



New connection on: : 23-05-2018 : 00:45:55 - Last disconnection on: : 22-05-2018 : 22:32:15

V 4.0.0.44358(LP,U,linux) (Rev:43856 2017-04-27 09:03:29 +0200#(D201802)) (RPM D201802)

Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 7] ..fiepodoc

 Database: EPODOC

[EPODOC: SS 7] G01F11/c/low

Results in EPODOC 21.123

[SS 8] * and dispens+

Results in EPODOC 6.708

[SS 9] * and (bottle or container)

Results in EPODOC 2.292

[SS 10] * and measure*

Results in EPODOC 0

EPODOC: term 'MEASURE*' not found in index 'BI'. WARNING(1)

[SS 11] 9 and measure+

Results in EPODOC 539

[SS 12] * and PD<2014-09-22

Results in EPODOC 506

[SS 13] * and open+

Results in EPODOC 252

[SS 14] * and valve

[SS 15] ..v

[EPODOC: SS 15] ..li 1-10



1/105 © EPODOC / EPO

PN - [CA2870714](#) A1 20131024

PNFP - CA2870714 C 20170704

PR - EP20120164442
20120417; EP20130152135
20130122; WO2013US36924
20130417

AP - CA20132870714 20130417

DT - I

CCI - [G01F11/04](#) ; [G01F11/263](#) ;
[G01F11/265](#) ; [G01F11/286](#) ;
[G01F13/006](#)

CUI - [B65D47/30](#)

PA - (A1 C)
PROCTER & GAMBLE [US]

TI - (A1 C)
LIQUID DOSING APPARATUS

AB - (A1 C)
An apparatus and means of repeatedly **dispensing** controlled doses of liquid comprising a resiliently squeezable **container** for containing a liquid detergent composition; a cap operably connected to said **container**, the cap comprising a nozzle for expelling the liquid out of the **container**; a dosing chamber operably connected to the cap, wherein the dosing chamber comprises a base having a discharge **opening** therein, sidewalls extending upwardly along the perimeter of said base and at least one inlet **opening** located proximal the sidewalls; at least one timer aperture located proximal to the discharge **opening**; a plunger,

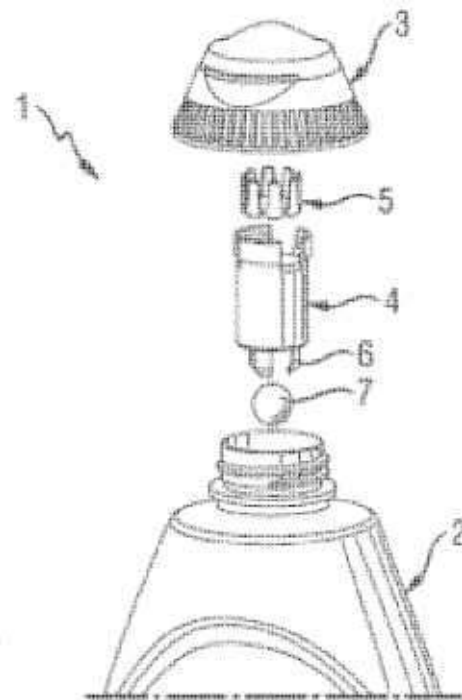


Fig. 2

provided in the dosing chamber and moveable relative to the chamber so as to advance upon squeezing of the **container**, up to a blocking position; a **valve** retaining means located below the base; a **valve** provided in the **valve** retaining mean wherein the **valve** is movable from an **open** position, allowing liquid flow through the discharge **opening**, and a closed position, where the **valve** blocks the discharge **opening**; wherein the liquid is a shear thinning liquid and the shear thinning liquid has a viscosity of greater than 150mPaos **measured** at 10s-1 at 20°C.

