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[EPODOC: SS 2] ..fi epodoc

 Database: EPODOC

[EPODOC: SS 2] (bottle or container or receptacle or recipient) and diaphragm

Results in EPODOC 7.575

[SS 3] * and sidewall+

Results in EPODOC 48

[SS 4] * and PD<2014-08-21

Results in EPODOC 28

[SS 5] ..li



1/28 © EPODOC / EPO

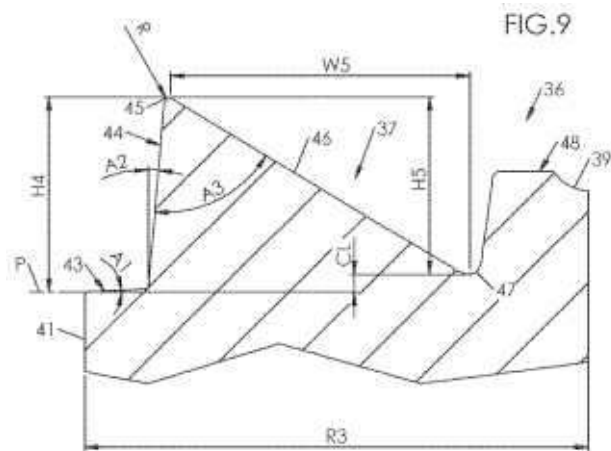
PN - [WO2014122018](#) A1 20140814

PR - EP20130305143 20130206

AP - WO2014EP51202 20140122

DT - **

CT - |EP| ISR (A1)
[US2008047964](#) A1 20080228
 [XYI] (DENNER JOHN [US], et al)
 [X] 1-3,8,9,11
 * figures 2,3,9,10 *
 [Y] 5
 [I] 2,4,6,10;
[WO2004028910](#) A1 20040408
 [X] (CO2 PAC LTD [NZ], et al)
 [X] 1,7-9,11
 * figures 3,4,11-14 *;



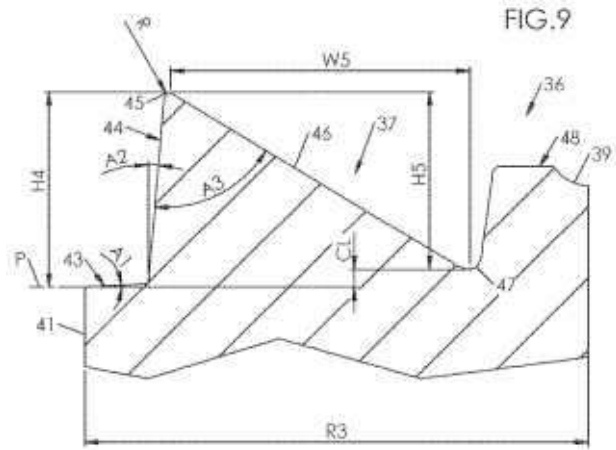
[US2009202766](#) A1 20090813
[X] (BEUERLE FREDERICK C [US], et al)
[X] 1,7-9,11
* figure 10 *;
[WO2012002164](#) A1 20120105
[X] (NISSEI ASB MACHINE CO LTD [JP], et al)
[X] 1,8-11
* figures 3,4 *;
[FR2919579](#) A1 20090206
[X] (SIDEL PARTICIPATIONS [FR])
[X] 1,8,11
* figures 2,5 *;
[US2010163513](#) A1 20100701
[A] (PEDMO MARC A [US])
[A] 1
* paragraphs [0030] , [0031] *;
[EP0572722](#) A1 19931208
[A] (PROCTER & GAMBLE [US])
[A] 1
* column 1, line 8 - line 25 *
* column 1, line 50 - column 2, line 8 *;
[US2007215571](#) A1 20070920
[A] (TRUDE GREGORY [US])
[A] 1
* figures 1,2 *;
[MX2012009509](#) A 20121130
[YA] (GRAHAM PACKAGING LC L P [US])
[Y] 5
* page 18; figures 17,19 *
[A] 1

- CCI - [B29B11/14](#) ; [B29C49/541](#) ;
[B65D1/0276](#) ; [B65D79/005](#)
- CUI - [B29C49/28](#)
- CCA - [B29L2031/7158](#) ; [B29B11/08](#) ;
[B29B11/12](#) ; [B29K2067/003](#) ;
[B29C49/12](#) ; [B29C49/4273](#) ;
[B29B2911/14326](#) ;
[B29B2911/14333](#) ;
[B29B2911/1444](#) ;
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[B29B2911/14606](#) ;
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[B29B2911/14666](#) ;
[B29B2911/14693](#) ;
[B29B2911/14753](#) ;
[B29B2911/1476](#) ;
[B29B2911/14886](#) ;
[B29C2049/4838](#) ;
[B29C2049/4882](#) ;
[B29C2049/4892](#) ;
[B29B2911/14331](#) ;
[B29B2911/14332](#)

- PA - SIDEL PARTICIPATIONS [FR]
- TI - MOLD FOR BLOW MOLDING A
HOT-FILL **CONTAINER** WITH
INCREASED STRETCH RATIOS
- AB - A mold for blow molding
a **container** from a preform,
said **container** comprising a wall
portion and a base including a
high standing ring and a central
outwardly-inclined
invertible **diaphragm**, said mold
comprising **sidewalls** forming a
counter print of the wall portion
of the **container** (1) and a mold
base (36) having an upper
surface (37) defining a counter
print of the **container** base,
characterized in that the upper
surface (37) includes: an
annular peripheral face (43)
corresponding to an annular
support flange of the **container**
base, a frusto-conical outer face
(44) corresponding to an inner
portion (11) of the high standing
ring, said outer face (44)
protruding upwardly with a draft
angle (A2) from an inner edge of
the peripheral annular face (43)
up to a sharp apex (45), a frusto-
conical downwardly inclined
inner face (46) corresponding to
the invertible **diaphragm**.

PN - [EP2764967](#) A1 20140813
 PNFP - EP2764967 B1 20151014
 PR - EP20130305143 20130206
 AP - EP20130305143 20130206
 DT - *; Rep
 CT - || STSE (A1)
[US2008047964](#) A1 20080228
 [XYI] (DENNER JOHN [US], et al)
 [X] 1,2,5,7,11,12,14
 * figures 2,3,9,10 *
 [Y] 3,8
 [I] 4,6,9,13;
[WO2004028910](#) A1 20040408
 [X] (CO2 PAC LTD [NZ], et al)
 [X] 1,7,10-12,14
 * figures 3,4,11-14 *;
[US2009202766](#) A1 20090813
 [X] (BEUERLE FREDERICK C [US], et al)
 [X] 1,7,11,12,14
 * figure 10 *;
[WO2012002164](#) A1 20120105
 [X] (NISSEI ASB MACHINE CO LTD [JP], et al)
 [X] 1,11-14
 * figures 3,4 *;
[FR2919579](#) A1 20090206
 [X] (SIDEL PARTICIPATIONS [FR])
 [X] 1,11,14
 * figures 2,5 *;
[US2010163513](#) A1 20100701
 [YA] (PEDMO MARC A [US])
 [Y] 3
 * paragraphs [0030] , [0031] *
 [A] 2;
[EP0572722](#) A1 19931208
 [A] (PROCTER & GAMBLE [US])
 [A] 2,3
 * column 1, line 8 - line 25 *
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[US2007215571](#) A1 20070920
 [A] (TRUDE GREGORY [US])
 [A] 2
 * figures 1,2 *;
[MX2012009509](#) A 20121130
 [YA] (GRAHAM PACKAGING LC L P [US])



[Y] 8

* page 18; figures 17,19 *

[A] 7

- CCI - [B29B11/14](#) ; [B29C49/541](#) ;
[B65D1/0276](#) ; [B65D79/005](#)
- CUI - [B29C49/28](#)
- CCA - [B29L2031/7158](#) ; [B29B11/08](#) ;
[B29B11/12](#) ; [B29K2067/003](#) ;
[B29C49/12](#) ; [B29C49/4273](#) ;
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[B29B2911/14886](#) ;
[B29C2049/4838](#) ;
[B29C2049/4882](#) ;
[B29C2049/4892](#) ;
[B29B2911/14331](#) ;
[B29B2911/14332](#)
- PA - (A1 B1)
SIDEL PARTICIPATIONS [FR]
- TI - (A1 B1)
Mold for blow molding a hot-fill **container** with increased stretch ratios
- AB - (A1)
A mold for blow molding a **container** from a preform, said **container** comprising a wall portion and a base including a high standing ring and a central outwardly-inclined invertible **diaphragm**, said mold comprising **sidewalls** forming a counter print of the wall portion of the **container** (1) and a mold base (36) having an upper surface (37) defining a counter print of the **container** base, characterized in that the upper

surface (37) includes: - an annular peripheral face (43) corresponding to an annular support flange of the **container** base, - a frusto-conical outer face (44) corresponding to an inner portion (11) of the high standing ring, said outer face (44) protruding upwardly with a draft angle (A2) from an inner edge of the peripheral annular face (43) up to a sharp apex (45), - a frusto-conical downwardly inclined inner face (46) corresponding to the invertible **diaphragm**.

