

Search history

Search 1: FT=((release# OR deliver# OR apply#) NEAR (device OR container OR apparatus)) and PD<20140331 and IC=(A61J1* OR A61F9* OR B65D*) (Results 44748)

Search 2: 1 AND (FT = (tubular OR cylindrical) W3 (case OR surface)) (Results 3032)

Search 3: 2 AND (FT = nozzle) (Results 651)

Search 4: 3 AND (FT = tab OR diaphragm OR accordion) (Results 195)

Search 5: 4 AND FT = drop* (Results 90)

Search 6: 5 AND (FT = flange) (Results 60)

Title: Device for **dropwise** delivery of a fluid contained in a flexible vial

Abstract: Source: US5673822A PCT No. PCT/EP94/00020 Sec. 371 Date Jun. 21, 1995 Sec. 102(e) Date Jun. 21, 1995 PCT Filed Jan. 5, 1994 PCT Pub. No. WO94/15855 PCT Pub. Date Jul. 21, 1994 The present invention provides a device for the **dropwise** delivery of a fluid (6) contained in a flexible vial (4; 4'), the device comprising a **tubular case** (1) capable of surrounding the vial (4; 4'), which casing is provided with a bottom portion (2; 7) whose inner surface lies opposite the outer surface of the bottom wall (42; 42') of the vial (4; 4'), the bottom portion (2; 7) of the casing (1) being equipped with a resiliently displaceable **tab** (3; 8) which can be moved so as to press against the bottom wall (42; 42') of the vial (4; 4') in order to squeeze the vial (4; 4') and drive out a **drop** (60) of fluid.

Classifications:

International (IPC 8-9): A45D34/04 A61F9/00 B65D47/18

B65D77/04 B65D83/00 (Advanced/Invention);

A45D34/04 (Advanced/Non-invention);

A61F9/00 B65D47/06 B65D77/04 B65D83/00 (Core/Invention);

A45D34/04 (Core/Non-invention)

International (IPC 1-7): B65D B65D47/18 B65D47/22 B65D77/06

B65D83/00 B67D5/06

CPC: A45D34/04 A61F9/0008 B65D47/18 B65D77/0493

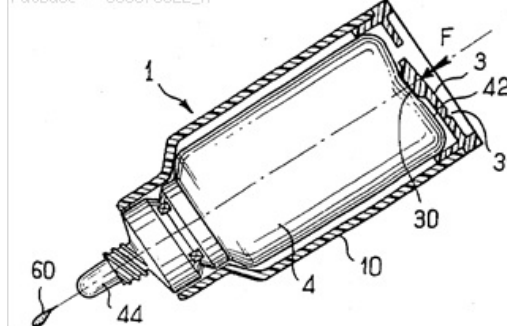
B65D83/0072

European: A61F9/00B B65D47/18 B65D77/04F1A B65D83/00B3

K45D34/04

US: 222/183 222/214

PatBase - US5673822_A



Family:

Publication number	Publication date	Application number	Application date
AT165066 E	19980515	AT19940903891T	19940105
AU199458161 A1	19940815	AU19940058161	19940105
DE69409632 D1	19980520	DE19946009632	19940105
DE69409632 T2	19981126	DE19946009632T	19940105
EP0677015 A1	19951018	EP19940903891	19940105
EP0677015 B1	19980415	EP19940903891	19940105
ES2114174 T3	19980516	ES19940903891T	19940105
FI953359 A	19950707	FI19950003359	19950707
FI953359 A0	19950707	FI19950003359	19950707
FR2700316 A1	19940713	FR19930011430	19930921
FR2700316 B1	19950331	FR19930011430	19930921
FR2700318 A1	19940713	FR19930000207	19930108
FR2700318 B1	19960823	FR19930000207	19930108
NO307413 B1	20000403	NO19950002698	19950707
NO952698 A	19950825	NO19950002698	19950707
NO952698 A0	19950707	NO19950002698	19950707
US5673822 A	19971007	US19950464665	19950621
WO9415855 A1	19940721	WO1994EP00020	19940105

Priority:

FR19930000207 19930108

FR19930011430 19930921

WO1994EP00020 19940105

Probable Assignee: LABORATOIRES MERCK SHARP AND DOHME CHIBRET

Assignee(s): (std): CHALMIN PATRICE ; GAZZOLA JEAN ; MERCK SHARP AND DOHME ; MERCK SHARP AND DOHME CHIBRET SN ; LIFSHEY ARTHUR

Assignee(s): MERCK SHARP DOHME CHIBRET LABO ; LABORATORIES MERCK SHARP AND DOHME CHIBRET ; LABORATOIRES MERCK SHARP AND DOHME CHIBRET ; LABORATOIRES MERCK SHARP AND DOHME CHIBRET PARIS F ; LABORATOIRES MERCK SHARP AND DOHME CHIBRET PARIS FR ; LABORATOIRES MERCK SHARP AND DOHME CHIBRET SNC

Inventor(s): (std): CHALMIN PATRICE ; GAZZOLA JEAN ; JEAN GAZZOLA ; LIFSHEY ARTHUR ; PATRICE CHALMIN

Inventor(s): ARTHUR LIFSHEY ; LIFSHEY ARTHUR EAST BRUNSWICK NJ 08816 US ; GAZZOLA JEAN F 63000 CLERMONT FERRAND FR ; CHALMIN PATRICE F 63140 CHATEL GUYON FR

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

Title: Precompression valve for trigger sprayer

Abstract: Source: US5467900A The trigger sprayer comprises: a body having a cylinder therein; a liquid inlet in communication with the cylinder; an outlet waterway in communication with the cylinder; an outlet **nozzle** which has an outlet orifice and which is movable to and from a position in communication with the waterway; a piston having an inner and an outer end and being received in said cylinder and being movable between an outer at rest position and an inner pumping stroke position during the pumping strokes of the piston in the cylinder; a trigger operatively coupled to the body and acting on the outer end of the piston; a precompression valve in the cylinder, the valve being operable to allow liquid in the cylinder to enter the waterway only after a predetermined pressure is established in the cylinder and to stop liquid from entering the waterway when the pressure in the cylinder falls below the predetermined pressure; and, biasing structure for biasing the piston away from the valve.

