as 19, 20, Fig. 12, are cut away from the blank, the' edges are folded over in the same angular direction about the lines 19a, 20a, and the folded edges engaged to form a lock joint except for the shaded portion 21, Fig. 13, where the edges are merely lapped, the resulting tin having a lap joint from groove 2, Fig. 3, to the mouth flange 3. Alternatively a rectangular portion may be cut from one edge where the groove is to be formed and the corresponding portion of the opposite edge be left unfolded. The mouth of the tin is either curled or flanged inwards to form a smooth surface against which a packing **ring** can engage or the edge comprises an inturned slightly upstanding flange 3, Fig. 3, adapted to be bent down by the packing whose application it resists. The rubber latex or other packing is disposed in an annular recess 12a, Fig. 10, having a sloping inner edge to provide engagement between the packing **ring** and the side of the curled edge of the tin as well as the top thereof. The part between the groove and the mouth may be tapered to produce a " glass " finish or may be formed with inclined threads or ribs for the reception of a bayonet joint or other interlocking cap. The **closure** cap may be a frictiontight cap, a snap-on cap having short inturned flanges in opposite halves and shallow flanges connecting them, or a cap having a rolled flange 11, Fig. 8, which is flattened prior to ribs 4a being pressed inwards from it. The cap may comprise a disc retained by a **ring** and, if a friction cap is employed with a **vacuum container** E, the flange thereof may be cut away at one portion to permit of the insertion of a knife &c. to break the **vacuum**. The locking **ring** used may be that described in Specification 336,302, [Class 125 (iii), Stoppers &c.], and comprising a tongue 15, Fig. 11, in the tail thereof adapted to engage the **base** of the tongue 16 in the head thereof, a bead or groove 14 being formed adjacent the lower edge of the **ring** to facilitate its application to the tin. In forming the groove in the tin a shoulder 31, Fig. 16, on a laterally displaceable rotary former 29 flanges the end of the tubular blank C which is disposed on a rotary block 28 and then a member 33 on the former co-operates with a groove 32 on the block to form the groove, the blank engaging a shoulder 30 on, and being supported throughout almost its entire length by, the block 28. The groove may be shaped to accommodate a spiral applying **ring** by which the **ring** is secured to the tin.

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PN - GB1089485 A 19671101

PR - GB19650005029 19650205

AP - GB19650005029 19650205

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CCI - A47J41/02

PA - VACCO LTD

TI - Improvements in or relating to **vacuum** flask containers

AB - 1,089,485. **Vacuum** flasks. VACCO Ltd. Feb. 7, 1966 [Feb. 5, 1966], No. 6029/65. Heading-F4U. A polyethylene or polypropylene **container** for a double walled **vacuum bottle** 6 is made in at least two parts permanently secured by welding Or an adhesive. The main tubular body portion 2 of the **container** having an integral closed **base** 4 withan upstanding annular support rim 8 for the **bottle** 6, is secured to the upper frusto-conical portion 10 which forms both a threaded shoulder 12 for a cup 26, and a shaped upper end 16 adhesively attached to the **bottle** 6 at points 18, 20 and defining a threaded aperture for a threaded stopper 24. The portions 2, 10 are mutually secured at abutting V- or U-shaped groove surfaces 3. Alternatively the abutting surfaces may be flat or be oblique, plain or curved surfaces. In another embodiment (Fig. 2) the main body portion (102) which defines both the shoulder portion (112) and the **bottle** lip portion (122) is permanently secured within a flange (105) of a bottom **closure** cap (104) including a ridge (107) and a resilient **ring** (108) for supporting the **bottle** (106). Spot or circumferential welding may be employed, and ultrasonic or

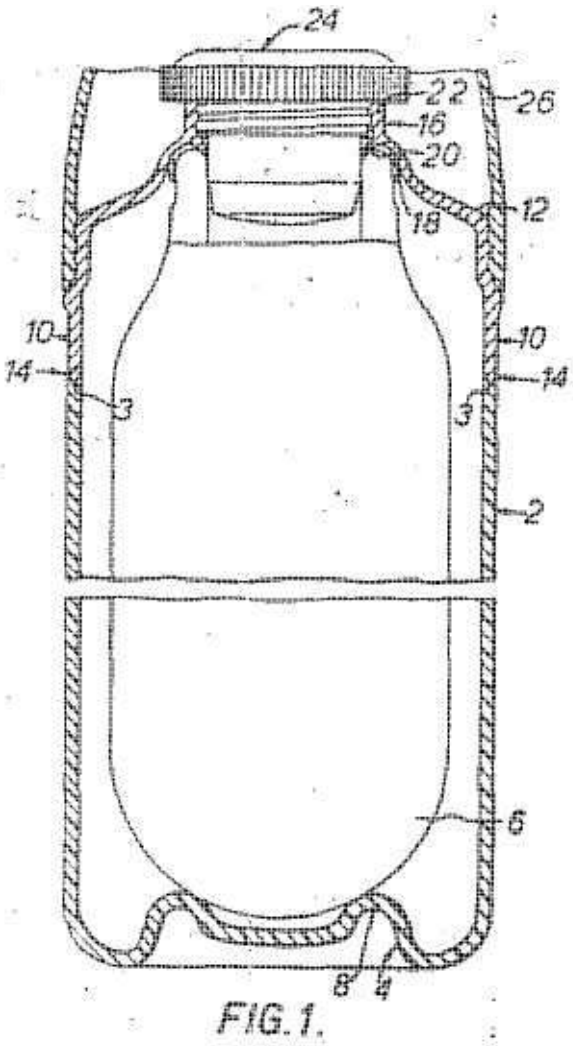

FIG. 1.

high frequency induction welding techniques used. The **container** may be formed with a handle, or as a jug, and with reinforcing longitudinal corrugations. The abuttng parts may overlap one another, one part being formed with a ridge to limit their mutual insertion.