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PN - [JP2012181062](#) A 20120920

PNFP - JP5712674B B2 20150507

PR - JP20110043179 20110228

AP - JP20110043179 20110228

DT - I

FI - G01L13/00&B; G01L19/14

FT - 2F055/AA39; 2F055/BB05; 2F055/CC55; 2F055/DD20; 2F055/EE23; 2F055/FF11; 2F055/GG25; 2F055/HH05

PA - (A)
SEIKO EPSON CORP

TI - (A)
FORCE DETECTOR HOUSING CASE AND FORCE MEASURING INSTRUMENT

AB - (A)
PROBLEM TO BE SOLVED: To keep accuracy in pressure measurement by discharging residual air in a circumference, while protecting a seal **diaphragm**. SOLUTION: A force detector housing case 10 for housing a pressure sensor 210 includes: a cylindrical **container**; a flange part projecting from the **container**; and a seal **diaphragm** 244A to be arranged in the **container**. The force detector housing case includes: a first external case 12 having a bottom part 16 and a **sidewall** part 18; a pressure introduction hole 22 formed in the bottom part 16; a circular ring 48 to be arranged between the flange part and the bottom part 16 so as to allow the pressure introduction hole 22 to be inside the ring; and a push-in member (a screw-in metal fitting 28) for pressurizing the flange part against the bottom part 16 together with the circular ring 48, and forming a pressure introduction space 26 having the pressure introduction hole 22 with the **diaphragm** 244A as a part of a boundary. Discharge holes 24 are arranged, which penetrate between the side surface of the **sidewall** part 18 and the pressure introduction space 26.

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- PN - [CN102716523](#) A 20121010
- PNFP - CN102716523B B 20130717
- PR - CN2012199077 20120406; CN20121224563 20120702
- AP - CN20121224563 20120702
- DT - I
- CT - || STSE (A)
[US4567211](#) A 19860128 [Y] (OBERSTER ARTHUR E [US], et al)
[Y] 1-10
说明书第3栏第23行-第7栏第2行,图1-6
[US4936841](#) A 19900626 [Y] (AOKI OSAMU [JP], et al)
[Y] 1-10
说明书第3栏第25行-第7栏第3行,图1-16
[US3390677](#) A 19680702 [A] (JACQUEZ RAZIMBAUD)
[A] 1-10
全文
- PA - (A B)
CHONGQING LUMMY PHARMACEUTICAL
- TI - (A B)
Screw-in pre-installed type medicine-charging instrument
- AB - (A)
The invention discloses a screw-in pre-installed type medicine-charging instrument, comprising a medicine-charging barrel, double medicine-charging needles, a rotary sleeve and a push rod, wherein a guide spiral groove is arranged on the inner wall of the top of the medicine-charging barrel; one end of the rotary sleeve stretches in the medicine-charging barrel, and the other end of the rotary sleeve is a sealed end; and a guide through groove is arranged on the **sidewall** of the rotary sleeve along an axial direction, the push rod is arranged in the rotary sleeve along the axial direction, and a guide block penetrating through the guide through groove and stretching in the guide spiral groove is arranged on the push rod. When the screw-in pre-installed type medicine-charging instrument is used, a medicine **container** and the double medicine-charging needles are in a sealed state via a **diaphragm** in a connector and the rotary sleeve with a sealed top end, so that absolutely sterile transport and storage can be achieved. The rotary sleeve is rotated to drive the push rod to rapidly move downwards along the guide spiral groove, so as to push the medicine **container**, and the upper needle points of the double medicine-charging needles puncture a sealing plug on the medicine **container**, the lower needle points of the double medicine-charging needles puncture the **diaphragm** in the connector, so that the medicine **container** is instantaneously connected with the interior of a transfusion **container**, and the whole process is in a sterile butt-joint; and therefore, whole-course sterile sealing for transport, storage, butt-joint, medicine mixing and transfusion can be realized.

5/28 © EPODOC / EPO

PN - [US2012181246](#) A1 20120719

PR - US201113324384
20111213; WO2010US33082
20100430; US20090175506P
20090505

AP - US201113324384 20111213

DT - **

CT - || R141 (A1)
[US5067622](#) A 19911126 [
] (GARVER LAWRENCE E [US], et
al);
[US2009202766](#) A1 20090813 [
] (BEUERLE FREDERICK C [US], et
al);
[US8596479](#) B2 20131203 [
] (SIMON JOHN B [US], et al)

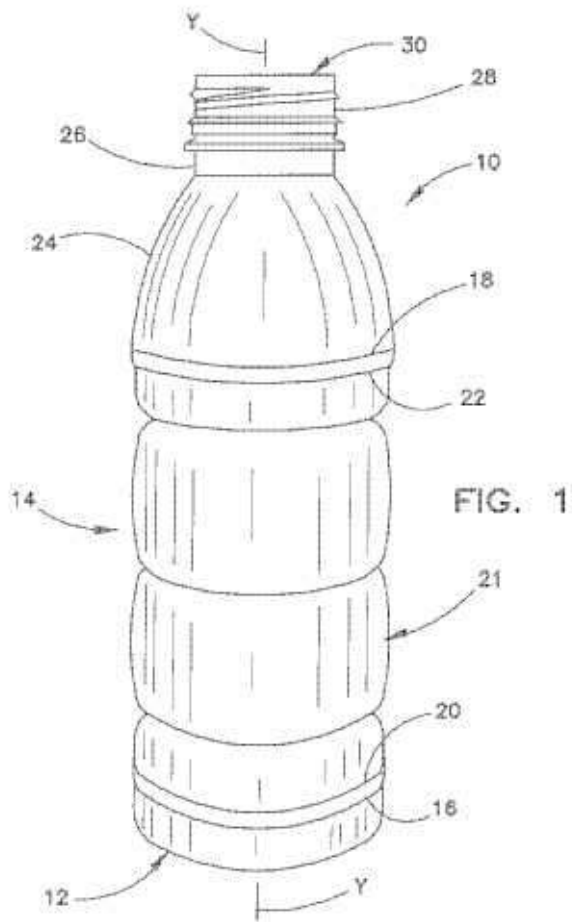
CCI - [B65D1/0223](#) ; [B65D1/0276](#) ;
[B65D79/005](#)

CCA - [B65D2501/0036](#)

PA - ROSS JOHN R [US]; SCOTT
ANTHONY J [US]; BALL CORP;
AMCOR RIGID PLASTICS USA INC

TI - PANELLESS HOT-FILL
PLASTIC **BOTTLE**

AB - A plastic **bottle** base having a
seating ring perpendicular to
the **bottle** axis. A base inner
portion extends upward and
inward toward a center bottom
wall surrounding the axis. A
flexible **diaphragm** portion
extends outward from the
seating ring to join a heel
portion at a substantially
horizontal inflection point.
The **diaphragm** portion is
sufficiently flexible to respond to
changes in **bottle** volume and
vacuum to allow the seating ring
to move upward so that the
seating ring is above the heel
portion of the **bottle**. A **sidewall**
is defined by a small number of
barrel shaped surfaces
separated by indented ring
segments to form a panelless
plastic **bottle** capable of hot-



filling and capping.

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PN - [CA2766426](#) A1 20101111

PR - US20090175506P
20090505; WO2010US33082
20100430

AP - CA20102766426 20100430

DT - I

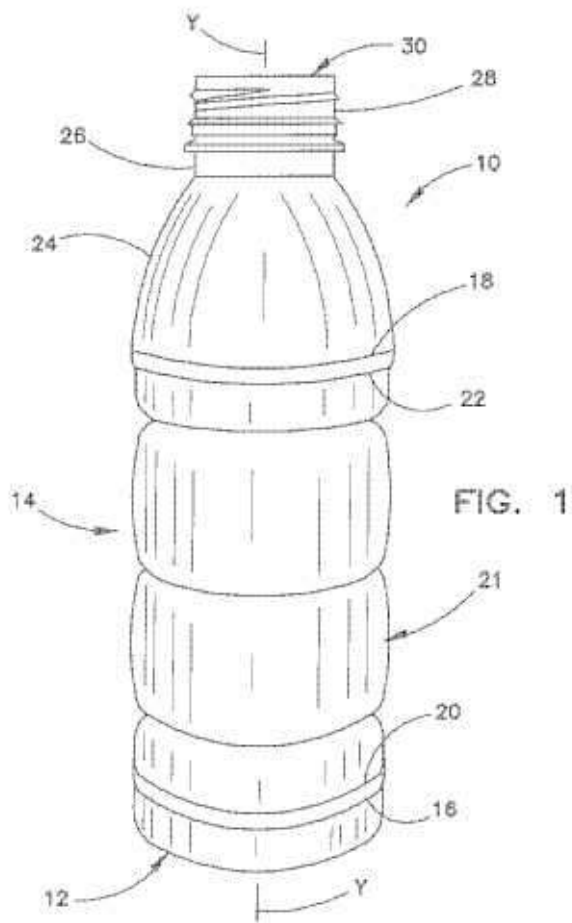
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[B65D79/005](#)

CCA - [B65D2501/0036](#)

PA - AMCOR RIGID PLASTICS USA INC
[US]