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PN - [US2013270301](#) A1 20131017

PR - EP20120164442
20120417; EP20130152135
20130122

AP - US201313864299 20130417

DT - **

CT - || R141 (A1)
[US2012097714](#) A1 20120426 [
] (HOEFTE PAULUS ANTONIUS
AUGUSTINUS [BE], et al);
[US8528795](#) B2 20130910 [
] (LAW BRIAN ROBERT [GB], et al);
[US2008073383](#) A1 20080327 [
] (MCDONALD JOHN TERRANCE
[US]);
[US4946080](#) A 19900807 [
] (VESBORG STTEN [BE]);
[US4811871](#) A 19890314 [
] (WASS ANTHONY [GB], et al);
[WO2005049477](#) A2 20050602 [
] (RIEKE CORP [US], et al);
[US7246723](#) B2 20070724 [
] (SANTAGIULIANA STEFANO [IT])

CCI - [G01F11/04](#) ; [G01F11/263](#) ;
[G01F11/265](#) ; [G01F11/286](#) ;
[G01F13/006](#)

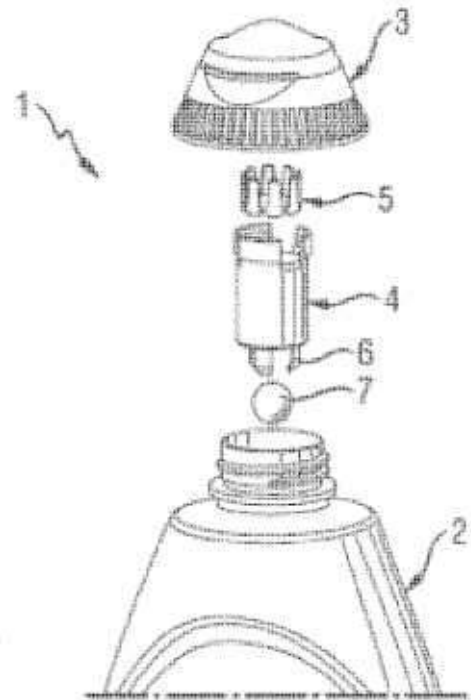


Fig. 2

CUI	- B65D47/30
PA	- PROCTER & GAMBLE [US]
TI	- LIQUID DOSING APPARATUS
AB	- An apparatus and means of repeatedly dispensing controlled doses of liquid comprising a resiliently squeezable container for containing a liquid detergent composition; a cap operably connected to said container , the cap comprising a nozzle for expelling the liquid out of the container ; a dosing chamber operably connected to the cap, wherein the dosing chamber comprises a base having a discharge opening therein, sidewalls extending upwardly along the perimeter of said base and at least one inlet opening located proximal the sidewalls; at least one timer aperture located proximal to the discharge opening ; a plunger, provided in the dosing chamber and moveable relative to the chamber so as to advance upon squeezing of the container , up to a blocking position; a valve retaining means located below the base; a valve provided in the valve retaining mean wherein the valve is movable from an open position, allowing liquid flow through the discharge opening , and a closed position, where the valve blocks the discharge opening ; wherein the liquid is a shear thinning liquid and the shear thinning liquid has a viscosity of greater than 150 mPa·s measured at 10 s ⁻¹ at 20° C.

PN - [WO2013141356](#) A1 20130926

PR - JP20120001606U 20120323

AP - WO2013JP58287 20130322

DT - *; Rep

CT - [JP] ISR (A1)
[JPS3729927Y](#) Y [Y];
[JP2011027728](#) A [Y];
[WO2006095601](#) A1 [A];
[JP3176004U](#) U [XP]

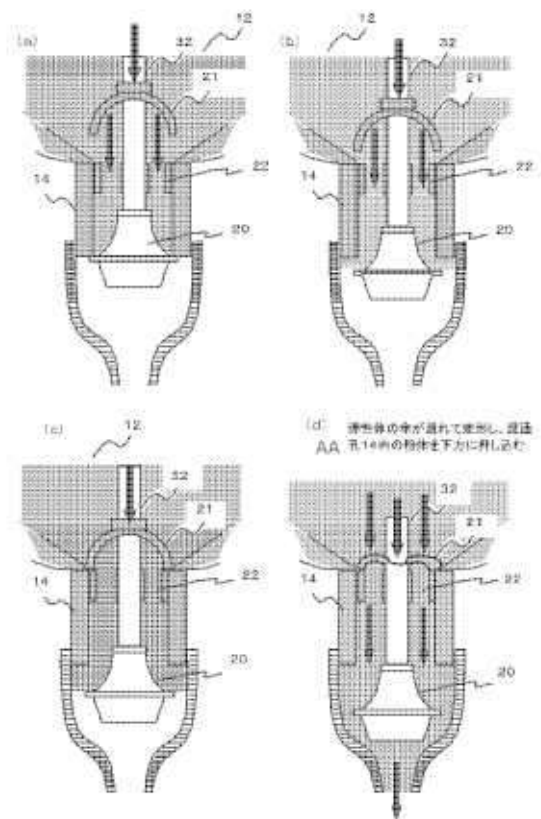
CCI - [G01F11/34](#)

