

Search history

Search 1: FT=(TAP~ AND FAUCET~ AND SPIGOT~ AND MOLD~ AND PLASTIC~ AND GAS~ AND AIR~ AND PRESSURE~) (Results 39)

Title: TAPPING ASSEMBLY FOR BEER KEGS AND THE LIKE
Priority: US19710189281 19711014 US19730385358 19730703 AU19730060148 19730910
US19730395898 19730910

Family:	Publication number	Publication date	Application number	Application date
	AU197360148 A1	19750313	AU19730060148	19730910
	CA982991 A1	19760203	CA19720153906	19721013
	DE2251263 A1	19730419	DE19722251263	19721013
	GB1382735 A	19750205	GB19720046935	19721011
	JP48076686 A2	19731015	JP19720103177	19721014
	US3758008 A	19730911	US19710189281	19711014
	US3836053 A	19740917	US19730385358	19730703
	US3908861 A	19750930	US19730395898	19730910

Probable Assignee: JOHNSTON M S

Assignee(s):(std): JOHNSTON M ; JOHNSTON M S ; JOHNSTON MACK S

Assignee(s): JOHNSTON MACK S ROLLING HILLS CALIF V ST A ; JOHNSTON M US

Inventor(s):(std): JOHNSTON M ; JOHNSTON MACK S

Inventor(s): JOHNSTON MACK S ROLLING HILLS CALIF V ST A ; MACK S JOHNSTON ; JOHNSTON M US

International class B65D83/00 B67D1/04 B67D1/08 F16K11/07 (Advanced/Invention);
(IPC 8-9): B65D83/00 B67D1/00 F16K11/06 F16K11/065 (Core/Invention)

International class B65D83/00 B67D1/04 B67D1/08 B67D1/12 B67D5/54 F16L39/00
(IPC 1-7):

CPC: B67D1/0802 B67D1/0831 Y10T137/314

European class: B67D1/08A2 B67D1/08B2 B67D1/08B6

US class: 137/212 222/1 222/400.7 251/65

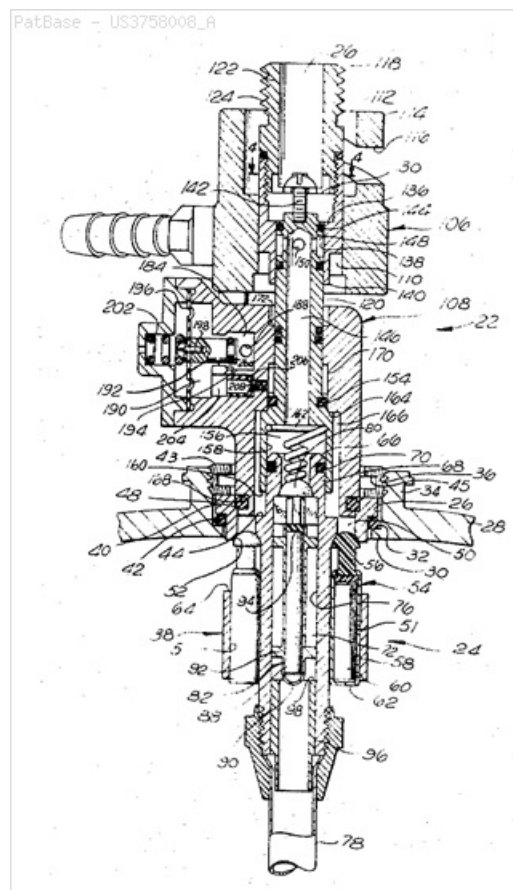
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Cited documents: US729145 A, US3758008 A, US3632023 A, US3610478 A, US3498313 A, US3495620 A, US3376013 A, US3360007 A, US3228413 A, US3065885 A, US2731027 A, US2597952 A, DE1051589 B,

Forward Citations: WO05113415, WO05113414, WO05113412, WO03071037, US9957146, US9834427, US9067774, US8561856, US8561855, US6681813, US5713496, US5617977, US4728010, US4350273, US4180189, US4089444, US4002273, US3836053, US2016152461, US2015175399, US2012241041, US2011210141, US2009294721, US2008061086, US2008061085, US2006243755, JP64055259, JP5173414, JP5173413, JP2007537955, JP2007537954, JP2007537945, DE2842376, DE2716394, DE19831186, DE19831186,

Abstract:

A keg adapter for beer kegs and the like with gas and liquid passageways containing normally closed valves, which when opened permit compressed gas to be admitted to the keg and beer to be withdrawn therefrom, said valves being biased toward the closed position by actuators which contain permanent magnets. A taper is connected to a source of compressed gas and to a beer **faucet** and contains a tap rod, which, when manually actuated, seals the taper to the adapter and interconnects the gas source and the **faucet** with the interior of the keg.