Classifications:

International (IPC 8-9): B05B11/00 B05B9/03 B65D47/34 B65D83/76 F16K21/00 G01F11/06 (Advanced/Invention); B65D47/34 B65D83/76 F16K21/00 G01F11/06 (Advanced/Non-invention); B05B11/00 B65D47/34 B65D83/76 F16K21/00 G01F11/02 (Core/Invention); B05B9/03 (Core/Non-invention)

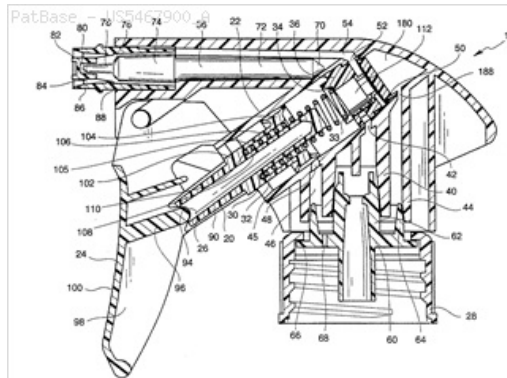
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CPC: B05B11/007 B05B11/3011 F41B9/0053 F41B9/0071

European: B05B11/00B9R B05B11/00P3L2 B05B11/00R6A

B05B11/30C5B F41B9/00B6B F41B9/00F

US: 222/341 222/380 222/383.1 222/383.3 239/333



Family:

Publication number	Publication date	Application number	Application date
AU199521187 A1	19951003	AU19950021187	19950309
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TW242577 B	19950311	TW19940104492	19940518
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WO9525261 A1	19950921	WO1995US03108	19950309
ZA9501927 A	19951211	ZA19950001927	19950308

Priority:

US19940214950 19940316 US19950560165 19951120 WO1995US03108 19950309

Probable Assignee: CONTINENTALAFA DISPENSING CO

Assignee(s): (std): MAAS WILHELMUS J J ; HURKMANS PETRUS L W ; AFA ACQUISITION CORP ; AFA PRODUCT INC ; AFA PRODUCTS ; AFA PRODUCTS INC

Assignee(s): CIT GROUP BUSINESS CREDIT INC ; CIT GROUP BUSINESS CREDIT INC ; AFA PRODUCTS INC DELAWARE CORP ; AFA PRODUCTS INC A OF DELAWARE CORP ; CIT GROUP BUSINESS CREDIT INC AGENT FOR LENDERS AS ; AFA PRODUCTS INC FOREST CITY N C US ; AFA PRODUCTS INCUS ; MAAS WILHELMUS J ; HURKMANS PETRUS L ; NATIONS CREDIT COMMERCIAL CORP ; NATIONS CREDIT COMMERCIAL CORP ; FIRST UNION NATIONAL BANK ; OAK HILL SECURITIES FUND LP ; CONTINENTALAFA DISPENSING CO ; HARBINGER CAPITAL PARTNERS MASTER FUND I LTD ; CONTINENTAL SPRAYERS INT ; MEADWESTVACO CALMAR INC ; CONTINENTAL SPRAYERS INT INC A DELAWARE CORP ; WACHOVIA CAPITAL FINANCE (CENTRAL) CORP ; CIT GROUP BUSINESS CREDIT INC COLLATERAL AGENT AS ; WACHOVIA CAPITAL FINANCE CENTRAL CORP ; WACHOVIA CAPITAL FINANCE CORP

Inventor(s): (std): MAAS WILHELMUS J J ; MAAS WILHELMUS JOHANNES JOSEPH ; PETRUS L W HURKMANS ; WILHELMUS J J MAAS ; HURKMANS PETRUS L W ; HURKMANS PETRUS LAMBERTUS WILH ; HURKMANS PETRUS WILHELMUS LAMB ; WILHE LMUS J J MAAS

Inventor(s): PETRUS LW HURKMANS ; HURKMANS PETRUS WILHELMUS LAMBERTUS ; HURKMANS PETRUS L ; MAAS WILHELMUS J ; WILHELMUS JOHANNES JOSEPH MAAS ; PETRUS LAMBERTUS WILHELMUS HURKMANS ; WILHELMUS JJ MAAS ; WILHE LMUS JJ MAAS

Agent(s): SANDERCOCK AND COWIE

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

Title: Carbonated beverage container and method of manufacture therefore

Abstract: Source: US5683732A PCT No. PCT/GB94/01860 Sec. 371 Date Aug. 17, 1995 Sec. 102(e) Date Aug. 17, 1995 PCT Filed Aug. 25, 1994 PCT Pub. No. WO95/08493 PCT Pub. Date Mar. 30, 1995A sealed, openable liquid container, e.g., for a beverage such as beer, comprises a container (10) partly filled with liquid (24) to provide a primary headspace (26). Secured to the base of the container (10) by means of adhesive (16) is an insert (14) in the form of a hollow body (18) having an upper restricted orifice (20) and a lower restricted orifice (22) therein. The hollow body (18) is partly filled with liquid derived from the main body of the container (10) so that a secondary headspace (23) is provided. The upper restricted orifice (22) communicates with the headspace (23), whilst the restricted orifice (22) is submerged in the liquid. The upper restricted orifice (22) is of a size such that the bubble point effect prevents loss of gas from the headspace (23) into the liquid (24) until a large pressure differential occurs across the orifice (20) when the container (10) is opened by means of **tab** (30).