PA - SANKO CO LTD [JP]; MOGARI KEN [JP]; KURISHIMA TADAHIRO [JP]; IWATA KAZUYOSHI [JP]

TI - POWDER DISPENSER

AB - Provided is a powder **dispenser** with which a predetermined amount of powder can be taken out reliably in a powder **dispenser** with an **open/close** drive system employing an **open/close valve**. An **open/close valve** (20) is provided at the lower surface of an outflow part (14) of a containing part (12) of a powder **container** (10). On a shaft body (32) is provided a press-out body (21) that moves together with the **open/close valve** (20) and that **opens** and closes the upper surface of the outflow part (14). When lowered, the press-out body (21) abuts against a press-out body stopper (22). An **open/close** mechanism (30) controls the up-and-down motion of the shaft body (32) and controls the **opening** and closing of the outflow part (14). When lowered, the press-out body (21) can press the powder, and after the press-out body abuts against the press-out body stopper (22) and blocks out the inflow of the powder, the umbrella shape of the press-out body is squashed, and thereby

[図5]



AA The umbrella of the elastic body is squashed and deformed, and the powder inside the communication hole (14) is forced downward.

the press-out body presses the powder inside the outflow part (14) and lets the powder drop reliably. The amount of volume in the press-out body (21) and the outflow part (14) serves as a kind of "measure", and a predetermined amount of powder is **measured** off in a single stroke.

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PN - [WO2013171706](#) A2 20131121

PNFP - WO2013171706 A3 20140313

PR - IN2012MUM1494 20120516

AP - WO20131854000 20130516

DT - *; Rep

CT - |EP| ISR (A3)

[DE3416882](#) A1 19851114

[X] (WASSILIEFF VICTOR)

[X] 1-14,19

* the whole document *;

[EP0006513](#) A1 19800109

[X] (CZECH JOACHIM [DE])

[X] 1-6,8-15,19

* the whole document *;

[WO2011022118](#) A1 20110224

[X] (ARCH CHEM INC [US], et al)

[X] 1-4,11,13,14,16,17

* the whole document *;

[US1959276](#) A 19340515

[X] (PAARDECAMP JOHN B)

[X] 1-6,8-11,16,19

* the whole document *;

[EP0254138](#) A1 19880127

[X] (CREANOVA AG [CH])

[X] 1-12,19

* the whole document *;

[GB2364296](#) A 20020123

[X] (TURNER ANDREW [GB])

[X] 1-12,18-20

* the whole document *;

[US3091374](#) A 19630528

[X] (GILBERT SCHWARTZMAN)

[X] 1-12,18-20

* the whole document *;

[EP1102969](#) A1 20010530

[A] (CREATECHNIC AG [CH])