TI - PANELLESS HOT-FILL
PLASTIC **BOTTLE**

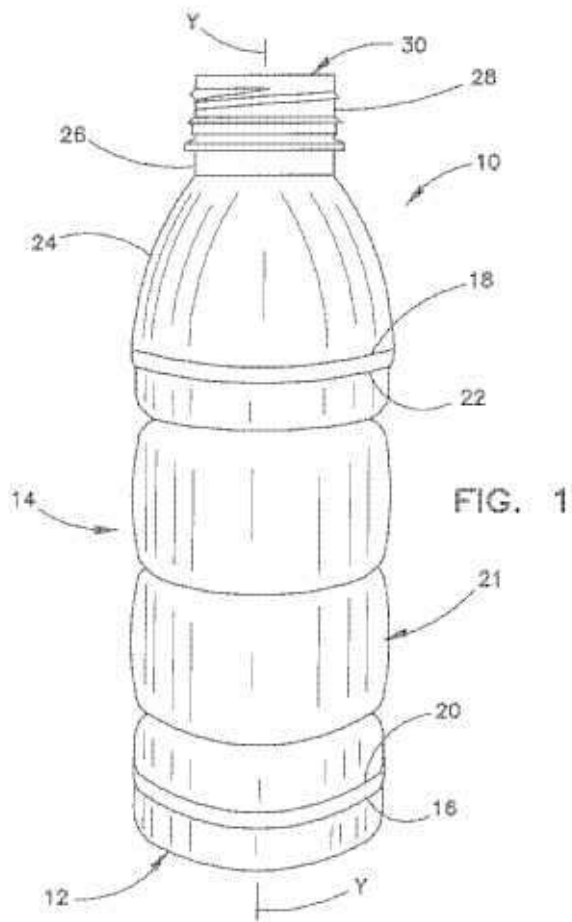
AB - A plastic **bottle** base is formed with a seating ring perpendicular to the axis for supporting the **bottle** on any underlying surface prior to hot filling. An inner portion within the seating ring extends upward and inward toward a center bottom wall surrounding the axis. A flexible **diaphragm** portion extends outward from the seating ring to join a heel portion at a substantially horizontal inflection point. The **diaphragm** portion is sufficiently flexible to respond to changes in **bottle** volume and vacuum to allow the seating ring to move upward so that the seating ring is above the heel portion of the **bottle**. This flexible base is combined with a **sidewall** defined by a small number of barrel shaped surfaces separated by indented ring segments to form a panelless plastic **bottle** capable of hot-filling and capping. The **sidewall** geometry is configured such that the plastic **bottle** prior to hot filling



can be a lighter weight and/or
can have a reduced number of
indented ring segments, while
having a satisfactory vacuum
resistance to localized paneling
and/or ovalization.

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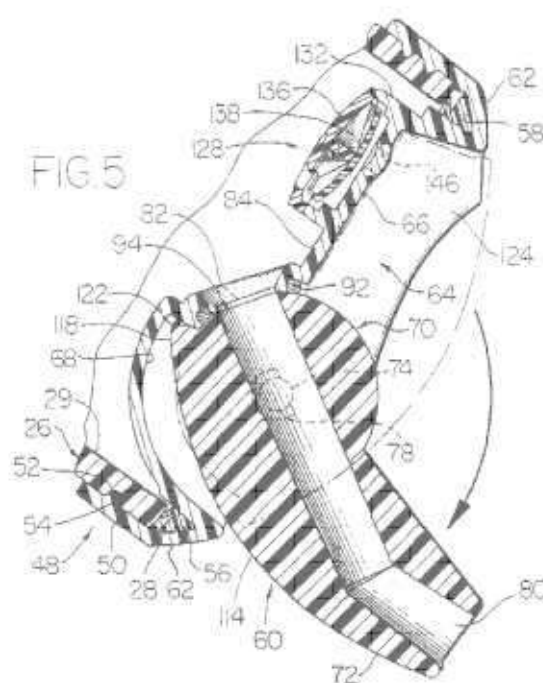
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- PR - US20090175506P 20090505
- AP - WO2010US33082 20100430
- DT - *; Rep
- CT - |US| ISR (A1)
[US2007199915](#) A1 20070830
[X] (DENNER JOHN [US], et al);
[US7296701](#) B2 20071120
[Y] (OZAWA TOMOYUKI [JP], et al);
[USD448997S](#) S 20011009
[Y] (ALLEN BRADLEY L [US], et al);
[US2002153343](#) A1 20021024
[Y] (TOBIAS JOHN W [US], et al);
[US7228981](#) B2 20070612
[A] (CHISHOLM BRIAN J [US]);
[US7150372](#) B2 20061219
[A] (LISCH G DAVID [US], et al);
[US6595380](#) B2 20030722
[A] (SILVERS KERRY W [US])
- CCI - [B65D1/0223](#) ; [B65D1/0276](#) ;
[B65D79/005](#)
- CCA - [B65D2501/0036](#)
- PA - BALL CORPORTION [US]; ROSS
JOHN R [US]; SCOTT ANTHONY J
[US]
- TI - PANELLESS HOT-FILL
PLASIC **BOTTLE**
- AB - A plastic **bottle** base is formed
with a seating ring
perpendicular to the axis for
supporting the **bottle** on any
underlying surface prior to hot
filling. An inner portion within
the seating ring extends upward
and inward toward a center
bottom wall surrounding the
axis. A flexible **diaphragm**
portion extends outward from



the seating ring to join a heel portion at a substantially horizontal inflection point. The **diaphragm** portion is sufficiently flexible to respond to changes in **bottle** volume and vacuum to allow the seating ring to move upward so that the seating ring is above the heel portion of the **bottle**. This flexible base is combined with a **sidewall** defined by a small number of barrel shaped surfaces separated by indented ring segments to form a panelless plastic **bottle** capable of hot-filling and capping. The **sidewall** geometry is configured such that the plastic **bottle** prior to hot filling can be a lighter weight and/or can have a reduced number of indented ring segments, while having a satisfactory vacuum resistance to localized paneling and/or ovalization.

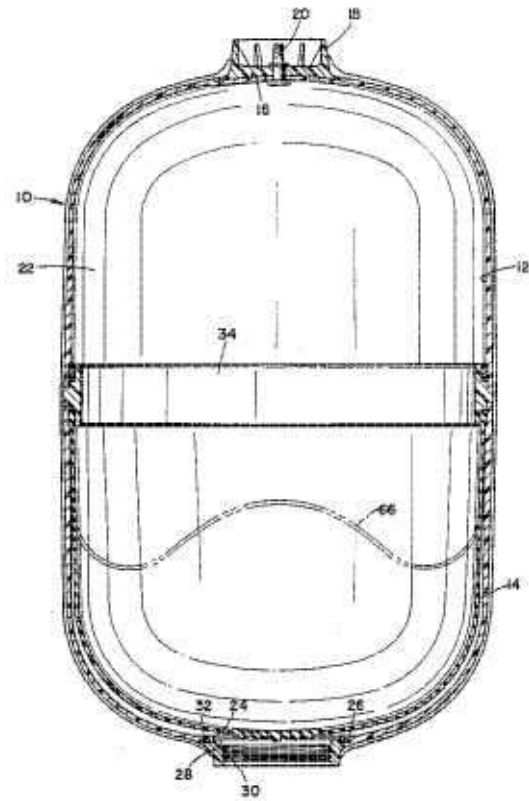
8/28 © EPODOC / EPO

- PN - [US5890628](#) A 19990406
- PR - US19970820049 19970318
- AP - US19970820049 19970318
- DT - **
- CT - [US3874562](#) A []; [US4219138](#) A [];
[US4892234](#) A []; [US5054662](#) A [];
[US5477994](#) A []; [FR2209062](#) A1 [];
[WO9615705](#) A1 []
- CCI - [B65D47/305](#) ; [B65D51/1644](#)
- PA - OUTER CIRCLE PRODUCTS LTD [US]
- TI - Dispensing lid assembly for a **container**
- AB - A dispensing lid assembly which includes a rotatable spout for use with a **container** defining a **container** cavity. The **container**



may be the type having deflectable **sidewalls**. The rotatable spout includes an arcuate ball portion and a nozzle portion. The arcuate rotator portion is retained on a base of the lid assembly to allow rotation thereof to align a through hole in the spout with a dispensing hole in the base. The arcuate rotator portion is configured to reduce the wear on a sealing gasket. A check valve assembly is attached to the base of the dispensing lid assembly. The check valve assembly includes a **diaphragm** which is pre-loaded within a valve chamber to provide a desired sealing effect between the **diaphragm** and the base portion. The check valve assembly is configured to pre-load forces on the **diaphragm** such that a desired inhaling force will unseat the **diaphragm** from the corresponding portion of the base to draw air therethrough. Upon equalization of the pressure within the **container** cavity and the ambient atmosphere, the **diaphragm** will return to seal against the base portion to prevent dripping therethrough.

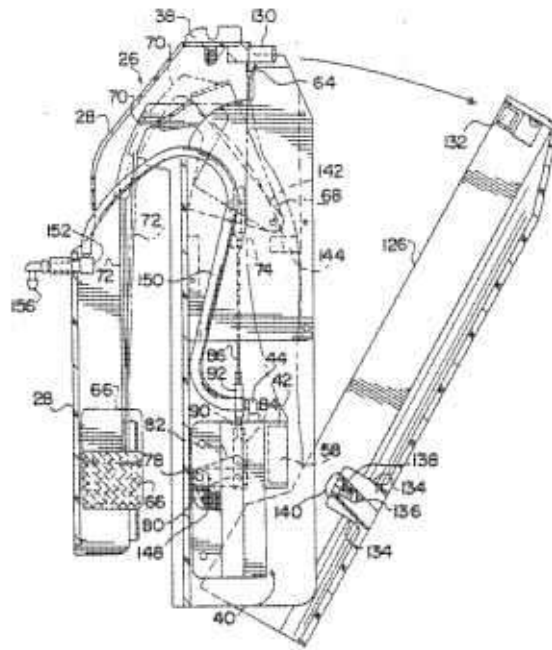
PN - [US4595037](#) A 19860617
 PR - US19840681841 19841214
 AP - US19840681841 19841214
 DT - *
 CT - [US2394401](#) A []; [US3034465](#) A [];
[US3066699](#) A []; [US3148706](#) A [];
[US4010773](#) A []; [US4192350](#) A [];
[US4216881](#) A []; [US4265274](#) A [];
[CH225086](#) A []; [GB948675](#) A []
 CCI - [F16L55/053](#) ; [F15B1/14](#)
 CCA - [F15B2201/205](#) ;
[F15B2201/3151](#) ;
[F15B2201/3156](#) ;
[F15B2201/4053](#) ; [F15B2201/41](#) ;
[F15B2201/415](#) ; [F15B2201/605](#)
 PA - ESSEF IND INC [US]
 TI - Split tank closure and **diaphragm** assembly
 AB - A split tank closure and **diaphragm** assembly for a hydropneumatic filament wound pressure vessel is disclosed. The assembly includes first and second cup shaped plastic tank liners having oblate ellipsoidal end portions and cylindrical **sidewall** portions terminating in cylindrical open mouth portions. A ring is provided for joining and sealing the open mouth portions together to form a sealed **container** and to mount a **diaphragm** within the tank to divide the interior of the tank into variable volume chambers. The ring has a cylindrical outer surface corresponding to the outside diameter of the cylindrical **sidewall** portions of the liners. The liners form a dovetail joint with the ring and respectively trap an O-ring and a



bulbous portion of the **diaphragm** between recessed portions of the liner and a surface of the ring to seal the interior of the tank. The assembly is wound with a resin impregnated continuous roving to reinforce the tank and resist internal pressures.