Classifications:

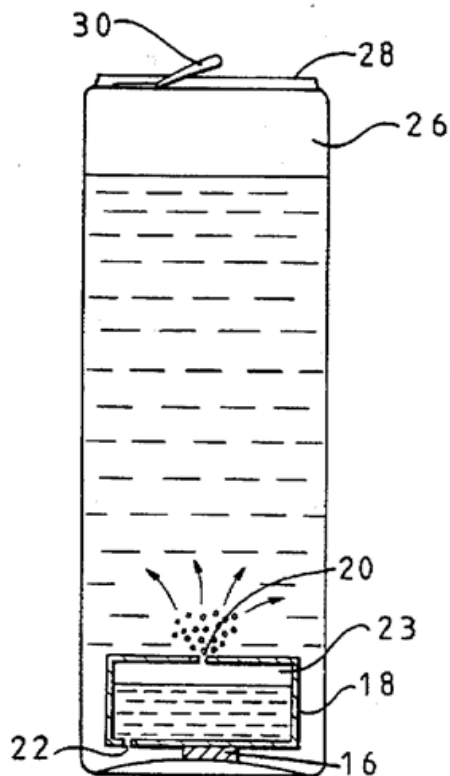
International (IPC 8-9): B65D25/02 B65D25/08 B65D79/00
B65D81/32 B65D83/14 B65D85/72 B65D85/73 (Advanced/Invention);
B65D25/02 B65D83/14 B65D85/72 (Advanced/Non-invention);
B65D83/14 (Core/Invention);
B65D (Subclass/Invention)

International (IPC 1-7): B65D B65D25/02 B65D25/08 B65D79/00
B65D81/32 B65D83/14 B65D83/70 B65D85/00 B65D85/72 B67C3/00
CPC: B65D85/73

European: B65D79/00C B65D85/73

US: 426/115 426/131

PatBase - US5683732_A



Family:

Publication number	Publication date	Application number	Application date
AT180458 E	19990615	AT19940924369T	19940825
AU199474662 A1	19950410	AU19940074662	19940825
AU674610 B2	19970102	AU19940074662	19940825
BRPI9405597 A	19990908	BR1994PI05597	19940825
CA2149631 AA	19950517	CA19942149631	19940825
CA2149631 C	19991102	CA19942149631	19940825
CN1115976 A	19960131	CN19941090798	19940825
CY2188 B1	20021108	CY19990000016	19990713
CZ9501282 A3	19951115	CZ19950001282	19940825
DE69418695 D1	19990701	DE19946018695	19940825
DE69418695 T2	19991111	DE19946018695T	19940825
EP0668836 A1	19950830	EP19940924369	19940825
EP0668836 B1	19990526	EP19940924369	19940825
ES2134951 T3	19991016	ES19940924369T	19940825
GB9319362 A0	19931103	GB19930019362	19930918
GB9325228 A0	19940209	GB19930025228	19931209
GB9405945 A0	19940511	GB19940005945	19940325
GR3030769 T3	19991130	GR19990401854T	19990714
HU71779 A2	19960228	HU19950001351	19940825
HU9501351 A0	19950828	HU19950001351	19940825
JP3238928 B2	20011217	JP19950509620T	19940825
JP8503678 T2	19960423	JP19950509620T	19940825
NZ271132 A	19961028	NZ19940271132	19940825
PL176444 B1	19990531	PL19940308960	19940825
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RU2116948 C1	19980810	RU19950113165	19940825
RU95113165 A	19970320	RU19950113165	19940825
RU95113165 A1	19970320	RU19950113165	19950517
SG49598 A1	19980615	SG19960000599	19940825
US5683732 A	19971104	US19950436226	19950817
WO9508493 A1	19950330	WO1994GB01860	19940825

ZA9406877 A	19950510	ZA19940006877	19940907
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Priority:

GB19930019362 19930918 GB19930025228 19931209 GB19940005945 19940325
WO1994GB01860 19940825

Probable Assignee: COORS EUROPEAN PROPERTIES GMBH

Assignee(s): (std): BASS PLC ; BASS PLS ; BAXTER WILLIAM RONALD STUART ; EDGSON RAYMOND ANTHONY ; ANDERSON IAIN WALLACE

Assignee(s): BASS MACHINE HOLDINGS LTD ; BASS P L C BURTON ON TRENT ; BASS P L C BURTON ON TRENT GB ; BRANDBREW RUE GOETHE SA ; COORS WORLDWIDE INC ; COORS EMEA PROPERTIES INC ; COORS EUROPEAN PROPERTIES GMBH ; BRANDBREW SA ; SIX CONTINENTS PLC ; SIX CONTINENTS HOLDINGS LTD

Inventor(s): (std): ANDERSON IAIN WALLACE ; BAXTER WILLIAM RONALD STUART ; EDGSON RAYMOND ANTHONY ; VILL JAM RONAL D STUART BEHKSTER ; LIAN WALLACE ANCERSON ; IAIN WALLACE ANDERSON ; EDGSON RAYMOND ANTONY ; WALLACE ANDERSON ; BAXTER WILLIAM RONALD STUART E ; VILL JAM RONAL D STUART BEHKS ; UNDER NEEDWOOD ; REJMOND EHNTONI IDZHSON ; IAIN ; EDGSON RAYMOND A ; EDGSON RAYMOND ; BAXTER WILLIAM R S ; BAXTER WILLIAM ; ANDERSON WALLACE ; ANCERSON LIAN WALLACE ; ANDERSON IAIN W ; ANDERSON IAIN ; AJEHN VEHLLES ANDERSON

Inventor(s): BAXTER WILLIAM RONALD STUART EDGSON RAYMOND ANTHON ; AJEHN VEHLLES ANDERSON[GB] ; VILL'JAM RONAL'D STJUART BEHKSTER ; ANDERSON IAIN WALLACE BURTON ON TRENT STAFFORDSHIR ; ANDERSON IAIN WALLACE BURTON ON TRENT... ; BAXTER WILLIAM RONALD STUART CAMBRIDGE CB4 1BZ GB ; VILL'JAM RONAL'D STJUART BEHKSTER[GB] ; EDGSON RAYMOND ANTHONY CAMBRIDGE CB4 6YX GB ; BAXTER WILLIAM RONALD STUART EDGSON RAYMOND... ; REJMOND EHNTONI IDZHSON[GB] ; RAYMOND ANTHONY EDGSON ; WILLIAM RONALD STUART BAXTER