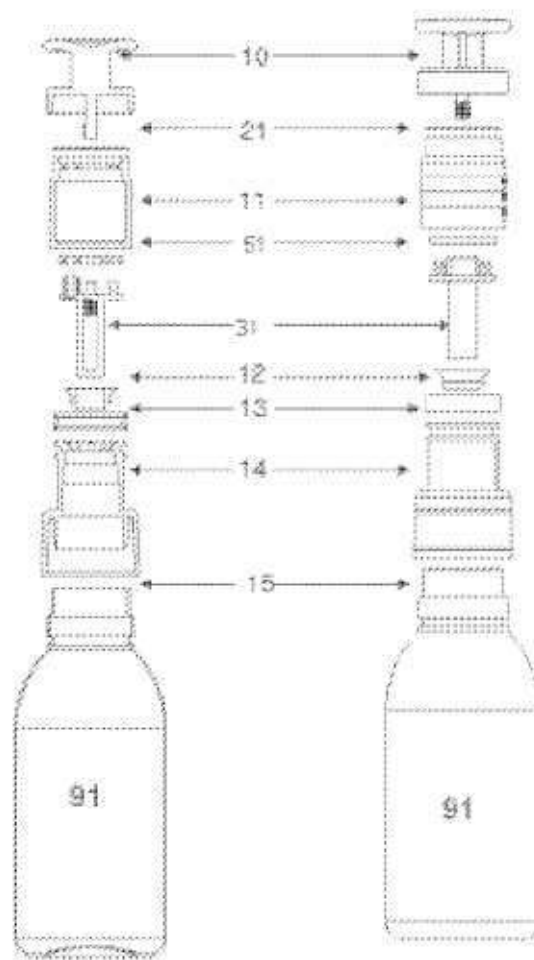


Figure 1B

Figure 1A

[A] 1-15,19
 * the whole document *

CCI - [G01F11/263](#)

PA - (A2 A3)
 ABBOTT HEALTHCARE PVT LTD [IN]

TI - (A2 A3)
 LIQUID **DISPENSING** DEVICE FOR
 DELIVERING ACCURATE DOSE

AB - (A2 A3)
 The present invention provides
 an integrated liquid **dispensing**
 device for delivering accurate
 and/or **measured** and/or
 metered and/or pre-determined
 dose of oral liquids comprising
 a **container** for holding liquid
 medicine and a **dispensing** device
 fitted on the **opening** of
 the **container**. The **dispensing**
 device is characterized by use of
 a shut off **valve** mechanism or a
 twist lock mechanism or a
 spring **valve** mechanism
 for **dispensing** the liquid.

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PN - [WO2013158732](#) A1 20131024

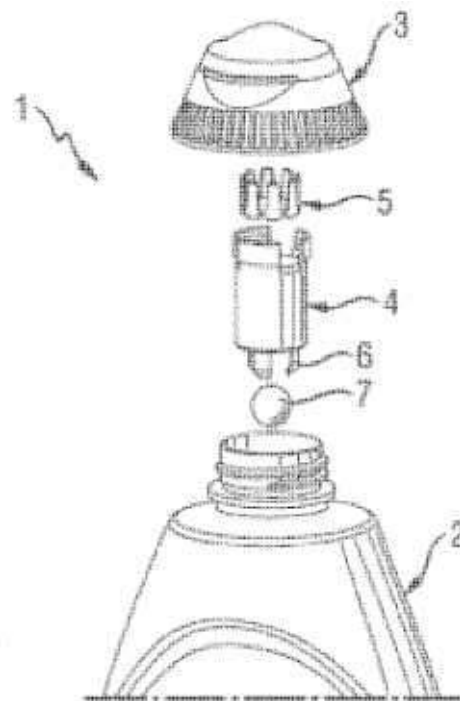
PR - EP20120164442
 20120417; EP20130152135
 20130122

AP - WO2013US36924 20130417

DT - **

CT - |EP| ISR (A1)
[WO2005049477](#) A2 20050602
 [XDI] (RIEKE CORP [US], et al)
 [XD] 1-3,7,9,10,14,15
 * page 1, line 8 - page 2, line 3
 *
 * page 9, line 9 - page 18,
 line 10; figures 1-8 *
 [I] 4-6,8,11-13;
[EP0274256](#) A1 19880713
 [AD] (ENGLISH GLASS CO LTD [GB])
 [AD] 1-15
 * the whole document *;
[EP2444782](#) A1 20120425
 [XP] (PROCTER & GAMBLE [US])