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- PN - [US5092377](#) A 19920303
- PR - US19900586370 19900921
- AP - US19900586370 19900921
- DT - *; Rep
- CT - || STSE (A)
[US213161](#) A 18790311 [];
[US475429](#) A 18920524 [];
[US2320128](#) A 19430525 [] (GEORGE HALL DAVID);
[US2337179](#) A 19431221 [] (BROWN CHARLES F);
[US2729382](#) A 19560103 [] (WEBER JOHN G);
[US3084350](#) A 19630409 [] (RUSSELLANDERSON);
[US3893470](#) A 19750708 [] (MACPHEE JOHN, et al);
[US3980206](#) A 19760914 [] (HANCOCK CHARLIE L);
[US4252142](#) A 19810224 [] (DURAND-TEXTE GERARD);
[US4358056](#) A 19821109 [] (GREENHUT BART E, et al)
- CCI - [B01F15/0441](#) ; [G05D11/001](#)
- CCA - [Y10T137/2536](#)
- PA - JOHNSON & SON INC S C [US]
- TI - Bucket and fluid-metering device therefor
- AB - In combination with a portable liquid **container** such as a bucket (20), a liquid-dispensing device (26) is disclosed. Device (26) automatically meters a desired quantity of a dilutable liquid concentrate into bucket (20) whenever bucket (20) is filled to



a predetermined level with a suitable diluting liquid. Device (26) comprises a frame (28), a pump (40) mounted on frame (28), and a flexible-plastic pouch (56) containing the liquid concentrate and hung from frame (28). Frame (28) is carried atop a **sidewall** portion of bucket (20). Pump (40) includes a pump inlet (42), a pump outlet (44), and a pump chamber (46). Pump chamber (46) is in fluid communication with pump inlet (42) and outlet (44). Pouch (56) includes a valved outlet (96) so dimensioned relative to pump inlet (42) as to be removably snugly engaged with pump inlet (42) in a fluid-tight manner. Pump (40) further includes a piston or **diaphragm** (48) disposed within pump chamber (46) for transferring liquid concentrate from pump inlet (42) via pump chamber (46) to pump outlet (44). Device (26) further includes a float mechanism (66) disposed into bucket (20) and pivotally operatively connected to piston (48) for causing piston (48) to be reciprocatingly movable in piston chamber (46) between first and second positions for purposes of defining a first cycle which causes liquid to be drawn into pump chamber (46) via pump inlet (42) and for purposes of defining a second cycle which causes liquid to be discharged from pump chamber (46) via pump outlet (44). Device (26) still further includes a spring mechanism (142), on frame (28), for biasing float mechanism (66) in the first position.

PN - [US3905368](#) A 19750916

PR - US19740443011 19740215

AP - US19740443011 19740215

DT - **

CT - || STSE (A)
[US3105613](#) A 19631001 [
] (BARTON RAYMOND W, et al);
[US3325031](#) A 19670613 [
] (GREGOIRE SINGIER JACQUES
 LOUIS);
[US3391847](#) A 19680709 [
] (CHRISTINE WILLIAM C, et al);
[US3509879](#) A 19700505 [
] (BATHISH LOUIS N, et al);
[US3656668](#) A 19720418 [
] (LIEBERTZ WOLFGANG)

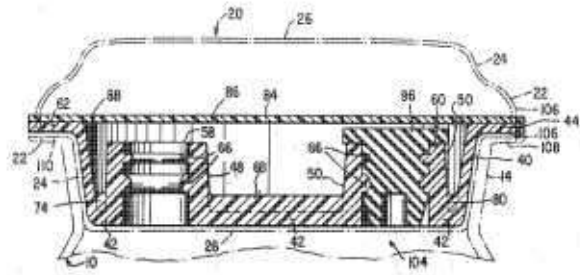
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[A61J1/18](#) ; [A61J1/1487](#) ;
[A61J1/1431](#)

CCA - [Y10S128/24](#) ; [A61J1/1468](#)

PA - CUTTER LAB

TI - Pierceable access port assembly

AB - The pierceable access port
 assembly includes a **container**
 having a mounting flange formed
 at one end thereof and an access
 port unit having an assembly
 mounting flange which is
 hermetically sealed to
 the **container** flange. In one
 embodiment, the access port unit
 includes a **sidewall** which
 engages the inner surface of the
 neck of the **container** over
 substantially the entire
 periphery thereof and includes
 port means spaced inwardly
 from the **sidewall** which
 terminates within the confines of
 the **sidewall**. In a second
 embodiment, the access port unit
 extends outwardly from
 the **container** neck and employs
 a unitary **container** closure as a
 pierceable **diaphragm** and a
 double-walled flange. Both
 embodiments employ an access



unit mounting flange sealed to a **container** mounting flange to provide a strong, reinforced flange structure which may be firmly grasped to facilitate the insertion of a spike or needle into the access port assembly.

12/28 © EPODOC / EPO

PN - [US4386720](#) A 19830607

PR - AU1979PD07731
19790219; AU1980PE01946
19800109

AP - US19820343622 19820122

DT - **

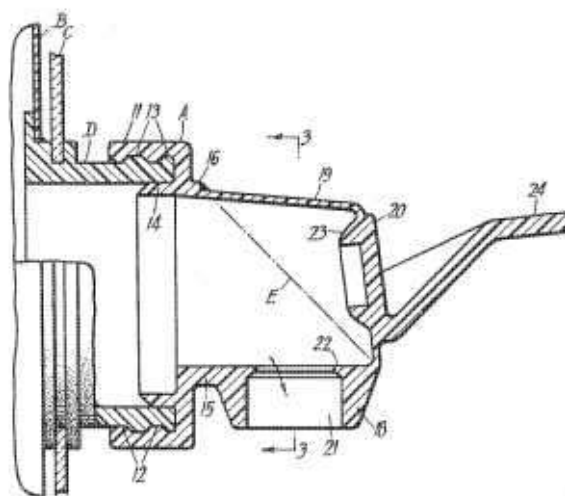
CT - [US3400866](#) A []; [US3443728](#) A [];
[US3595445](#) A []; [US3642172](#) A [];
[US3711011](#) A []; [US3741447](#) A [];
[US3758000](#) A []; [US3883034](#) A [];
[US3972452](#) A []; [US4124151](#) A [];
[US4169548](#) A []; [US4211348](#) A []

CCI - [B65D47/2025](#) ; [B65D47/38](#)

PA - ILLINOIS TOOL WORKS

TI - One-piece plastic tap

AB - The invention relates to a tap for connection to a tube extending from a **container** for liquids. It includes a barrel having a substantially continuous hollow configuration open at one end and having an outlet opening in its **sidewall**. The open end of the barrel is adapted for fastening the barrel to the **container**. There is included a seat surrounding the outlet opening and complimentary plug extending into the interior of the barrel and carried by the closed opposite end of the barrel. At least a portion of the barrel is of a



flexible thin-walled **diaphragm**-like configuration and is adapted to be inverted by a snap action from an open position to a closed position with the plug engaging the seat when in the closed position to shut off the flow of liquid through the tap.

13/28 © EPODOC / EPO

PN - [TW200622217](#) A 20060701

PNFP - TWI259276B B 20060801

PR - TW20040141069 20041229

AP - TW20040141069 20041229

DT - I

PA - (A B)
JUAN CHIH-CHEN [TW]

TI - (A)
Isolated IC pressure sensing apparatus
- (B)
Insulated IC pressure sensing device

AB - (A)
The invention is kind of the isolated IC pressure sensing apparatus. It includes a body with a **container** where a pressure sensing IC is set up and a hole in the **sidewall**. It's characterized in the film set up between the hole in the **container** and the pressure sensing IC. The **container** is divided into two portions by the film. The close space is generated between the film and the pressure sensing IC and it is filled up with the isolated dielectric fluid. By the film and the isolated dielectric fluid to isolate the pressure sensing IC. It would not contact directly with the fluid from the hole into the **container** and prevent the IC from short circuit.
- (B)
The present invention relates to an insulated IC pressure sensing device, which includes a main body having a chamber, in which a pressure sensing IC is disposed therein, and one hole disposed on one side thereof. The pressure sensing device is characterized by a **diaphragm** disposed between the hole inside and the pressure sensing IC in the chamber, dividing the chamber into two portions, and forming an sealed space with the pressure sensing IC and filling an insulated medium fluid in the sealed space. By using the **diaphragm** and the insulated medium fluid to isolate the pressure sensing IC from directly contacting the fluid entering in the chamber, the short circuit of the pressure sensing IC can thus be avoided.