Title: UNIVERSAL VALVE SYSTEM FOR BEER KEGS AND THE LIKE
Priority: US19730389836 19730820 US19740487358 19740710
Family:

Publication number	Publication date	Application number	Application date
US3880182 A	19750429	US19740487358	19740710

Probable Assignee: JOHNSTON MACK S

Assignee(s):(std): JOHNSTON MACK S

Inventor(s):(std): JOHNSTON MACK S

International class
 (IPC 8-9): B67C3/30 (Advanced/Invention);
 B67C3/00 (Core/Invention)

International class
 (IPC 1-7): B65D83/14 F16L55/10

CPC: B67C3/30 Y10T137/314 Y10T137/86332

European class: B67C3/30

US class: 137/212 137/588 222/148 222/400.7

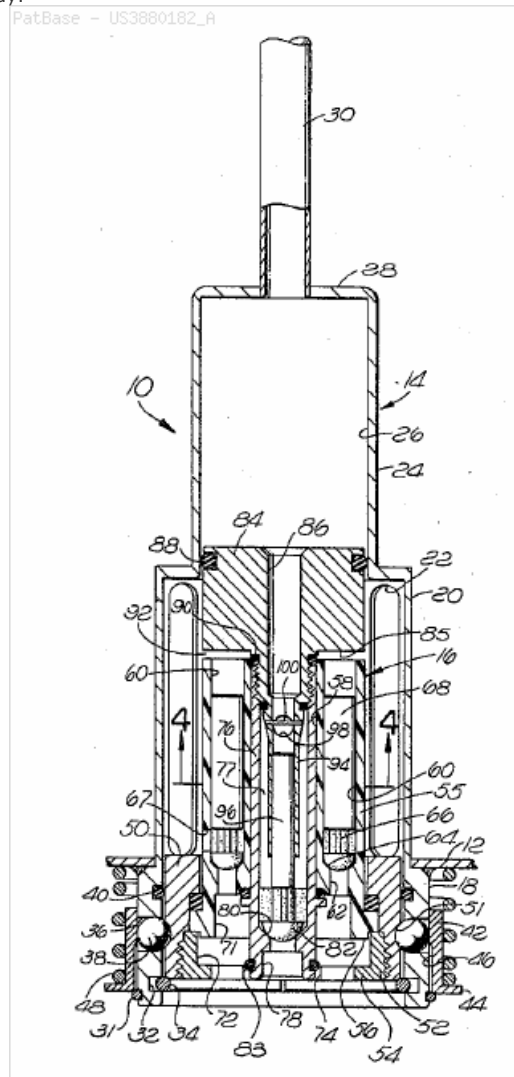
[Classification Explorer](#)

Cited documents: US3753445 A, US3596809 A,

Forward Citations: US9834427, US8757195, US7455082, US7278452, US4685598, US2016152461, US2008029543, US2007169834, US2005279777,

Abstract:

A valve body containing liquid and gas passageways with normally closed valves, is positioned in a generally cylindrical housing or cage which has one end thereof received in an opening contained in a wall of a keg or the like, said valve body being movable in the housing or cage between a closed position at said keg opening and an open position spaced therefrom. The cage or housing adjacent the keg opening contains a plurality of openings for the admission of liquid into the keg through the keg opening and said housing openings when the valve body is in the open position. Interengaging detent means are provided between the valve body and the housing, releasably maintaining the valve body in the closed position. A filling assembly is also provided for simultaneously filling the keg with liquid through the openings in the housing or cage and for venting air from the keg through a siphon tube in communication with the liquid passageway in the valve body.



Title:

KEG ADAPTER VALVE

Priority:

US19730390153 19730820

Family:

Publication number	Publication date	Application number	Application date
US3913608 A	19751021	US19730390153	19730820

Probable Assignee:

JOHNSTON MACK S

Assignee(s):(std):

JOHNSTON MACK S

Inventor(s):(std):

JOHNSTON MACK S

International class (IPC 8-9):

B67D1/08 (Advanced/Invention);
B67D1/00 (Core/Invention)

International class (IPC 1-7):

B65D83/00 B65D83/14

CPC:

B67D1/0831 Y10T137/6137 Y10T137/6154 Y10T137/7904

European class:

B67D1/08B2

US class:

137/322 137/327 137/528 222/400.7 251/65

Classification Explorer

Cited documents:

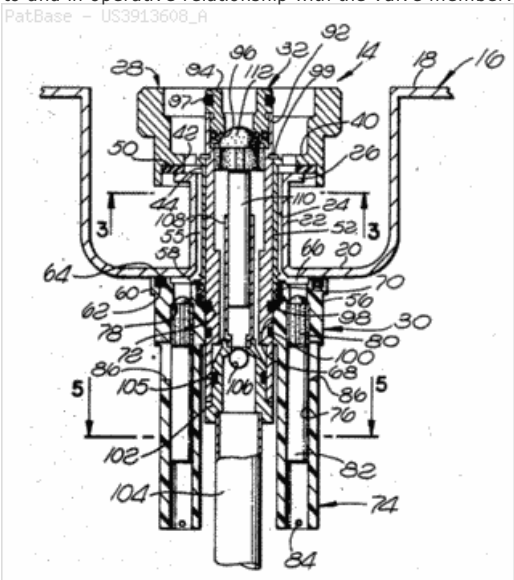
US3563266 A, US3438553 A, US3294291 A, US3228413 A, US3065885 A, US3035603 A,

Forward Citations:

WO05113414, US9834427, US8561856, US7669738, US7455082, US5823222, US5152437, US5014887, US2016152461, US2008061086, US2007169834, EP0350779,

Abstract:

A valve member containing controlled gas and liquid passageways for admitting gas into a keg and for dispensing liquid therefrom through a relatively small opening is mounted on the inside of the keg in alignment with said opening. A taper connector member is mounted on the outside of the keg and is connected to and in operative relationship with the valve member.



Title: SWEPT JET ORAL IRRIGATOR

Priority: US19740510701 19740930 US19740510722 19740930 DE19752534288 19750731
 US19750618208 19750930 US19750618252 19750930 CA19760258181 19760730
 FR19770018395 19770615 CA19780305479 19780614 SE19820001797 19820322

Family:	Publication number	Publication date	Application number	Application date
	AT359182 B	19801027	AT19750007453	19750930
	AT745375 A	19800315	AT19750007453	19750930
	AU197836475 A1	19791129	AU19780036475	19780525
	AU517724 B2	19810820	AU19780036475	19780525
	BE834030 A	19760116	BE19750160557	19750930
	CA1059918 A1	19790807	CA19750235845	19750919
	CA1069353 A1	19800108	CA19750235902	19750919
	CA1095666 A1	19810217	CA19760258181	19760730
	CA1101099 A1	19810512	CA19780305479	19780614
	CH620136 A	19801114	CH19750012561	19750926
	CH627388 A	19820115	CH19780006449	19780613
	DE2505605 A1	19760422	DE19752505605	19750211
	DE2505605 B2	19780126	DE19752505605	19750211
	DE2505605 C3	19780921	DE19752505605	19750211
	DE2505695 A1	19760422	DE19752505695	19750211
	DE2505695 C2	19880601	DE19752505695	19750211
	DE2534261 A1	19760408	DE19752534261	19750731
	DE2534261 C2	19820311	DE19752534261	19750731
	DE2534288 A1	19760408	DE19752534288	19750731
	DE2534288 C2	19840620	DE19752534288	19750731
	DE2543378 A1	19760422	DE19752543378	19750929
	DE2543378 C2	19820603	DE19752543378	19750929
	DE2559730 A1	19771103	DE19752559730	19750211
	DE2560383 A1	19820909	DE19752560383	19750929
	DE2560383 C	19820909	DE19752560383	19750929
	DE2560546 C2	19880204	DE19752560546	19750731
	DE2826060 A1	19781221	DE19782826060	19780614
	DE2826060 B2	19791129	DE19782826060	19780614
	DE2826060 C3	19800807	DE19782826060	19780614
	DE7504041 U	19760102	DE19750004041U	19750211
	DE7504093 U	19770707	DE19750004093U	19750211
	DE7530771 U	19770428	DE19750030771U	19750929
	DK436775 A	19760331	DK19750004367	19750929
	FR2285927 A1	19760423	FR19750029595	19750926
	FR2285927 B1	19820219	FR19750029595	19750926
	FR2394347 A1	19790112	FR19770018395	19770615
	FR2394347 B1	19800509	FR19770018395	19770615
	FR2475939 A1	19810821	FR19810003157	19810218
	FR2475939 B1	19851025	FR19810003157	19810218
	GB1515891 A	19780628	GB19750021883	19750521
	GB1515892 A	19780628	GB19750021884	19750521
	GB1598385 A	19810916	GB19780022804	19780525
	IT1043005 A	19800220	IT19750027812	19750930
	IT7868212 A0	19780526	IT19780068212	19780526
	JP1115788 C3	19820929	JP19750077104	19750624
	JP1178390 C3	19831130	JP19750070998	19750613
	JP51039412 A2	19760402	JP19750077104	19750624
	JP51042396 A2	19760409	JP19750070998	19750613
	JP52031428 A2	19770309	JP19760090401	19760730
	JP53022326 B4	19780707	JP19760090401	19760730
	JP54112330 A2	19790903	JP19780067171	19780602
	JP57000108 B4	19820105	JP19750077104	19750624
	JP58012023 B4	19830305	JP19750070998	19750613
	JP944561 C3	19790320	JP19760090401	19760730
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	NL172620 C	19831003	NL19750011523	19750930
	NL7511523 A	19760401	NL19750011523	19750930
	NL8201825 A	19820901	NL19820001825	19820504
	NO781780 A	19781218	NO19780001780	19780522
	SE426443 B	19830124	SE19750010963	19750930
	SE426443 C	19830511	SE19750010963	19750930
	SE426444 B	19830124	SE19780006868	19780614
	SE426444 C	19830511	SE19780006868	19780614
	SE426445 B	19830124	SE19780012672	19781208
	SE426445 C	19830511	SE19780012672	19781208
	SE426446 B	19830124	SE19820001797	19820322
	SE426446 C	19830511	SE19820001797	19820322
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	SE7806868 A	19781216	SE19780006868D	19780614
	SE7812672 A	19800609	SE19780012672D	19781208
	SE7812672 L	19800609	SE19780012672	19781208