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PN - GB1074653 A 19670705

PR - GB19640003362 19640127

AP - GB19640003362 19640127

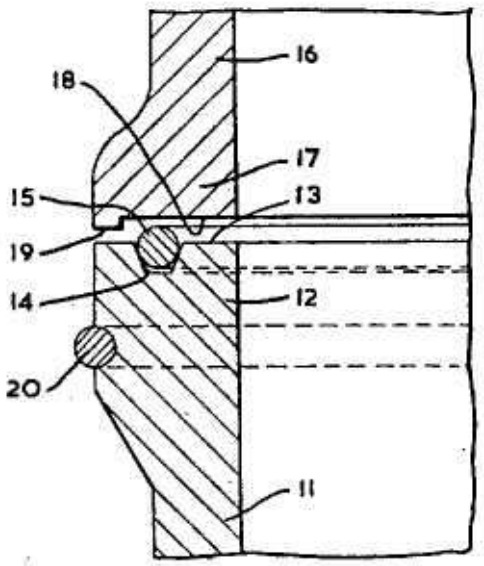
DT - **

CCI - B01L1/02 ; F16J15/106

PA - JENCONS SCIENT LTD

TI - Improvements in or relating to desiccators

AB - 1,074,653. **Container** closures. JENCONS (SCIENTIFIC) Ltd. Jan. 21, 1965 [Jan. 27, 1964], No. 3362/64. Heading B8T. [Also in Division F4] The **closure** between a bowl 11 and a cover 16 of a **vacuum** desiccator is formed between corresponding annular joint surfaces 13, 18 by means of a tapered groove 14 in the surface 13 of the bowl which seats a resilient 0-**ring** seal 15 so as to inhibit the seal from settling on the **base** of the groove 14. The thickened wall portion 17 of the cover terminates in an annular lower face 18 having around its periphery a shallow projecting stepped portion 19. An additional resilient **ring** or rings 20 may be mounted in a part-circular peripheral groove in the bowl and/or cover for protection purposes.



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PN - DE3811212 A1 19891026

PR - DE19883811212 19880402

AP - DE19883811212 19880402

DT - *

CT - DE3341164 C2 [ ]; DE2905785 A1 [ ]; DE2045966 A1 [ ]; GB2069425 A [ ]

CCI - B64D17/80

PA - SEIFFERT WULF [DE]

TI - Device for releasing an aircraft rescue parachute from a **container**

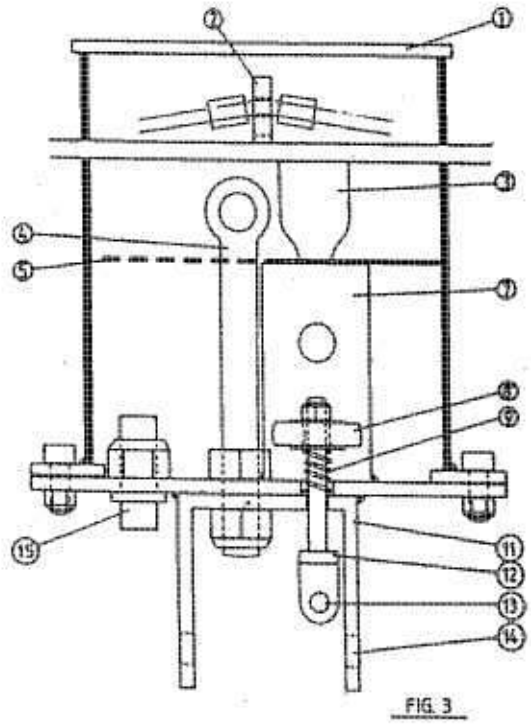

FIG. 3

AB - The invention relates to a device for releasing an aircraft rescue parachute from a **container**, which is provided with a **closure** flap, by means of a propellent gas. This propellent gas which is located in a cartridge (3) on or in the **container** produces an overpressure, which forces the rescue parachute out of the **container**, under the rescue parachute after the cartridge (3) has been opened. In order to achieve improved storage of the rescue parachute, the **container** is pumped to be empty of air or virtually empty of air. A **vacuum**-pressure valve (15) is provided for this purpose. The cord of the rescue parachute is fastened by means of a strong shackle to a sufficiently dimensioned **ring** bolt (4) which is screwed to the **container base** and to the connection U-piece (11). The rip cord is fastened to an eye bolt (12) which is held in the quiescent position by a helical spring (9). Via a tilting lever (8), this eyebolt knocks a blade (6) into the compressed-gas cartridge (3). The housing cover (1), which is provided with a rubber seal, is held on the upper

housing opening by the **vacuum** pressure. A filter is located between the rescue parachute and the release mechanism.
<IMAGE>

[SS 48]