14/28 © EPODOC / EPO

PN - [KR20060131046](#) A 20061220

PR - KR20050051180 20050615

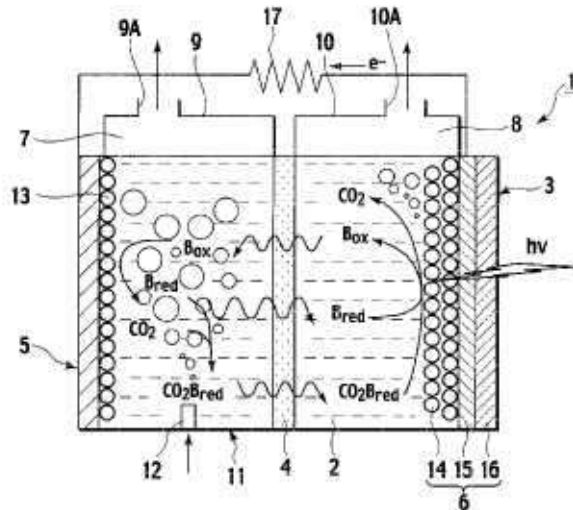
AP - KR20050051180 20050615

DT - I

- CNOI - [C25D17/002](#) ; [C25D21/06](#)
- PA - DAEDUCK ELECTRONICS CO LTD [KR]
- TI - ELECTROPLATING **CONTAINER** CAPABLE OF DRAINING THE METAL SLUDGES
- AB - A plating vessel that prevents alien substances from being remained in a plating solution, prolongs life of the plating solution, and can improve plating quality by smoothly removing sludge generated from the inside of an electroplating vessel for electroplating is provided. A plating vessel comprises: an anode basket(40) connected to an anode and installed in a space formed by the **diaphragm**, the sludge receiver and the wall surface of the plating vessel; a **diaphragm**(60) that surrounds the plating vessel along a **sidewall** of the plating vessel in a way that the **diaphragm** is spaced from the plating vessel in a predetermined distance; a sludge receiver(50) to which the **diaphragm** is connected, and which is connected to a wall surface of the plating vessel; and a sludge outlet(90) into which sludge is discharged from the anode basket, wherein a plating solution discharged from the sludge outlet is filtered by a filter(110) and is flown into the plating vessel again by power of a pump(120).

15/28 © EPODOC / EPO

- PN - [WO2005117137](#) A1 20051208
- PR - JP20040162195 20040531
- AP - WO2005JP08767 20050513
- DT - **
- CT - [JP] ISR (A1)
[JPH01220380](#) A 19890904
 [A] (SULZER AG);
[XP002990893](#) A[A];
[JPH1128331](#) A 19990202
 [A] (ISHIKAWAJIMA HARIMA HEAVY IND);
[JPH1133340](#) A 19990209
 [A] (ISHIKAWAJIMA HARIMA HEAVY IND, et al);
[JPH11169661](#) A 19990629
 [A] (ISHIKAWAJIMA HARIMA HEAVY IND);
[JPH08290052](#) A 19961105
 [A] (HITACHI LTD, et al)
- CTNP - [JP] ISR (A1)
 [A] - SCOVAZZO P. ET AL,
 "Electrochemical Separation and Concentration of <1% Carbon Dioxide from Nitrogen>.", JOURNAL OF THE ELECTROCHEMICAL SOCIETY., (2003), vol. 150, no. 5, pages D91 - D98, XP002990893
- CCI - [B01D53/326](#) ; [B01D53/62](#) ;
[B01D53/864](#) ; [C25B1/003](#) ;
[H01G9/2013](#) ; [H01G9/2018](#) ;



[H01M14/005](#)

CCA - [Y02E10/542](#) ; [Y02C10/04](#) ;
[B01D2255/802](#) ; [B01D2257/504](#) ;
[Y02P20/135](#) ; [Y02P20/152](#)

PA - NISSAN MOTOR [JP]; IWASAKI
YASUKAZU

TI - PHOTOELECTROCHEMICAL CELL

AB - A photoelectrochemical cell (1) comprising an electrolyte **container** (3) containing an ionic liquid (2) and a **diaphragm** (4) partitioning the interior of the electrolyte **container** (3) into a CO₂ capturing chamber (7) and a CO₂ releasing chamber (8). The **sidewalls** opposing to each other with the **diaphragm** (4) therebetween serve, respectively, as a carbon electrode (5) and a photoelectrode (6). An oxidation-reduction mediator (B) is a mediation chemical species such that an oxidant Box and a reductant Bred exhibit different bonding force to carbon dioxide and the one exhibiting the higher bonding force carries carbon dioxide to one of the pair of electrodes (5, 6). An upper wall part (10) is formed at an upper part of the CO₂ releasing chamber (8) and a CO₂ take-out port (10A) is formed in the upper wall part (10). Separation/condensation of carbon dioxide is carried out while converting light energy of sunlight into electric power by utilizing oxidation and reduction of the oxidation-reduction mediator.

16/28 © EPODOC / EPO

PN - [JPS61242050](#) A 19861028

PR - JP19850083905 19850419

AP - JP19850083905 19850419

DT - I

CCI - [H01L23/66](#)

CLC - [H01L2224/48091](#) , [H01L2924/00014](#) , ADD

- [H01L2224/48](#) , [H01L2924/00](#) , ADD

CCA - [H01L2224/32188](#) ; [H01L2224/48](#) ; [H01L2224/48091](#) ; [H01L2924/16195](#)

FI - H01L23/12&301Z; H01L23/32&D

FT - 5F035/AC17; 5F035/AC20; 5F035/CB09; 5F035/CB11; 5F035/CB22

PA - NEC CORP

TI - MICROWAVE SEMICONDUCTOR DEVICE

AB - PURPOSE:To directly connect the corner parts of the bottom surface of the metal **sidewall** to the recessed inner wall of the metal frame by a method wherein a conductive plate with its one side part fitted on the outer periphery of the metal **sidewall** supporting body of the **container** with a **diaphragm** is prepared. CONSTITUTION:The recessed part of a conductive plate 13 is firmly fitted on the outer periphery of a metal **sidewall** supporting body 6 and the conductive plate 13 is connected to the supporting body 6. The contact parts of the conductive plate 13, which have respectively numerous notches at the edge ends on the opposite side to the recessed part, are caught on the inner part of a metal frame 1. The intermediate part of the conductive plate 13 is pressed by the corner parts of the bottom surface of the metal **sidewall** 5 of the **container**, whereby the conductive plate 13 is made to sag. By this way, the corner parts of the bottom surface of the metal **sidewall** are securely connected to the recessed inner wall of the metal frame in a short time.

17/28 © EPODOC / EPO

PN - [JPH01237493](#) A 19890921

PR - JP19880064349 19880317

AP - JP19880064349 19880317

DT - I

CCA - [Y02E30/40](#)

FI - G21C13/02&P

PA - ISHIKAWAJIMA HARIMA HEAVY IND

TI - REACTOR **CONTAINER** MADE OF CONCRETE AND CONSTRUCTION THEREOF

AB - PURPOSE:To plan the reduction of a construction period by bridging a gate beam between the upper part of a reactor pedestal and an outer concrete **sidewall** and placing a piece of **diaphragm** floor concrete at the lower position of the gate beam. CONSTITUTION:A reactor pedestal 4 and a side wall 12 are constructed up to the height of a sealing plate 17 of a **diaphragm** floor 6 and a gate 16 is bridged thereon. Further, a plate 17 is previously hung on the beam 16 and a liner 13 and the plate 17 are welded to seal a suppression chamber. Next, a support column 20 is vertically set on the beam 16 and the plate 17, a piece of concrete is placed on the plate 17 and a floor 6 is formed to support the outer circumferential part of the floor 6 by the side wall 12. After a piece of the beam 16 is cut, the concrete is placed on the middle side wall 12 to construct a concrete-made vessel. Therefore, a constructing process is simplified to plan the reduction of a construction period.