Agent(s): GRIFFITH HACK; MARKS AND CLERK

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

Title: Rechargeable dispensers

Abstract: Source: US2001011661A Rechargeable dispensers, in particular spray bottle dispensers including at least one chemical reservoir for recharging the spray bottle dispenser. Preferably, a plurality of separate chemical reservoirs containing chemical concentrate are provided within the spray bottle dispenser to fully contain any inadvertent spillage of chemicals, and to insure a high degree of safety against accidental spills, and/or accidental ingestion by children.

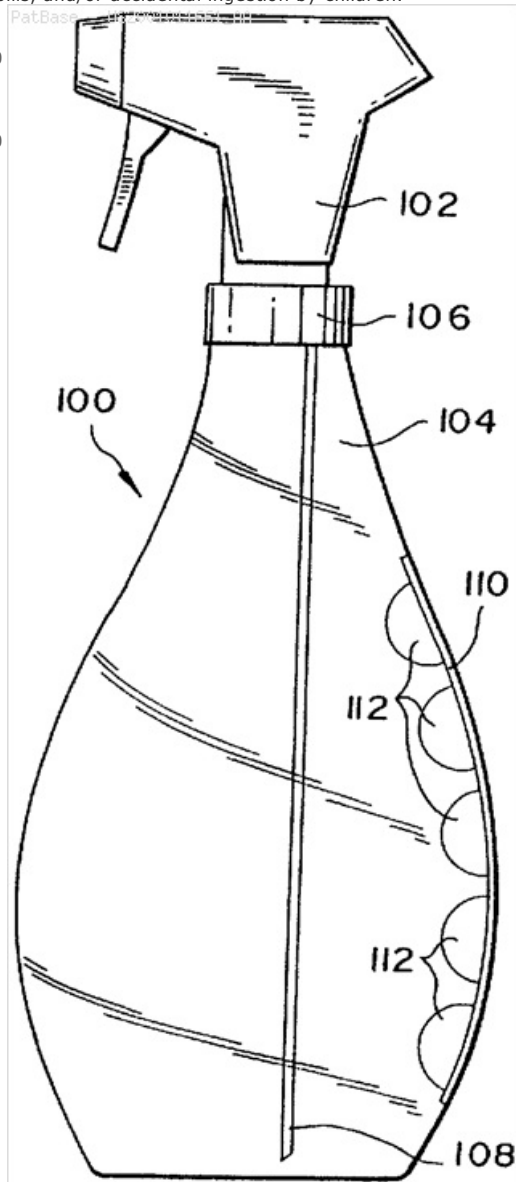
Classifications:

International (IPC 8-9): B05B11/00 B05B7/04 B05B7/26 B05B9/03 B29C49/04 B29C49/06 B29C49/20 B29C49/50 B29C49/74 B29D1/00 B29D22/00 B65D1/00 B65D1/02 B65D1/20 B65D25/08 B65D47/06 B65D81/32 B65D83/76 B67D3/00 B67D5/40 B67D5/52 B67D5/56 B67D7/58 B67D7/70 B67D7/74 (Advanced/Invention); B29C49/04 B29C49/06 B65D47/06 B65D81/32 B65D83/76 B67D3/00 B67D7/58 B67D7/70 (Advanced/Non-invention); B05B11/00 B05B7/04 B05B7/24 B05B9/03 B65D47/06 B65D81/32 B65D83/76 B67D3/00 (Core/Invention)

International (IPC 1-7): B05B1/12 B05B11/00 B05B7/04 B05B7/26 B05B9/03 B05B9/04 B29C49/02 B29C49/04 B29C49/06 B29C49/20 B29C49/50 B29C49/74 B29D1/00 B29D22/00 B65D1/00 B65D1/02 B65D1/20 B65D25/08 B65D47/06 B65D81/32 B65D83/76 B67D3/00 B67D5/00 B67D5/40 B67D5/52 B67D5/56 B67D5/60

CPC: B05B11/00 B05B11/3057 Y10T428/13 B05B11/0081 B05B11/0056 B05B11/0083 B05B11/0086 B05B11/0097 B05B11/3081 B29C49/06 B29C2049/048 B29C2049/5837 B29C2793/009 B29K2023/06 B29K2023/12 B29K2027/06 B29K2067/00 B29L2031/7158 B65D1/023 B65D1/20 B29C49/04 B05B11/00B13 B05B11/00B17 B05B11/00B5F B05B11/30K B29C49/04 B65D1/02D1 B65D1/20 L05B11/00B11C2 L05B11/00P1 L05B11/30H3F2 L29C49/04 L29C49/04E L29C49/06 L29C49/58D9 L29C793/00J L29K23/06 L29K23/12 L29K27/06 L29K67/00 L29L31/7158

US: 222/129 222/13 222/130 222/136 222/325 222/383.1 222/383.100S 222/82 222/83.5 222/83.500P 239/130 239/302 239/302S 239/303 239/303S 239/304 239/304S 239/305 239/305S 239/309 239/309S 239/325 239/333 239/333P 239/333S 264/504 264/523 264/523S 264/537 264/537S 264/54 264/540 264/540S 428/34.1 428/34.100P D9/524



Family:

Publication number	Publication date	Application number	Application date
AU199532005 A1	19960222	AU19950032005	19950725
AU199661702 A1	19961230	AU19960061702	19960607
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Priority:

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Probable Assignee: SUNPAT LLC