US3973558 A	19760810	US19740510701	19740930
US4052002 A	19771004	US19750618208	19750930
US4122845 A	19781031	US19770818215	19770722
US4157161 A	19790605	US19750618252	19750930
US4157161 B1	19860408	US19750618252	19750930
US4213494 A	19800722	US19780915209	19780613

Probable Assignee: FLUID EFFECTS CORP

Assignee(s):(std): BOWLES FLUIDICS CO ; BOWLES FLUIDICS CORP ; BOWLES FLUIDICS TE SILVER SPRING MARYL CORP ; LOKNA JAAN ; MAGDEBURGER ARMATURENWERKE ; MAGDEBURGER ARMATURENWERKE KARL MARX VEB ; EUROTUNGSTENE ; NOVATOME ; NOVATOME IND

Assignee(s): NOVATOME LE PLESSIS ROBINSON FRANKREICH FA ; NOVATOME FA ; STOUFFER RONALD D ; NOVATORE ; JAAN LOKNA ; BOWLES FLUIDICS TE SILVER SPRING MARYLAND VER ST V AM CORP ; BRAY HARRY C ; CARBONNEL HENRI ; MERCANTILE SAFE DEPOSIT AND TRUST CO ; FLUID EFFECTS CORP ; BOWLES FLUIDIES CORP ; BOWLES FLUIDICS CORP SILVER SPRING MD US ; BOWLES FLUIDICS CORP SILVER SPRING MD V ST A ; BAUER PETER

Inventor(s):(std): H C BRAY JR ; H CARBONNEL ; H J MICHAEL ; H M BEIER ; H U HOLTGE ; HARI SHII BUREI JUNIA ; HARRY C BRAY JR ; HENRI CARBONNEL ; INVENTEUR A RENONCE A ETRE MENTIONNE ; JAAN LOKNA ; L LUBITZ ; LOKNA JAAN ; P BAUER ; PEETAA BAUWAA ; PETER BAUER ; PIITAA BAUAA ; R D STOUFFER ; ROMAGNOLO G ; RONALD D STOUFFER ; RONARUDO DEE SUTOFUA ; RONARUDO DEE SUTOTSUFUAA ; S SCHERSCHMIDT ; BEANTRAGT NICHTNENNUNG ; BRAY HARRY C ; BRAY JR H C ; BRAY JR HARRY C ; BRAY JUN HARRY C ; STOUFFER RONALD D ; STOUFFER R D ; SCHERSCHMIDT S ; MICHAEL H J ; LUBITZ L ; HOLTGE H U ; CARBONNEL H ; 1H M BEIER ; 2H U HOLTGE ; 3L LUBITZ ; 4H J MICHAEL ; 5S SCHERSCHMIDT ; ANRI KARUBONNU ; BRAY HARRY C JR ; BRAY H C ; BEIER H M ; BAUER P ; CARBONNEL HENRI ; BAUER PETER

Inventor(s): 1 H M BEIER ; 5 S SCHERSCHMIDT ; 4 H J MICHAEL ; 3 L LUBITZ ; 2 H U HOLTGE ; BAUER PETER GERMANTOWN MD ; BAUER PETER GERMANTOWN ; C BRAY JUN ; BRAY JUN ; C BRAY JUN HARRY ; CARBONARI H ; D STOUFFER RONALD ; STOUFFER RONALD D SILVER SPRING