Fig. 2



[XP] 1-15

* the whole document *

- CCI - [G01F11/04](#) ; [G01F11/263](#) ;
[G01F11/265](#) ; [G01F11/286](#) ;
[G01F13/006](#)
- CUI - [B65D47/30](#)
- PA - PROCTER & GAMBLE [US]
- TI - LIQUID DOSING APPARATUS
- AB - An apparatus and means of repeatedly **dispensing** controlled doses of liquid comprising a resiliently squeezable **container** for containing a liquid detergent composition; a cap operably connected to said **container**, the cap comprising a nozzle for expelling the liquid out of the **container**; a dosing chamber operably connected to the cap, wherein the dosing chamber comprises a base having a discharge **opening** therein, sidewalls extending upwardly along the perimeter of said base and at least one inlet **opening** located proximal the sidewalls; at least one timer aperture located proximal to the discharge **opening**; a plunger, provided in the dosing chamber and moveable relative to the chamber so as to advance upon squeezing of the **container**, up to a blocking position; a **valve** retaining means located below the base; a **valve** provided in the **valve** retaining mean wherein the **valve** is movable from an **open** position, allowing liquid flow through the discharge **opening**, and a closed position, where the **valve** blocks the discharge **opening**; wherein the liquid is a shear thinning liquid and the shear thinning liquid has a viscosity of greater than 150mPaos **measured** at 10s-1 at 20°C.

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PN - [EP2653842](#) A1 20131023

PR - EP20120164442
20120417; EP20130152135
20130122

AP - EP20130152135 20130122

DT - *; Rep

CT - || STSE (A1)
[EP2444782](#) A1 20120425
[XP] (PROCTER & GAMBLE [US])
[XP] 1-15
* the whole document *;
[WO2005049477](#) A2 20050602
[XDI] (RIEKE CORP [US], et al)
[XD] 1-3,7,9,10,14,15
* page 1, line 8 - page 2, line 3
*
* page 9, line 9 - page 18,
line 10; figures 1-8 *
[I] 4-6,8,11-13;
[EP0274256](#) A1 19880713
[AD] (ENGLISH GLASS CO LTD [GB])
[AD] 1-15
* the whole document *

CCI - [G01F11/04](#) ; [G01F11/263](#) ;
[G01F11/265](#) ; [G01F11/286](#) ;
[G01F13/006](#)

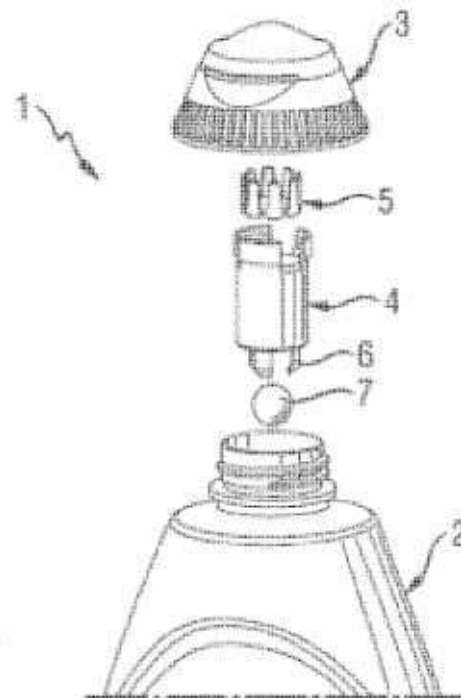
CUI - [B65D47/30](#)

PA - PROCTER & GAMBLE [US]

TI - Liquid dosing apparatus

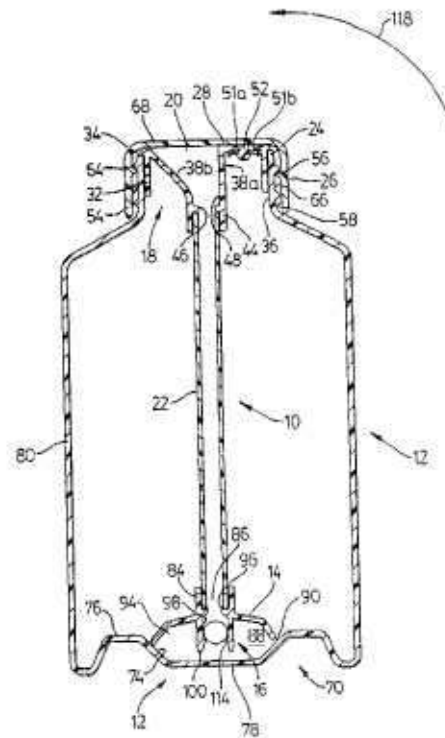
AB - An apparatus and means of repeatedly **dispensing** controlled doses of liquid comprising a resiliently squeezable **container** for containing a liquid detergent composition; a cap operably connected to said **container**, the cap comprising a nozzle for expelling the liquid out of the **container**; a dosing chamber operably connected to the cap, wherein the dosing chamber comprises a base having a discharge **opening** therein, sidewalls extending upwardly along the perimeter of said base