Assignee(s): (std): KLIMA WALTER F ; KLIMA WALTER F JR ; KLIMA WILLIAM L ; SPRAYER L L C ; SPRAYEX L L C ; SPRAYTEC SYSTEMS LLC ; SPRAYEX LLC ; SPRAYEX LLC SUBSTITUTION UNDER ; SUNPAT L L C ; SPRAYTEC SYSTEMS ; SPRAYTEC SYSTEMS L L C ; SPRAYEX LLC SUBSTITUTION UNDER SECTION 24 1 SU ; WALTER F KLIMA JR ; WILLIAM L KLIMA

Assignee(s): SUNPAT LLC ; SUNPAT LLC LI ILITY CO IN COMMW ABLTD ; SPRAYEX LLC SUBSTITUTION UNDER SECTION 24 1 SUBSTITUTION UNDER SECTION 24 1

Inventor(s): (std): KLIMA F ; KLIMA WALTER F ; KLIMA WALTER F JR ; KLIMA WILLIAM L ; WALTER JR ; WLKLIMA ; WILLIAM L KLIMA ; WFJRKLIMA ; WALTER F KLIMA JR ; WALTER F KLIMA ; WALTER F JR KLIMA ; KLIMA W L ; KLIMA W F JR ; KLIMA JR WALTER F ; JR

Inventor(s): KLIMA WALTER FJR ; F KLIMA ; W L KLIMA ; W F JR KLIMA ; WALTERF KLIMA ; WILLIAM L KLIMA ; KLIMA WILLIAM ; KLIMA WALTER

Agent(s): PETER MAXWELL AND ASSOCIATES; GOWLING LAFLEUR HENDERSON LLP; LAW OFFICES OF WILLIAM L KLIMA PC

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA

GB GE GH GM GN GR GW HR HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG
MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG
US UZ VN YU ZW

Title: Dilution system for filling spray bottles

Abstract: Source: US5597019A An apparatus for diluting liquid concentrate materials to liquid use solutions. Liquid concentrates comprise common household cleaning and sanitizing materials such as window cleaners, hard surface cleaners, floor cleaners, sink cleaners, tile cleaners, drain cleaners and openers, glass cleaners, food preparation units, sanitizers, disinfectants, floor finishes and other similar institutional or industrial aqueous or aqueous-alcoholic cleaning solutions. The aspirator system is adapted to receive a container of liquid concentrate in a reservoir. The reservoir contains device to open the liquid concentrate. Additionally the reservoir contains device to support the liquid concentrate during addition of concentrate to the reservoir. When empty, the liquid concentrate bottle can be placed in a receiver for the empty container. The receiver has filling device for the container that can deliver dilute use solution to the container. As should be apparent, the liquid concentrate container and the dilute use solution container are substantially identical.

Classifications:

International (ipc 8-9): B65D1/02 B65D23/10 B65D51/20 B67D1/00 B67D3/00 B67D5/56 B67D7/74 B67D99/00 (Advanced/Invention); B67D1/00 (Core/Invention)

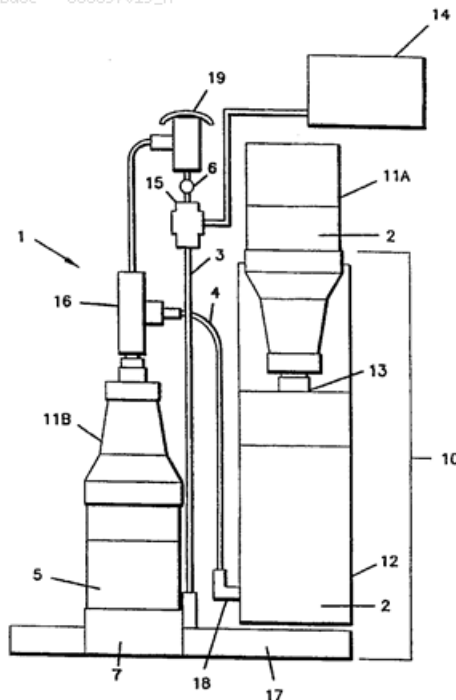
International (ipc 1-7): B65B1/04 B65B3/04 B65D51/16 B65D51/20 B67D1/00 B67D3/00 B67D5/00 B67D5/56

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European: B65D1/02D B65D23/10B B65D51/20 B67D1/00B2D B67D3/00D B67D7/74 L65D251/00Y2D L65D251/00Y6J

US: 141/104 141/18 141/329 141/330 141/364 222/541.6 222/81 222/88

PatBase - US5597019_A



Family:

Publication number	Publication date	Application number	Application date
AU199644707 A1	19961016	AU19960044707	19951218
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Priority:

US19950413782 19950330 US19970782413 19970114 US19980037629 19980310
 WO1995US16355 19951218

Probable Assignee: ECOLAB INC

Assignee(s): (std): ECOLAB INC

Assignee(s): ECOLAB INC ST PAUL ; ECOLAB INC ST PAUL MINN US ; GLADFELTER ELIZABETH J ; MCCALL JOHN E JR ; THOMAS JOHN E ; PEDERSEN DANIEL E ; BALZ ERIC R ; BOCHE DANIEL K

Inventor(s): (std): J E MCCALL ; J E THOMAS ; JOHN E MC CALL ; JOHN E MCCALL ; JOHN E MCCALL JR ; JOHN E THOMAS ; JOHN E THOMAS DANIEL K BOCHE ; JR ; JR JOHN E MCCALL ; MCCALL J E ; MCCALL JOHN E ; MCCALL JOHN E JR ; MCCALL JR JOHN E ; BOCHE JOHN E THOMAS DANIEL K ; CALL JOHN E MC ; D K BOCHE ; DANIEL E PEDERSEN ; DANIEL K BOCHE ; ELIZABETH J GLADFELTE ; ELIZABETH J GLADFELTER ; ERIC R BALZ ; GLADFELTE ELIZABETH J ; GLADFELTER ELIZABETH J ; BALZ ERIC R ; BOCHE D K ; BOCHE DANIEL K ; MCCALL JUN JOHN E ; PEDERSEN DANIEL E ; THOMAS J E ; THOMAS JOHN E