Agent(s): GH; GRIFFITH HACK; HEWSON DONALD E; ROBIC ROBIC AND ASSOCIES ASSOCIATES

International class (IPC 8-9): A47K7/08 A61C17/02 A61C17/024 A61C17/028 A61C17/032 A61H13/00 A61H9/00 A61M3/02 B05B1/08 B05B11/00 B05B11/04 B05B17/00 B05B3/00 B22D17/32 B22D18/08 B22D31/00 B23B27/16 B23B43/02 B60S1/48 B60S1/52 F15C1/04 F15C1/22 F15C4/00 F15D1/08 G05B19/07 G05D16/00 (Advanced/Invention); A47K7/00 A61C17/00 A61H13/00 A61H9/00 A61M3/00 B05B1/02 B05B11/00 B05B11/04 B05B17/00 B05B3/00 B22D17/32 B22D18/00 B22D31/00 B23B27/16 B23B43/00 B60S1/46 F15C1/00 F15C4/00 F15D1/00 G05B19/04 (Core/Invention); B05B (Subclass/Invention)

International class (IPC 1-7): A01C23/00 A01M7/00 A61C17/00 A61C17/02 A61H13/00 A61H7/00 A61H9/00 A61M15/00 B05B1/02 B05B1/08 B05B11/00 B05B11/14 B05B1/18 B05B1/26 B05B1/34 B05B12/06 B05B17/00 B05B17/04 B05B3/00 B05B3/16 B05D1/02 B08B3/02 B22D11/16 B22D17/32 B22D18/04 B22D18/08 B22D27/12 B22D27/14 B22D31/00 B22D37/00 B22D39/00 B22D41/08 B22D45/00 B23B27/16 B23B43/02 B60S1/46 B60S1/48 B60S1/52 F15B21/12 F15C1/04 F15C1/22 F15C4/00 F15D1/08 F23D11/38 G01F1/00 G05D16/00 G05D16/20

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European class: A61C17/02 A61C17/028 A61C17/02F A61H13/00 A61H13/00B B05B1/08 B05B1/08A B05B11/00 B05B11/04E B05B17/00 B05B3/00 B22D18/08 B22D31/00 B23B27/16 B23B43/02 B60S1/48B B60S1/52 B60S1/52B F15C1/22 G05B19/07R R23D900/14482

US class: 128/66 128/DIG.10 137/830 137/835 164/147.1 164/155.6 164/4 164/457 164/500 239/11 239/284.1 239/4 239/589.1 239/DIG.3 401/137 401/15 601/155 601/160 601/165

[Classification Explorer](#)

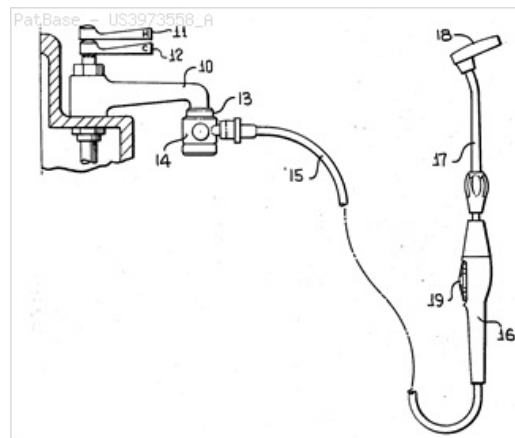
Cited documents: USRE27938 E, US785824 A, US4052002 A, US4050503 A, US3979068 A, US3973558 A, US3926373 A, US3910265 A, US3842893 A, US3754576 A, US3753435 A, US3741481 A, US3640133 A, US3608703 A, US3593707 A, US3563462 A, US3552415 A, US3547110 A, US3507275 A, US3458888 A, US3452745 A, US3432104 A, US3432102 A, US3423026 A, US3373600 A, US3283352 A, US3247861 A, US3213493 A, US3185166 A, US3016066 A, US2934241 A, US2796294 A, US2758874 A, US2417222 A, US2211823 A, US1995424 A, US1848708 A, JPS4958572 U, JP51043317 A2, JP49058572 U, JP49046076 A2, JP47020052 A2, JP47017011 A2, JP44004399 B4, GB1219747 A, DE2313980 A1, DE2065063 B2, DE2065063 B1, DE2017600 B2, DE2017600 A1, DE1920575 A1, CA693965 A,