Fig. 2



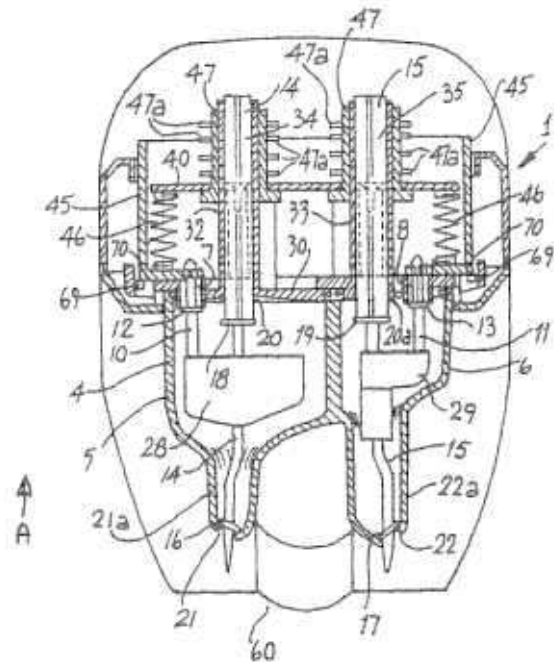
and at least one inlet **opening** located proximal the sidewalls; at least one timer aperture located proximal to the discharge **opening**; a plunger, provided in the dosing chamber and moveable relative to the chamber so as to advance upon squeezing of the **container**, up to a blocking position; a **valve** retaining means located below the base; a **valve** provided in the **valve** retaining mean wherein the **valve** is movable from an **open** position, allowing liquid flow through the discharge **opening**, and a closed position, where the **valve** blocks the discharge **opening**; wherein the liquid is a shear thinning liquid and the shear thinning liquid has a viscosity of greater than 150mPa $\cdot$ s **measured** at 10s⁻¹ at 20°C.

PN - [US6076708](#) A 20000620
 PR - US19970982738 19971202
 AP - US19970982738 19971202
 DT - **
 CT - [US298778](#) A []; [US1555591](#) A [];
[US1770185](#) A []; [US1799401](#) A [];
[US1966754](#) A []; [US2114168](#) A [];
[US2282825](#) A []; [US2446085](#) A [];
[US2693301](#) A []; [US2704623](#) A [];
[US2747776](#) A []; [US2812120](#) A [];
[US2943767](#) A []; [US2986310](#) A [];
[US2989216](#) A []; [US3023937](#) A [];
[US3223295](#) A []; [US3224652](#) A [];
[US3229854](#) A []; [US3841534](#) A [];
[US4024992](#) A []; [US4424921](#) A [];
[US4666065](#) A []; [US4684045](#) A [];
[US4763816](#) A []; [US4763817](#) A [];
[US4828149](#) A []; [US4871095](#) A [];
[US5078305](#) A []; [US5122272](#) A [];
[US5127553](#) A []; [US5323938](#) A [];
[US5449097](#) A []; [EP0175256](#) A2 [];
[FR1064934](#) A []; [GB362461](#) A [];
[WO9010199](#) A1 []
 CCI - [G01F11/265](#)
 TI - Pre-measured liquid dispenser
 AB - A device for **dispensing** a pre-determined volume of liquid from a **container**. The device comprises a pour spout adapted for coupling to the mouth of the **container**, an inverted cup



including an **open** mouth and a discharge port communicating with the interior of the cup, and a **dispensing** tube coupling the pour spout to the discharge port. A check **valve** is provided inside the cup. The **container** has a bottom which includes a well having a base and a shoulder. The **open** mouth is adapted for sealing against the shoulder such that the cup, when disposed in the **container**, defines a measuring reservoir including an inlet port.