Inventor(s): THOMAS JOHN E RIVER FALLS WIS US ; PEDERSEN DANIEL E COTTAGE GROVE MINN US ; MCCALL JUN

JOHN E WEST ST PAUL MINN US ; BOCHE DANIEL K EAGAN MINN US ; BALZ ERIC R EAGAN MINN US ;
GLADFELTER ELIZABETH J ROSEVILLE MINN US ; MCCALL JUN

Agent(s): GRIFFITH HACK; GOUDREAU GAGE DUBUC

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

Title: Eye spray mist dispenser

Abstract: Source: US5588564A A device including an eye cup portion affixed to one end of an extendible tube portion, the other end of the tube portion is adapted for releasably attaching the tube portion to the **nozzle** of a spray-mist fluid dispenser. In combination, the device and mist dispenser are operable for controlling the delivery of a fluid to the eye. The device functions both as mask to confine the distribution of the spray mist ejected from the **nozzle** upon the eye and as a jig operable for adjusting the distance between the mist dispenser **nozzle** and the eye cup portion of the device. In operation, with the device affixed to a spray mist dispenser **nozzle** and the tube portion unextended (**nozzle** closest to the eye), a dense mist is delivered to the cornea and surrounding eye tissues when mist is dispensed. When the tube portion is extended, the spray mist dispenser **nozzle** is further from the eye cup thereby reducing the density of the spray mist impinging on the eye. The tube portion of the device includes inner and outer concentric tubes and a conical containment chamber affixed to the outer tube and disposed within the eye cup portion of the device. The distance between the wide end of the eye cup and the **nozzle** engaging end of the tube portion is telescopically adjustable. The containment chamber may be removed from the device to permit the spray **nozzle** to be positioned nearer the eye. When the tube portion is unextended, the fluid spray mist impinges on the anterior surface of the eye with the greatest force and concentration. For a gentler, finer delivery of spray mist, the containment chamber is preferably employed and the distance between the dispenser's **nozzle** delivery orifice and the eye cup portion adjusted and set for comfort and accurate dosimetry.

Classifications:

International (IPC 8-9): A61F9/00 (Advanced/Invention);

A61F9/00 (Core/Invention)

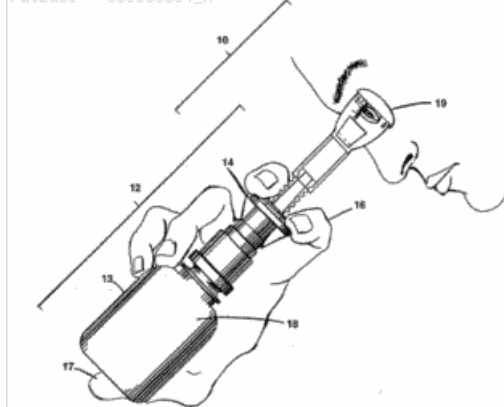
International (IPC 1-7): B67D5/40

CPC: A61F9/0026

European: A61F9/00B4

US: 222/383.1 222/523 222/525 604/301

PatBase - US5588564_A



Family:

Publication number	Publication date	Application number	Application date
US5588564 A	19961231	US19950518143	19950821

Priority:

US19950518143 19950821

Probable Assignee: DEMANGUS ROBERT

Assignee(s): (std): DEMANGUS ROBERT ; HUTSON CLIFFORD L

Inventor(s): (std): DEMANGUS ROBERT ; HUTSON CLIFFORD L

Title: Instrument tip for extracting liquid from sealed container

Abstract: An instrument tip, e.g. for extracting liquid from a container of nutrient to be fed to a patient through a gastric tube, has a forward section (3) with a point (5) for penetrating the wall of the container, and a rear section with a system (57) providing for the insertion and sealing of a sliding trocar through an outlet in the tip with the aim of linking the inner chamber (9) of the tip with the trocar channel (31). The rear section of the tip is in the shape of a housing (33) and a stopper (35) which is fitted into the open end of the housing and has an aperture which provides a seal for the trocar, e.g. by friction. The tip is made from a plastic material, preferably polyethylene.

Classifications:

International (IPC 8-9): A61M5/162 (Advanced/Invention);

A61J1/00 A61J1/14 (Advanced/Non-invention);

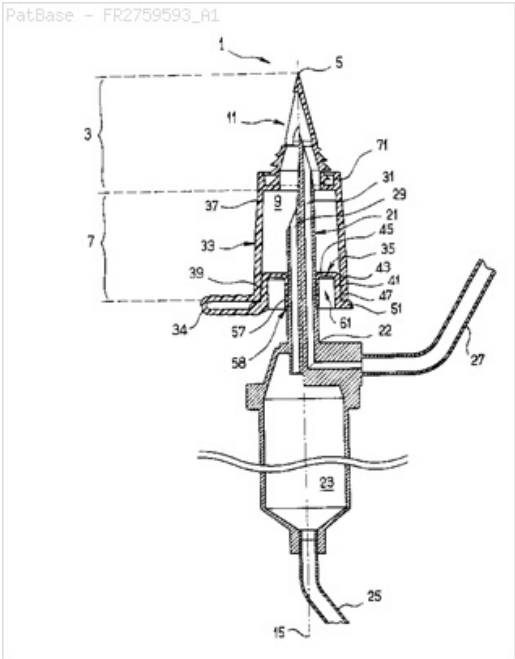
A61M5/14 (Core/Invention);

A61J1/00 A61J1/14 (Core/Non-invention)

International (IPC 1-7): A61J15/00 A61M5/162

CPC: A61J1/1406 A61M5/162

European: A61M5/162 K61J1/00C2 K61J1/14B



Family:

Publication number	Publication date	Application number	Application date
FR2759593 A1	19980821	FR19970001713	19970214
FR2759593 B1	19990716	FR19970001713	19970214

Priority:

FR19970001713 19970214

Probable Assignee: GERVAIS DANONE CO

Assignee(s): (std): GERVAIS DANONE CO

Assignee(s): GERVAIS DANONE COMP ; COMPAGNIE GERVAIS DANONE

Inventor(s): (std): DEPEZAY LAURENCE ; MILLET DANIEL ; SIMONET FRANCOISE

Title: MULTIPURPOSE FLUID APPLICATOR AND METHOD, WITH SURGICAL USES

Abstract: Source: US2001011162A Multipurpose fluid applicators, particularly suitable for surgical purposes, are disclosed. The applicators are specifically designed for dispensing various combinations of sterile pressurized gas, suction, irrigation and sealant agents, including a mixed liquid sealant agent. Preferred embodiments employ a dual-acting valve selectively to control the flow of gas or suction which valve is capable of simultaneously varying flow from a source and the venting of that flow to atmosphere.

Classifications:

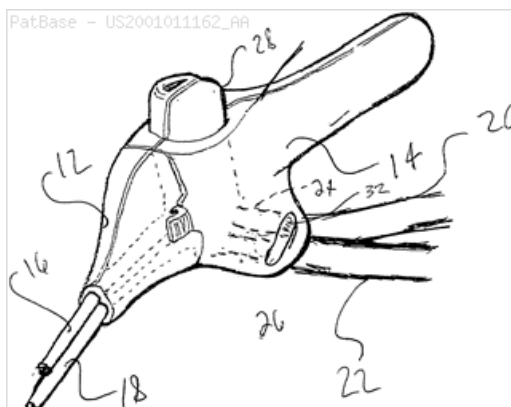
International (IPC 8-9): A61B17/00 A61B17/03 A61B17/11 A61B17/12 A61B19/00 A61J1/05 A61J3/00 A61L24/00 A61M1/00 A61M31/00 A61M35/00 A61M37/00 A61M5/315 B05B15/02 B05B7/02 B05B7/04 B05C17/005 B05C5/00 B05C9/06 B08B5/04 (Advanced/Invention); A61B17/00 A61B17/12 A61B19/00 A61J1/05 A61J3/00 A61M35/00 A61M37/00 A61M5/315 B05B7/02 B05B7/04 B05C17/005 B05C5/00 (Advanced/Non-invention); A61B17/00 A61B17/03 A61B17/12 A61J1/05 A61J3/00 A61L24/00 A61M1/00 A61M37/00 B05B7/02 B05B7/04 B05C17/005 B05C5/00 (Core/Invention); A61B19/00 A61M5/315 (Core/Non-invention)

International (IPC 1-7): A46B11/00 A47L13/26 A61B17/00 A61B17/03 A61B17/08 A61B17/11 A61B17/12 A61D1/00 A61J1/05 A61J1/20 A61L24/00 A61M03/00 A61M1/00 A61M35/00 A61M37/00 A61M5/00 B01D39/08 B05B7/02 B05B7/04 B05C17/005 B05C5/00 B05D3/00 B28B1/52 B28B21/56 B28B23/00 B28B23/02 B28B23/22 B43K29/00 B43K5/02 B67D1/08 B67D1/16 B67D5/56 B67D5/60 C04B38/00 D03D1/00 D03D11/00 D03D25/00

IPC: A61B2017/00367 A61M5/31581 A61M5/31595 Y10S604/902 Y10T137/86815 B05C17/00516 A61B2017/00115 B05B7/0408 B05C17/00553 Y10T137/7504 A61B2017/00495 A61B2090/401 A61M1/0043 A61M1/0047 A61M1/0064 A61B17/00491

European: A61B17/00L A61M1/00H10B2 A61M1/00H10B4 A61M1/00K4 B05B7/04A B05C17/005B6 B05C17/005F K61B17/00C2 K61B17/00L2 K61B19/38B K61M1/00H10B4 K61M1/00K4

US: 137/454.2 137/625.4 222/145.2 222/145.5 222/148 251/319 251/322 251/352 604/118 604/119 604/131 604/181 604/19 604/191 604/207 604/207S 604/208 604/214 604/218 604/224 604/228 604/246 604/27 604/28 604/30 604/30P 604/33 604/35 604/35P 604/35S 604/43 604/45 604/500 604/500S 604/57 604/73 604/82 604/82P 604/83 604/89 604/902 606/213 606/213S 606/92 D24/108



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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WO1999US11392	19990520	US20020161100	20020531		

Probable Assignee: BAXTER INT INC

Assignee(s): (std): BAXTER HEALTHCARE CORP ; BAXTER INT ; BAXTER INT INC ; BIOSURGICAL CORP ; PLYLEY ALAN KIRBY ; REDMOND RUSSELL JAMES ; EPSTEIN GORDON HOWARD

Assignee(s): BIOSURIGAL CORP ; LEVINSON MITCHELL E ; SPERO RICHARD K ; BAXTER INT INCORPORATED

Inventor(s): (std): ALAN KIRBY PLYLEY ; EPSTEIN GORDAN HOWARD ; EPSTEIN GORDON H ; EPSTEIN GORDON HOWARD ; GORDON HOWARD EPSTEIN ; LEVINSON MITCHELL E ; MITCHELL E LEVINSON ; PLYLEY ALAN ; PLYLEY ALAN KIRBY ; REDMOND RUSSEL JAMES ; REDMOND RUSSELL ; REDMOND RUSSELL JAMES ; RICHARD K SPERO ; RUSSELL JAMES REDMOND ; SPERO RICHARD K ; SPERO RICHARD ; LEVINSON MITCHELL ; EPSTEIN GORDON