Forward Citations: WO9916649, WO9739830, WO9534785, WO9222735, WO9222735, WO8202076, WO8102253, WO8101966, WO8001884, WO8001140, WO8000927, WO8000543, WO7900361, WO7900236, WO17194525, WO13061251, WO12166525, WO09142774, WO09142774, WO09091461, WO09058834, WO09030878, WO08024005, WO08024005, WO07149436, WO07044354, WO07035767, WO06110154, WO06049622, WO05093264, WO05042169, WO05042169, WO0023197, USRE38013, USRE33605, USRE33448, USRE33159, USRE33158, USD819956, USD819196, USD815274, USD809651, USD809650, USD807822, USD804018, USD804016, USD802747, USD802120, USD802119, USD798440, USD796028, USD794773, USD788907, USD786422, USD783810, USD783809, USD782657, USD782656, USD780908, USD772397, USD772396, USD756122, USD754330, USD747464, USD740936, USD735428, USD731640, USD725770, USD718855, USD717427, USD714930, USD714929, USD707350, USD694398, USD670373, USD629884, USD588617, USD574952, USD565175, USD550261, USD530010, USD464564, USD449884, USD443728, USD437978, USD433193, US9987639, US9987109, US9980794, US9980793, US9962718, US9943863, US9915362, US9776195, US9775692, US9763554, US9642677, US9597161, US9566593, US9555422, US9517030, US9468511, US9420924, US9394759, US9333060, US9316065, US9308326, US9212522, US9157635, US9144477, US9061096, US9050157, US8955585, US8943634, US8916085, US8893804, US8888727, US8808245, US8808209, US8801667, US8800894, US8733401, US8662421, US8646483, US8641649, US8573066, US8517108, US8517107, US8517106, US8517105, US8499375, US8453745, US8444340, US8439117, US8435600, US8424781, US8424605, US8408483, US8403665, US8381817, US8205812, US8172162, US8113832, US8074902, US8056830, US7951244, US7850098, US7798434, US7775456, US7712687, US7677480, US7670141, US7651036, US7645383, US7478764, US7472848, US7404416, US7367803, US7364687, US7354008, US7314188, US7302731, US7267290, US7246615, US7152817, US7111800, US7111800, US7093890, US7078046, US7051953, US7014131, US6977042, US6976507, US6951567, US6908047, US6890167, US6846413, US6814318, US6785915, US6783505, US6694986, US6685458, US6682004, US6680021, US6659674, US6615857, US6602554, US6581856, US6575386, US6558682, US6531142, US6514504, US6503362, US6497375, US6467701, US6461430, US6318647, US6311903, US6298898, US6245032, US6200635, US6197406, US6083003, US6074597, US6051180, US6050503, US6007676, US5988529, US5957385, US5911851, US5904298, US5902540, US5882573, US5749525, US5667483, US5547094, US5472143, US5445516, US5383781, US5231978, US5215141, US5178203, US5149263, US5129585, US5095893, US5035361, US4990059, US4982753, US4976305, US4955547, US4905909, US4860820, US4793331, US4774975, US4721251, US4714102, US4693292, US4676201, US4645126, US4618096, US4590987, US4585050, US4565220, US4562867, US4517881, US4508267, US4493362, US4480793, US4469164, US4463904,

US4413782, US4398664, US4388950, US4365752, US4250799, US4231519, US4210283, US4196857, US4184636, US4177927, US4151955, US4122845, US4043337, US2017087569, US2016263591, US2016082447, US2014227659, US2012175438, US2012168014, US2012084911, US2012037731, US2012021374, US20111311939, US2011089250, US2011042092, US2010308125, US2010123031, US2010021397, US2009236449, US2009188991, US2009178695, US2009065170, US2009025758, US2008128004, US2008084452, US2008067267, US2008061479, US2008011868, US2007295840, US2007194148, US2007163573, US2007063076, US2006226266, US2006108442, US2006091242, US2006065765, US2005214147, US2005087633, US2005077399, US2005040674, US2005027241, US2004250837, US2004227275, US2004222310, US2004219483, US2004164189, US2004117937, US2004074988, US2004050980, US2003216762, US2003132316, US2003090569, US2001038047, US2001020653, JP62251508, JP61078795, JP60234085, JP60213576, JP59145675, JP59062708, JP58047681, JP5793699, JP55008597, JP52160810, JP2270690, JP2270689, JP2270688, JP2017529493, JP2012020268, JP2005000667, JP1792201, JP1145406, GB2356687, GB2295535, GB2271301, GB2271301, GB2160444, GB2159445, GB2120384, FR2967239, FR2726491, FR2497471, FR2411326, FR2400690, FR2352591, EP3155949, EP2644999, EP1675686, EP1486158, EP0931707, EP0914995, EP0841038, EP0835793, EP0835793, EP0830996, EP0724994, EP0724994, EP0586588, EP0583664, EP0302668, EP0302668, EP0175563, EP0151636, EP0135305, EP0121035, EP0056628, EP0055947, EP0020446, EP0011869, DE9108004, DE8812568, DE3933109, DE3907740, DE3532885, DE3400934, DE3111063, DE2913087, DE2853327, DE2724299, DE19838764, DE19802491, DE19753780, DE19641460, DE102016208344, DE102007037492, DE10028362, CZ306290, CZ306064, CZ304314, CN103359070, CN103359070, AU713623,

Abstract:

An improved oral irrigation technique is characterized by an oscillatory swept water jet issued to sweep back and forth at high frequencies across the user's gums and teeth. High frequency operation is achieved by oscillating the jet itself rather than the jet-issuing body. The high frequency sweeping jet effects faster cleaning action and more effective gum massage than prior art pulsed jet irrigators having lower effective operating frequencies.