18/28 © EPODOC / EPO

PN - [WO2006072972](#) A2 20060713

PNFP - WO2006072972 A3 20070503

PR - IT2005MI00021 20050110

AP - WO2006IT00003 20060109

DT - *; Rep

CT - |EP| ISR (A3)
[FR2590555](#) A1 [X];
[GB2145061](#) A [X];
[US4015758](#) A [X];
[US5480071](#) A [X];
[WO9108979](#) A1 [X]

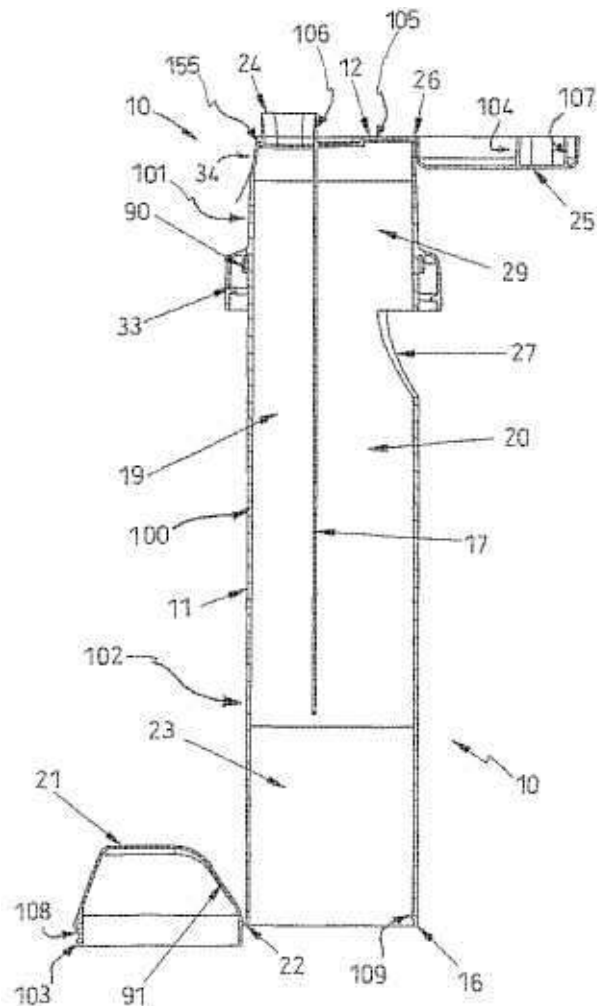
CCI - [B29C45/4421](#) ; [B65D47/0804](#) ;
[G01F11/262](#)

CCA - [B29C45/2628](#) ; [B65D2547/063](#)

PA - (A2 A3)
GARZIERA ROBERTO VINCENZO [IT]

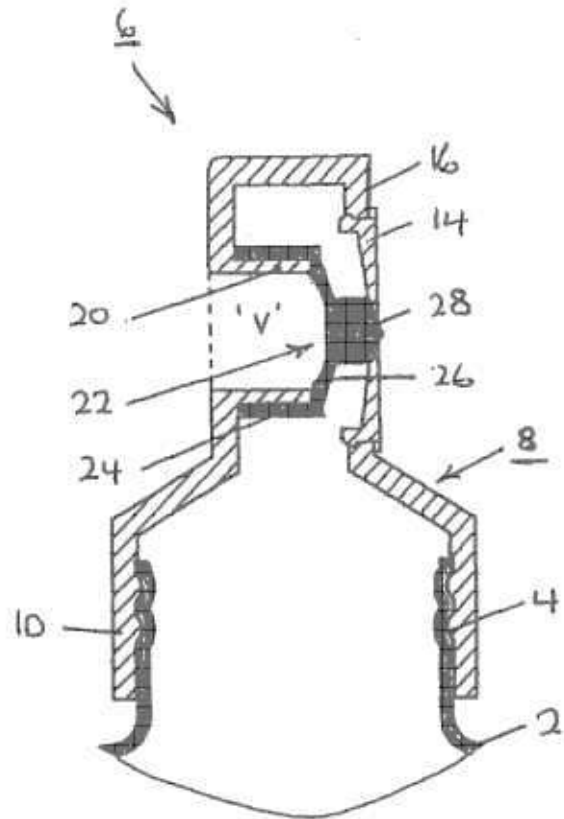
TI - (A2 A3)
DOSING DEVICE FOR FLUID
SUBSTANCES

AB - (A2 A3)
A dosing device (10) comprises a hollow body (100) , suitable to be partially inserted into the opening (13) of a **container** (14) and comprises a first upper end (101) adapted to be outside the **container** (14) ; a second lower end (102) adapted to be inside the **container** (14) ; one of said ends (101; 102) being closed by a wall (12) and the other end being open and ending with an edge (16) ; said hollow body (100) being provided with elements (33) , suitable to tightly connect the latter to said opening (13) ; a **diaphragm** (17) partially dividing the inside volume of said hollow body by extending from the upper end (101) to the lower end (102) , without reaching the latter, and by defining, with the **sidewalls** of said hollow body, an discharge duct (19) and a dosing duct (20) communicating below with a collecting chamber (23) ; said



discharge duct (19) comprising at least one opening (24) , suitable for the spillage of fluid substances from said dosing device (10) , at the upper end thereof; a cap (21) , directly connected to said hollow body by means of a first hinge (22) , and a lid (25) , directly connected to said hollow body by means of a second hinge (26) ; a body portion (105) separating said second hinge (26) from said outlet opening (24) ; first sealing means (103) adapted to sealingly close said cap (21) on said edge (16) of the open end; second sealing means (104) adapted to sealingly close said lid on said outlet opening (24) and adapted to open said lid for using the dosing device (10) ; said dosing duct (20) comprising at least one aperture (27) or inlet aperture, communicating the latter with the inside of said **container** (14) ; the inlet aperture (27) being provided near the sealing connection elements (33) of the dosing device (10) at the opening (13). of the **container** (14) ; said dosing device (10) being provided as one piece.

PN - [WO9907615](#) A1 19990218
 PR - GB19970016953 19970812
 AP - WO1998GB02328 19980803
 DT - *; Rep
 CT - |EP| ISR (A1)
 [US4798311](#) A 19890117
 [X] (WORKUM DONALD J [CH])
 [X] 1,7,13
 * column 4, line 31 - column 7,
 line 5; figures 8A-13 *;
 [CH225084](#) A 19421231
 [X] (STALDER OSKAR [CH])
 [X] 1
 * page 1, line 27 - page 3,
 line 23; figures 1-7 *;
 [US2170588](#) A 19390822
 [A] (GORDON DOUGLAS)
 [A] 1
 * figures 1-4 *;
 [US5197638](#) A 19930330
 [AD] (WOOD ROBERT [US])
 [AD] 1
 * figures 1A-5B *
 CCI - [B65D35/20](#) ; [B65D47/2068](#) ;
 [B65D47/44](#)
 PA - VERESK BIOSYSTEMS LIMITED
 [GB]; TAGHAVI KHANGHAH SAID
 [GB]
 TI - **CONTAINER**
 AB - A **container** for dispensing
 liquids comprises a body
 member (2) and a closure (6) for
 the body member (2), the closure
 (6) including a cap (8) in the
 form of a plastic moulding
 having an outlet (12) in
 a **sidewall** thereof, and a control
 valve (22) within the cap (8) for
 controlling the dispensing of
 liquid through the outlet (12), the
 control valve (22) being in the
 form of a one piece plastic
 moulding conveniently integrally
 moulded with the cap (8) and
 having a **diaphragm** portion (26)
 and a nose portion (28), the
 central axis of the valve (22)



being substantially perpendicular to the direction of flow of liquid from the body member (2) to the closure (6), the nose portion (28) of the valve (22) normally sealing the outlet (12) but being displaceable therefrom on distortion of the **diaphragm** portion (28) resulting from pressurisation of the interior of the body member (2) and whereby liquid is dispensed through the outlet (12).

- 20/28** © EPODOC / EPO
- PN - [GB2211813](#) A 19890712
- PNFP - GB2211813 B 19920506
- PR - GB19880025419
19881031; GB19870025387
19871029
- AP - GB19880025419 19881031
- DT - *
- CT - (A)
[GB1266351](#) A []; [GB1331425](#) A []
- CCI - [B65D85/73](#)
- PA - (A B)
PRICE E J [GB]
- TI - (A)
Compartmented drinks **container**
- (B)
DRINKS CONTAINER
- AB - (A)
In order to provide a good head on stout a conventional beer can is provided with an internal **diaphragm** member (2) which divides the can into an upper drink compartment and a lower nitrogen reservoir. The **diaphragm** (2) is provided with small holes (8) through which nitrogen bubbles into the stout when the top (5) of the can is opened and pressure released in the upper compartment, and

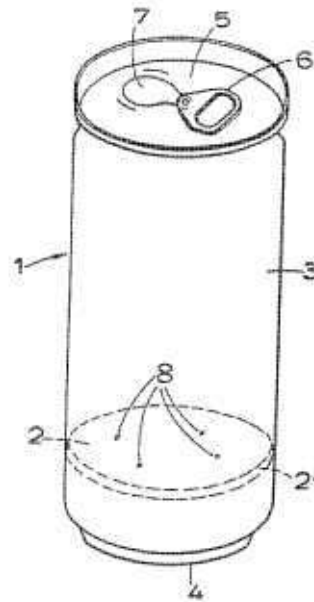
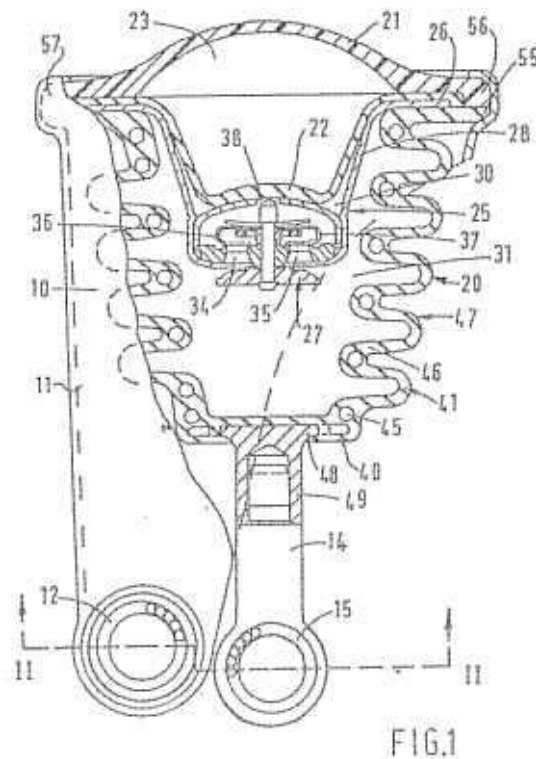


FIG.1.