- 8/105 © EPODOC / EPO
- PN - [US5899245](#) A 19990504
- PR - IE19950000339
19950511; WO1996IE00028
19960513
- AP - US19980945728 19980109
- DT - **
- CT - [US2201545](#) A []; [US2740571](#) A [];
[US2873050](#) A []; [US3256916](#) A [];
[US3509920](#) A []; [US3567075](#) A [];
[US4126164](#) A []; [US5163488](#) A [];
[GB519621](#) A []
- CCI - [B67D3/02](#) ; [G01F11/32](#)
- PA - BAILEY R & A CO LTD [IE]
- TI - Device for concurrent delivery of **measured** quantities of at least two liquids
- AB - PCT No. PCT/IE96/00028 Sec. 371
Date Jan. 9, 1998 Sec. 102(e)
Date Jan. 9, 1998 PCT Filed May 13, 1996 PCT Pub. No. WO96/35633 PCT Pub. Date Nov. 14, 1996A **measure** for **dispensing measured** quantities of two liquors from a pair of bottles has a pair of measuring and receiving bowls



associated with the bottles. Sleeves engage within necks of the bottles for delivery of liquid from each **bottle** to an associated bowl. **Valve** members in each bowl have normally **open** inlet liquid seals which cooperate with the sleeves to control filling of the bowls. Outlet liquid seals on the **valve** members normally close liquid outlets of the bowls. An actuating lever is operable to raise the **valve** members, moving the seals upwardly for **opening** the outlets and closing the inlets of the bowls. Thus, liquid **measures** flow from the bowls substantially concurrently into a glass or the like placed below the liquid outlets. The outlets are arranged to direct the two liquids to opposite sides of the glass so that the liquids remain separated within the glass. Release of the actuating lever drops the **valve** members closing the liquid outlets and **opening** the inlets for recharging the bowls.

PN - [US4180106](#) A 19791225

PR - ZA19770005345
19770906; ZA19780004140
19780720

AP - US19780939738 19780905

DT - **

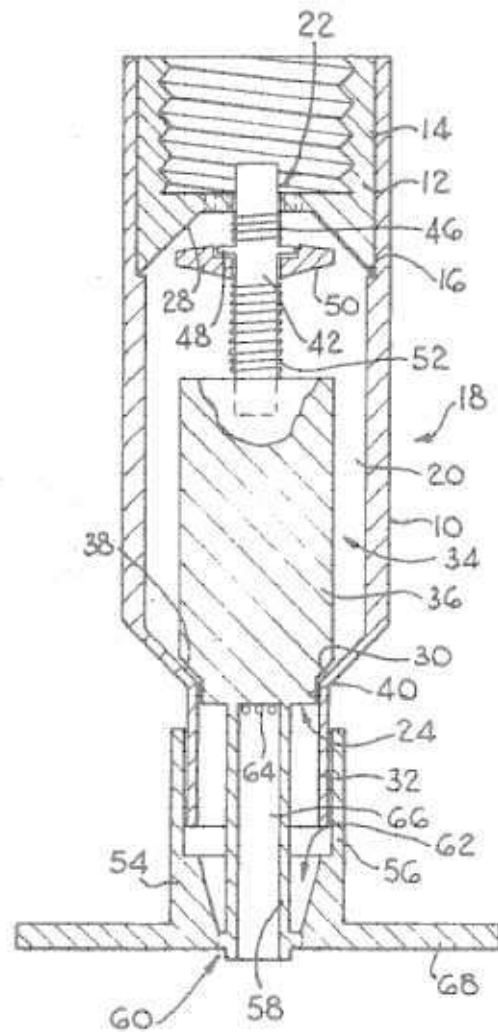
CT - [US2679347](#) A []; [US3109546](#) A []

CCI - [G01F11/32](#)

PA - COETZEE JOHN C [ZA]

TI - Device for **dispensing measured**
quantities of a liquid from
a **bottle**

AB - A **dispensing** and metering device
which can be attached to the
neck of a **bottle** has a housing
defining a chamber having an
inlet and an outlet. The chamber
can be filled through the inlet
with liquid from a **bottle** secured
to the device by an attachment
element and can be drained
through the outlet. A **valve**
arrangement which includes an
outlet nozzle extending generally
away from the outlet, is movable
from a first condition in which it
closes the inlet and **opens** the
outlet, through a second
condition in which it closes both
the inlet and the outlet, to a third
condition in which it closes the
outlet and **opens** the inlet. A flow
path is defined at least partly
within the **valve** arrangement for
introducing air into the chamber
via the nozzle and the outlet. The
air replaces liquid flowing from
the outlet when the outlet
is **open**. The **valve** arrangement
is resiliently biased to the third
condition to keep the outlet
closed until the **valve**
arrangement is operated.