Title: TRACHEAL TUBE FOR WINDPIPE INSERTION - HAS THREE WAY VALVE WITH AUXILIARY BALLOON FOR RAPID SEALING BALLOON FILLING

Priority: DE19752538268 19750828

Family:	Publication number	Publication date	Application number	Application date
	DE2538268 A1	19770303	DE19752538268	19750828
	DE2538268 B2	19780503	DE19752538268	19750828
	DE2538268 C3	19790201	DE19752538268	19750828

Probable Assignee: WILLY RUESCH FA

Assignee(s):(std): RUESCH GMBH AND CO WILLY KG ; WILLY RUESCH FA

Assignee(s): WILLY RUESCH GMBH AND CO KG 7053 ROMMELSHAUSEN ; FA WILLY RUESCH

Inventor(s):(std): RUESCH HEINZ ; RUESCH HEINZ ING GRAD

Inventor(s): RUESCH HEINZ ING GRAD 7050 WAIBLINGEN ; RUESCH HEINZ ING

International class
(IPC 8-9): A61M16/04 (Advanced/Invention);
A61M16/04 (Core/Invention)

International class
(IPC 1-7): A61M16/00

CPC: A61M16/044

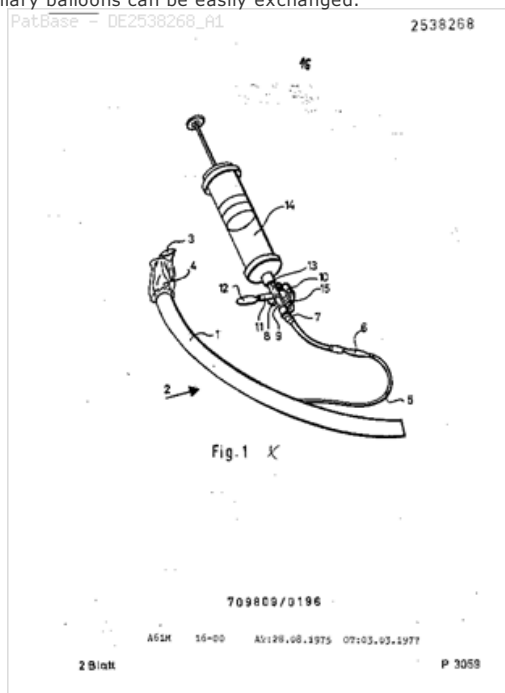
European class: A61M16/04B2

[Classification Explorer](#)

Forward Citations: WO9407556, WO03033063, US8733359, DE102006044740,

Abstract:

A tracheal tube for insertion into the windpipe of a patient for artificial aspiration and the introduction of anaesthetics has at the outer end of the filler hose for the sealing balloon a 3-way valve. The second connection of the latter is joined to an auxiliary balloon and the third to a syringe. This provides a rapid seal of the windpipe if there is a risk of vomit entering the lungs. The action of the 3-way valve is faster than that of a hose clip. Defective auxiliary balloons can be easily exchanged.

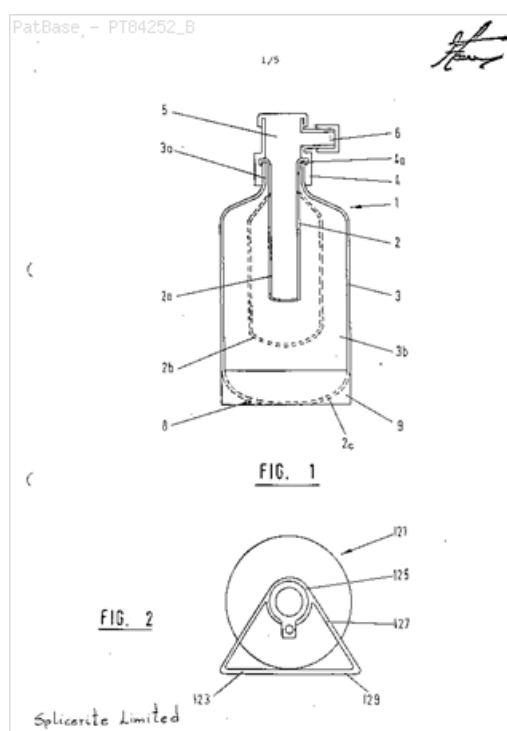


Title: LIQUID CONTAINER RECIPIENTE PARA LIQUIDOS**Priority:** PT19870084252 19870205