the nitrogen bubbles cause a good head to be produced. The **diaphragm** (2) is desirably an independent metal disc which is a gas-tight fit with the **sidewalls** (3) of the can, and is inserted in a dished condition effected by a suction tool. The disc may be corrugated in radial cross section and have a skirt. Alternatively the **diaphragm** may be formed integrally with the can side wall or be a skirted insert which is secured with the can side wall to a first end wall disc, the second end wall including an easy-open pull ring (6). The **diaphragm** holes may be recesses in the edge of the **diaphragm**. <IMAGE>

- 21/28** © EPODOC / EPO
- PN - [GB2153483](#) A 19850821
- PNFP - GB2153483 B 19871014
- PR - GB19840001900 19840125
- AP - GB19840001900 19840125
- DT - *
- CT - (A)
[GB2074962](#) A []; [GB1482135](#) A [];
[GB1456258](#) A []; [GB890876](#) A [];
[EP0068395](#) A2 []; [US4401298](#) A []
- CCI - [B60G15/12](#) ; [F16F9/096](#) ;
[F16F13/20](#)
- PA - (A B)
DUNLOP LTD
- TI - (A B)
Fluid-pressure springs
- AB - (A)
A fluid pressure spring, e.g. for a motor car suspension incorporates a pair of liquid-filled chambers 30,31 communicating with one another through a damper valve 27, and a gas-filled chamber 23

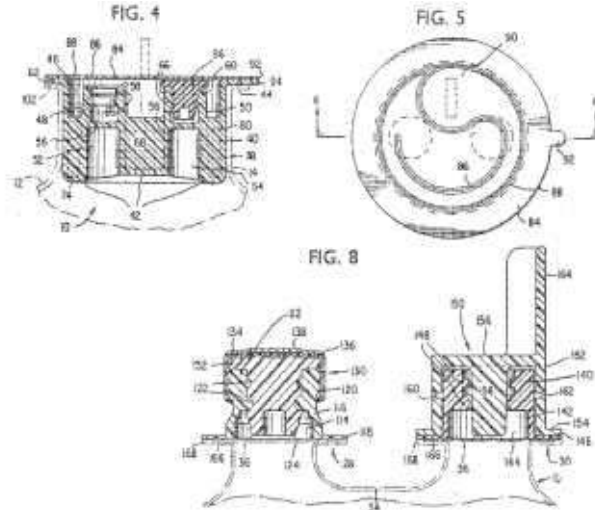


separated from one 30 of the liquid-filled chambers by a **diaphragm** 22. The liquid-filled chamber 31 remote from the gas-filled chamber is formed within an elastomeric **container** 41 having an end wall 40 with a coupling connection and a tapering convoluted elastomeric **sidewall** 47. No external support is provided for the **sidewall** 47, but a coil spring may be moulded into its inwardly-turned portions 46.

<IMAGE>

22/28 © EPODOC / EPO

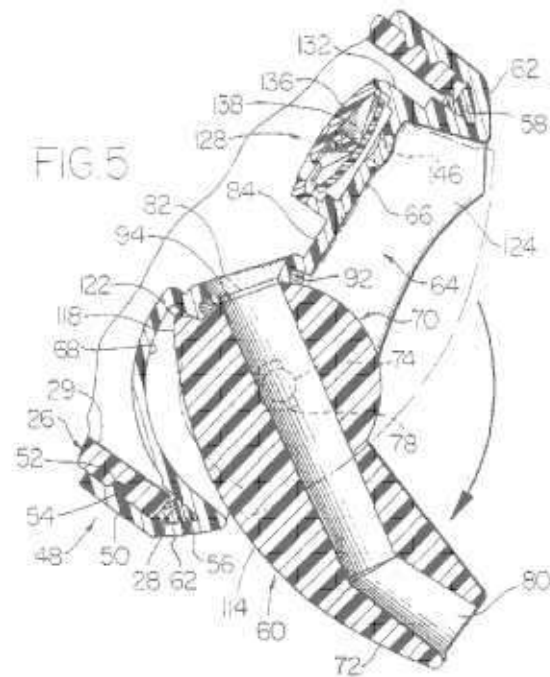
PN - [GB1499433](#) A 19780201
 PR - US19740443011 19740215
 AP - GB19750006250 19750214
 DT - **
 CCI - [A61J1/1406](#) ; [A61J1/1462](#) ;
[A61J1/18](#) ; [A61J1/1487](#) ;
[A61J1/1431](#)
 CCA - [Y10S128/24](#) ; [A61J1/1468](#)
 PA - CUTTER LAB
 TI - STORAGE OF STERILE SOLUTIONS
 AB - 1499433 Sealed containers
 CUTTER LABORATORIES Inc 14 Feb 1975 [15 Feb 1974] 6250/75
 Heading B8T An access port assembly 38 comprises at least one bore 52, 54 which is closed by a pierceable closure, e.g. a **diaphragm** 56, and a flange 44 which is secured by radio frequency, ultrasonic or solvent sealing techniques to a flange 102 around the neck of a plastics **container** 10 for sterile solutions. In Fig. 4, the assembly 38 fits within the **container** neck and a resilient stopper 96 is inserted in the internally beaded end of one port structure 48 or 50. A tear-out section defined by score lines 86, 88 of a cover 84



is removed by initially pushing in a portion 90, tabs 92, 94 ensuring correct alignment of the cover on the assembly 38. Strengthening ribs, e.g. 68, 74, 80 are provided between the port structures 48, 50 and the assembly **sidewall** 40 and bottom wall 42. The pierceable closures are alternately provided by a wall integral with **container** 1 but pushed into the **container** neck by the access port assembly. In Fig. 8, the walls 36 provide the pierceable closures for two access port assemblies 112, 140 which are arranged externally of the two **container** necks. A cap structure 130 having a tear-away portion 138 holds a stopper 124 in the assembly 112. A protector 150 is removed from assembly 140 by pulling a tab 164 to cause rupturing in the region of a groove 160. The assembly 140 may have an integral bottom wall as the pierceable closure when used with an open necked **container**.

PN - [EP0867377](#) A1 19980930
 PR - US19970820049 19970318
 AP - EP19980200813 19980314
 DT - *; Rep
 CT - || STSE (A1)
 [US3874562](#) A 19750401
 [XY] (HAZARD ROBERT E)
 [X] 1-4
 * column 3, line 66 - column 7,
 line 39; figures 1-4 *
 [Y] 5,7-12,16;
 [WO9615705](#) A1 19960530
 [Y] (SOBRAL INVICTA SA [BR], et
 al)
 [Y] 5,7,8
 * pages 3-7; figures 1-7 *;
 [FR2209062](#) A1 19740628
 [Y] (GOGLIO LUIGI [IT])
 [Y] 9-12,16
 * pages 2-6; figures 1-3 *;
 [US5477994](#) A 19951226
 [A] (FEER DAVID L [US], et al)

 CCI - [B65D47/305](#) ; [B65D51/1644](#)
 PA - OUTER CIRCLE PRODUCTS LTD [US]
 TI - Dispensing lid for an insulated
 jug
 AB - A dispensing lid assembly (20)
 which includes a rotatable spout
 (60) for use with a **container** (23)
 defining a **container** cavity (29).
 The **container** (23) may be the
 type having deflectable **sidewalls**
 (25). The rotatable spout (60)
 includes an arcuate ball portion
 (70) and a nozzle portion (74).
 The arcuate rotator portion (70)
 is retained on a base (48) of the
 lid assembly (20) to allow
 rotation thereof to align a
 through hole (80) in the spout
 (60) with a dispensing hole (82)
 in the base (48). The arcuate
 rotator portion (70) is
 configured to reduce the wear on
 a sealing gasket (92). A check
 valve assembly (128) is attached
 to the base (48) of the dispensing



lid assembly (20). The check valve assembly (128) includes a **diaphragm** (138) which is pre-loaded within a valve chamber (140) to provide a desired sealing effect between the **diaphragm** (138) and the base portion (48). The check valve assembly (128) is configured to preload forces on the **diaphragm** (138) such that a desired inhaling force will unseat the **diaphragm** (138) from the corresponding portion (154) of the base (48) to draw air therethrough. Upon equalization of the pressure within the **container** cavity (29) and the ambient atmosphere, the **diaphragm** (138) will return to seal against the base portion (48) to prevent dripping therethrough. <IMAGE>

24/28 © EPODOC / EPO

PN - [EP0148978](#) A2 19850724

PNFP - EP0148978 A3 19850731
- EP0148978 B1 19870909

PR - EP19840106862
19820503; US19810261431
19810507; US19820364322
19820406

AP - EP19840106862 19820503

DT - *; Rep

CT - || STSE (A3)
[US3166106](#) A 19650119 [Y];
[US4119114](#) A 19781010
[Y] (BOLTON JACK CURTIS, et al);
[DE2146267](#) A1 19730405
[A] (RUMP FA JOH M)

CCI - [B08B9/0804](#) ; [B67D7/0294](#) ;
[B67C9/00](#) ; [B67D1/04](#)

PA - (A2)
CIBA GEIGY AG [CH]

TI - (A2)
Container closure for the
contaminationless tapping of

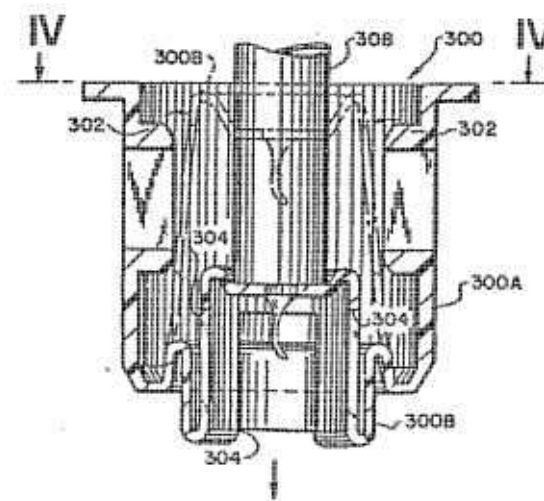


FIG.3

liquid chemicals from
a **container**.