Agent(s): WRAYS; PETER MAXWELL AND ASSOCIATES; KIRBY EADES GALE BAKER; SIM AND MCBURNEY; DEE IAN MARK; NICHOLS JEFFREY C; BARRETT JOSEPH B; CANTER BRUCE M; BRUCE M; JOSEPH B; JEFFREY C

Designated states: AT AU BE CA CH CY DE DK ES FI FR GB GR IE IT JP LI LU MC MX NL PT SE US

Title: FLUID DISPENSER

Abstract: Source: US2002034456A A method and apparatus for an automated biological reaction system is provided. In the processing of a biological reaction system, there is a need for consistently placing an amount of fluid on a slide. In order to accomplish this, several methods are used including a consistency pulse and a volume adjust means. Moreover, in order to reliably operate an automated biological reaction system, the dispenser must be reliable, easy to assemble and accurate. Among other things, in order to accomplish this, the dispense chamber is substantially in line with the reservoir chamber, the reservoir chamber piston is removed, and the flow of fluid through the dispenser is simplified. Further, in order to operate the automated biological reaction system more reliably, the system is designed in modular pieces with higher functions performed by a host device and the execution of the staining operations performed by remote devices. Also, to reliably catalog data which is used by the automated biological reaction system, data is loaded to a memory device, which in turn is used by the operator to update the operator's databases. The generation of the sequence of steps for the automated biological reaction device based on data loaded by the operator, including checks to determine the ability to complete the run, is provided.

Classifications:

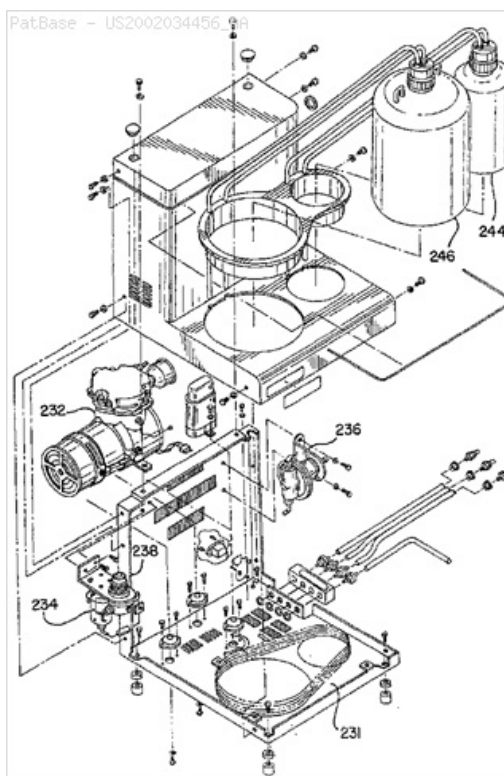
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Probable Assignee: VENTANA MEDICAL SYSTEMS INC

Assignee(s): (std): DRUYOR SANCHEZ BOBBI ; DRUYOR SANCHEZ ROBERTA ; FORD ANTHONY ; HEILMAN BRONWEN ; LEMME CHARLES D ; MCDANIEL DARIN ; MCGRAW BRIAN ; MEAD STEPHEN ; RICHARDS WILLIAM ; RIZZO JR VINCENT R ; VENTANA MED SYST INC ; VENTANA MEDICAL SYSTEMS ; VENTANA MEDICAL SYST INC ; SHOWALTER WAYNE ; RIZZO VINCE

Assignee(s): VENTANA MEDICAL SYSTEMS INC A OF STATE OF DELAWARE CORP ; BRONWEN HEILMAN ; VENTANA MEDICAL SYSTEMS INC A OF STATE OF DELAWARE ; VENTANA MEDICAL SYSTEMS INC

Inventor(s): (std): DRUYOR SANCHEZ BOBBI ; DRUYOR SANCHEZ ROBERTA ; FORD ANTHONY ; HEILMAN BRONWEN ; LEMME CHARLES ; LEMME CHARLES D ; MC DANIEL DARIN ; MCDANIEL DARIN ; MCDONALD DARIN ; MCGRAW BRIAN ; MEAD STEPHEN ; RICHARDS WILLIAM ; RIZZO JR VINCENT R ; RIZZO VINCE ; RIZZO VINCENT R ; RIZZO VINCENT R JR ; SHOWALTER WAYNE ; SHOWALTER WAYNE A ; RICHARDS WILLIAM L ; MCGRAW BRIAN J

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Agent(s): SPRUSON AND FERGUSON; DENNISON ASSOCIATES; KREMER SIMON MARK; MUELLER-BORE AND PARTNER PATENTANWALTE; MCDONNELL BOEHNEN HULBERT AND BERGHOFF LLP; MUIRHEAD AND SATURNELLI LLC; HAYES SOLOWAY PC; HUW R

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HR HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RS RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

Title: METHOD AND APPARATUS FOR DETECTION OF OCCLUSIONS

Abstract: Source: US2002043951A A method and apparatus for automatically detecting an occlusion or drive system failure in a medication infusion system is provided. The electrical current to an infusion pump is measured and compared against a baseline average current. If the current exceeds a threshold amount, an alarm is triggered. Alternatively, pump motor encoder pulses are measured during a pump cycle. If the number of pulses do not correspond within a normal range, an alarm is triggered. After any alarm is triggered, the pump motor is driven in reverse for an incremental distance in order to relieve the fluid pressure in the system.

Classifications:

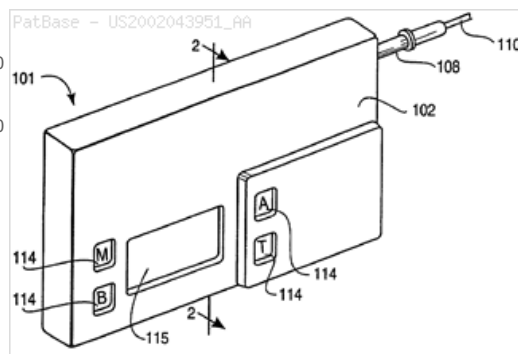
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**Family:**

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