PN - [US6341718](#) B1 20020129

PR - NL19981010749
19981207; WO1999NL00750
19991207

AP - US20010875130 20010607

DT - **

CT - [US5186367](#) A []; [US5967377](#) A [];
[US6241129](#) B1 []

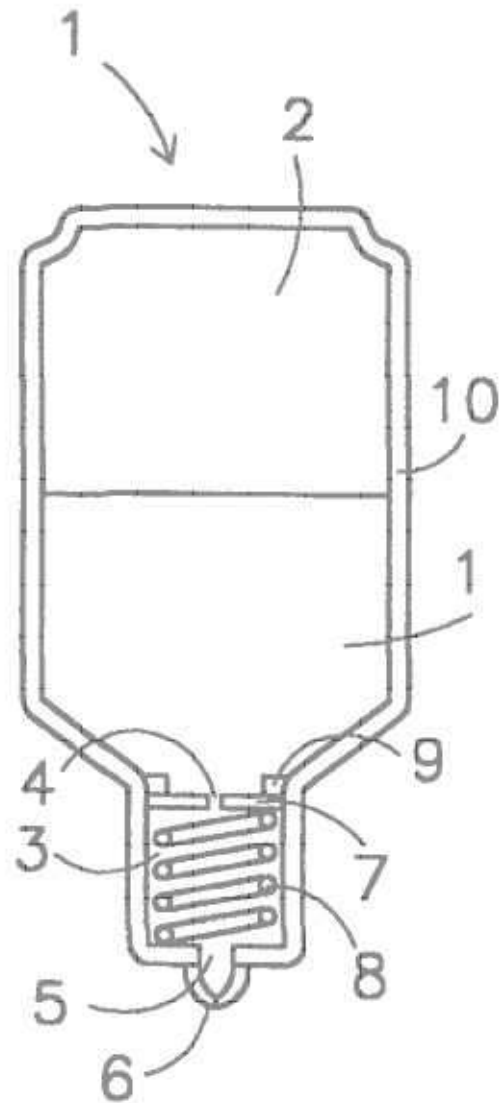
CCI - [B05B11/04](#) ; [B05B11/3001](#) ;
[B05B11/3015](#) ; [B05B11/3035](#) ;
[B05B11/3052](#) ; [B05B11/3077](#) ;
[B05B11/3094](#) ; [G01F11/025](#) ;
[G01F11/082](#) ; [G01F11/16](#)

CCA - [B05B11/0005](#) ; [B05B11/0043](#)

PA - V O F PHARMASEPT [NL]

TI - Squeeze **bottle** for **dispensing** a
liquid in a metered and
substantially germ-free manner

AB - The invention describes a
squeeze **bottle** for **dispensing** a
liquid, in particular a liquid
medicament, in a metered and
substantially germ-free manner,
at least comprising: a storage
chamber for accommodating the
liquid, a metering chamber with
a variable volume for dispensing
from this chamber, under
reduction of volume of the
chamber, a **measured** volume of
liquid, restoring means for
returning the metering chamber
to its original state after a
volume of liquid has
been **dispensed**, an inlet for
placing the metering chamber in
communication with the storage
chamber by mediation of a flow
restrictor, which flow restrictor
counteracts flow from the
metering chamber to the storage
chamber substantially
completely when the pressure in
the storage chamber is
increased, counteracts flow
between the storage chamber
and the metering chamber



substantially completely and ,
when the increase pressure in
the storage chamber is removed,
allows flow from the storage
chamber into the metering
chamber, at least one
outflow **opening** for placing the
interior of the metering chamber
in communication with the
environment, the
outflow **opening** comprising a
non-return **valve**, actuating
means can be actuated by
squeezing the **bottle**, means for
ventilating the squeeze **bottle** .