- (A3 B1)

CONTAINER CLOSURE FOR THE
CONTAMINATIONLESS TAPPING
OF LIQUID CHEMICALS FROM
A **CONTAINER**

AB

- (A2)

1. **Container** closure having two through-flow paths, being, on the one hand, tightly fixable in an outlet opening of an **container**, and to which there is, on the other hand, tightly connectable a draw-off device, each of the two through-flow paths being closed by means which are opened automatically by parts (tube 308) of the draw-off device penetrating from the outside, when the same is put in place, whereby on the one hand, the **container** is emptied via one of the paths being designated hereinafter as the drain-off path and air and/or rinsing liquid and the like can enter the **container** via the other path being designated hereinafter as the pressure-equalizing and rinsing path, characterized in that the **container** closure is designed as an open-at-the-top beak-shaped, hollow body (300) being turnable inside out and viceversa, which is designated hereinafter as the turnable body, that the closing means of the drain-off path are arranged in the bottom part, and the closing means of the pressure-equalizing and rinsing path are arranged in the **sidewall** of this turnable body, and that the turnable body is convertible by means of one of the paths (tube 308) penetrating from the outside from its inwardly turned (short) state (Fig. 1) to its outwardly turned

(long) state (Fig. 5), whereby the closing means (openings 304/projections 303 and/or **diaphragm** 306) of both through-flow paths are opened.

25/28 © EPODOC / EPO

PN - [CN1981383](#) A 20070613

PNFP - CN100505327C C 20090624

PR - JP20040162195 20040531

AP - CN2005817729 20050513

DT - I

CCI - [B01D53/326](#) ; [B01D53/62](#) ;
[B01D53/864](#) ; [C25B1/003](#) ;
[H01G9/2013](#) ; [H01G9/2018](#) ;
[H01M14/005](#)

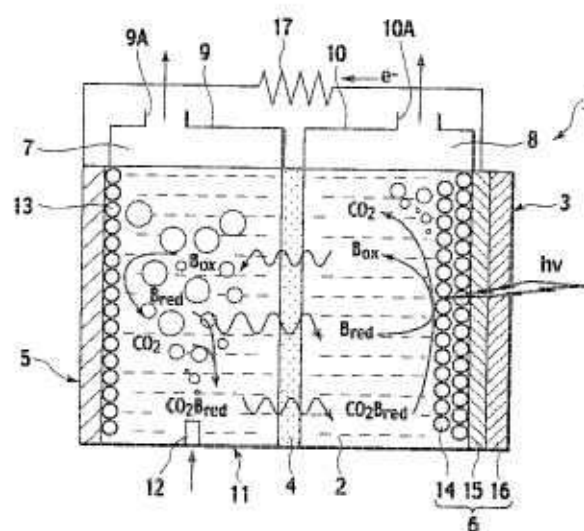
CCA - [Y02E10/542](#) ; [Y02C10/04](#) ;
[B01D2255/802](#) ; [B01D2257/504](#) ;
[Y02P20/135](#) ; [Y02P20/152](#)

PA - (A C)
NISSAN MOTOR [JP]

TI - (A C)
Photoelectrochemical cell

AB - (A)
A photoelectrochemical cell (1) comprising an electrolyte **container** (3) containing an ionic liquid (2) and a **diaphragm** (4) partitioning the interior of the electrolyte **container** (3) into a CO₂ capturing chamber (7) and a CO₂ releasing chamber (8). The **sidewalls** opposing to each other with the **diaphragm** (4) therebetween serve, respectively, as a carbon electrode (5) and a photoelectrode (6). An oxidation-reduction mediator (B) is a mediation chemical species such that an oxidant B_{ox} and a reductant B_{red} exhibit different bonding force to carbon dioxide and the one exhibiting the higher bonding force carries carbon dioxide to one of the pair of electrodes (5, 6). An upper wall part (10) is formed at an upper part

FIG. 1



of the CO₂ releasing chamber (8)
 and a CO₂ take-out port (10A) is
 formed in the upper wall part (10).
 Separation/condensation of
 carbon dioxide is carried out while
 converting light energy of sunlight
 into electric power by utilizing
 oxidation and reduction of the
 oxidation-reduction mediator.

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- PN - [CA2410221](#) A1 20040428
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- DT - *
- CCI - [B65D47/2018](#) ; [B65D25/44](#) ; [B65D25/56](#) ; [B65D77/067](#)
- PA - DNESTRIANSCHII LUCIEN [CA]; ALMOND KELLY GEORGE [CA]
- TI - A VALVE FOR A LIQUID DISPENSING **CONTAINER** AND A LIQUID DISPENSING **CONTAINER**
EQUIPPED WITH THE VALVE
- AB - A valve for a liquid dispensing **container** includes a body adapted to mount on a
liquid **container**. The body has a cavity with a peripheral **sidewall** and a flexible
resilient bottom **diaphragm**. A liquid inlet is provided through the **sidewall** of the body. A
valve member is provided having a first end, a second end, and a peripheral **sidewall**.
An outlet extends through the **sidewall** adjacent the first end. A flow passage extends
through the valve member from the second end to the outlet. The valve member seals the
cavity and is reciprocally movable in the cavity between a first retracted position and
an extended position. In the first retracted position, the outlet of the valve member is
blocked by the **sidewall** of the body. In the extended position, the outlet of the valve
member protrudes out of the cavity, thereby allowing liquid to flow from the inlet along
the flow passage to the outlet. The valve member is coupled to the bottom **diaphragm**.
The bottom **diaphragm** biases the valve member into the first retracted position. The
valve member is moved from the first retracted position to the extended position to
permit liquid to flow.

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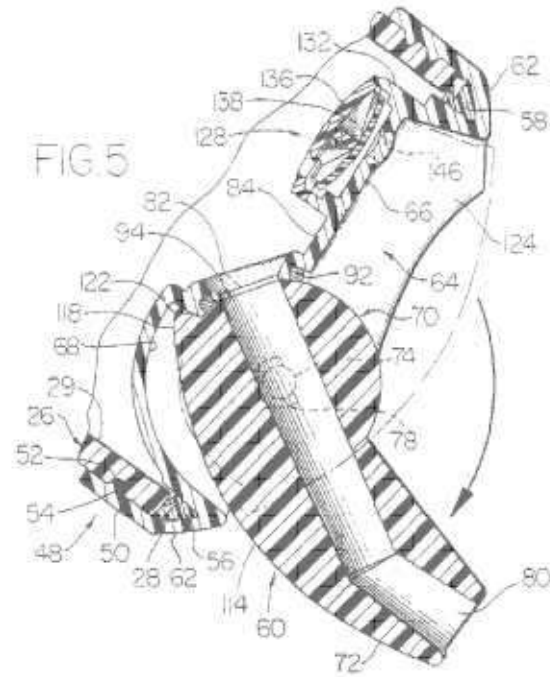
DT - I

CCI - [B65D47/305](#) ; [B65D51/1644](#)

PA - OUTER CIRCLE PRODUCTS LTD [US]

TI - DISPENSING LID FOR AN INSULATED JUG

AB - A dispensing lid assembly (20) which includes a rotatable spout (60) for use with a **container** (23) defining a **container** cavity (29). The **container** (23) may be the type having deflectable **sidewalls** (25). The rotatable spout (60) includes an arcuate ball portion (70) and a nozzle portion (74). The arcuate rotator portion (70) is retained on a base (48) of the lid assembly (20) to allow rotation thereof to align a through hole (80) in the spout (60) with a dispensing hole (82) in the base (48). The arcuate rotator portion (70) is configured to reduce the wear on a sealing gasket (92). A check valve assembly (128) is attached to the base (48) of the dispensing lid assembly (20). The check valve assembly (128) includes a **diaphragm** (138) which is pre-loaded within a valve chamber (140) to provide a desired sealing effect between the **diaphragm** (138) and the base portion (48). The check valve assembly (128) is configured to pre-load forces on the **diaphragm** (138) such that a desired inhaling force will unseat the **diaphragm** (138) from the corresponding portion (154) of the base (48) to draw air therethrough. Upon equalization of the pressure within the **container** cavity (29) and the



ambient atmosphere,
the **diaphragm** (138) will return
to seal against the base portion
(48) to prevent dripping
therethrough.

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CCI - [B65D47/2025](#) ; [B65D47/38](#)
PA - DEUTSHER PTY LTD
TI - ONE-PIECE PLASTIC TAP
AB - A tract of the Invention A ONE-PIECE PLASTIC TAP The invention relates to a tap for connection to a tube extending from a **container** for liquids. It includes a barrel having a substantially continuous hollow configuration open a-t one end and having an outlet opening in its **sidewall**. The open end of the barrel is adapted for fastening the barrel to - the **container**. There is included a seat means surrounding the outlet opening and complimentary plug means extending into the interior of the barrel and carried by the closed opposite end of the barrel. At least a portion of the barrel is of a flexible thin-walled **diaphragm**-like configuration and is adapted to be inverted by a snap action from an open position to a closed position with the plug engaging the seat when in the closed position to shut off the flow of liquid through the tap.