Family:	Publication number	Publication date	Application number	Application date
	PT84252 A	19870930	PT19870084252	19870205
	PT84252 B	19900601	PT19870084252	19870205

Probable Assignee: SPLICERITE LTD**Assignee(s):(std):** SPLICERITE LTD**Inventor(s):(std):** SHARPLES LEONARD**Inventor(s):** LEONARD SHARPLES**International class** B65D47/00 (Advanced/Invention);
(IPC 8-9): B65D47/00 (Core/Invention)**International class** B65D47/00 F16L9/18
(IPC 1-7):[Classification Explorer](#)**Abstract:**

A liq. charging and discharging opening (3a) is provided on a rigid or semi-rigid housing (3) of the container, the opening communicating with a flexible, open-ended bag (2) within the housing. The opening is controlled by a valve (4-6). Pref. the bag is made of elastomeric material. The bag is expandable upon charging of the container and contractable by inherent resilience to discharge liq. A space (3b) between the housing and bag is vented via a control valve (8) during bag expansion, with ambient air passing into the space responsive to bag contraction.

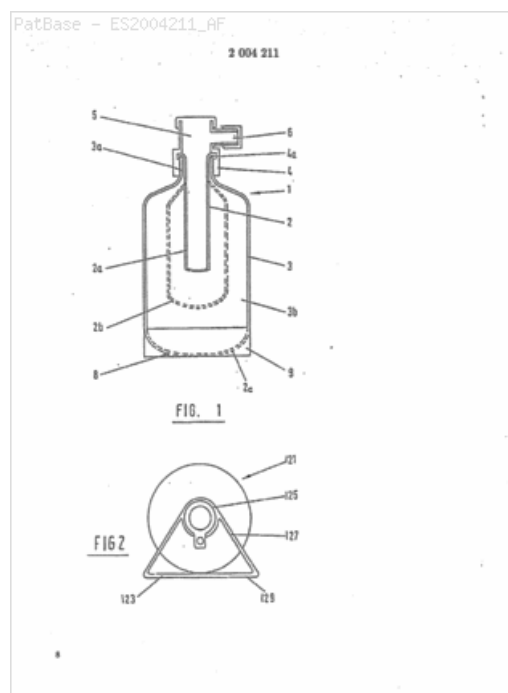


Title: Bag-in-tube type liq. container**Priority:** ES19870000295 19870206

Family:	Publication number	Publication date	Application number	Application date
	ES2004211 AF	19881216	ES19870000295	19870206

Probable Assignee: SPLICERITE LTD**Assignee(s):(std):** SPLICERITE LTD**Assignee(s):** SPLICERITE LIMITED**Inventor(s):(std):** SHARPLES LEONARD**International class** B65D83/14 B65D85/72 (Advanced/Invention);
(IPC 8-9): B65D83/14 B65D85/72 (Core/Invention)**International class** B65D83/14 B65D85/72
(IPC 1-7):[Classification Explorer](#)**Abstract:**

A liq. charging and discharging opening (3a) is provided on a rigid or semi-rigid housing (3) of the container, the opening communicating with a flexible, open-ended bag (2) within the housing. The opening is controlled by a valve (4-6). Pref. the bag is made of elastomeric material. - The bag is expandable upon charging of the container and contractable by inherent resilience to discharge liq. A space (3b) between the housing and bag is vented via a control valve (8) during bag expansion, with ambient air passing into the space responsive to bag contraction.



Title:

Priority:

Family:

Probable Assignee:

Assignee(s):(std):

Inventor(s):(std):

Agent(s):

Designated states:

International class (IPC 8-9):

International class (IPC 1-7):

CPC:

European class:

US class:

Classification Explorer

Cited documents:

Forward Citations:

CARBONATED BEVERAGE DISPENSING SYSTEM

US19910658514 19910221CA19922119248 19920803WO1992US06434 19920803

Publication number	Publication date	Application number	Application date
CA2119248 AA	19940316	CA19922119248	19920803
CA2119248 C	19970318	CA19922119248	19920803
EP0605441 A1	19940713	EP19920917067	19920803
US5139169 A	19920818	US19910658514	19910221
WO9403376 A1	19940217	WO1992US06434	19920803

BOYER RICHARD L

BOYER RICHARD L

BOYER RICHARD L

OGILVY RENAULT LLP SENCRL SRL

AT BE CA CH DE DK ES FR GB GR IE IT LI LU MC NL SE

B67D1/00 B67D1/08 (Advanced/Invention);
B67D1/00 (Core/Invention)

B65D35/28 B65D37/00 B65D77/06 B67D1/00 B67D1/08

Y10T74/18816 B67D1/0001

B67D1/00C

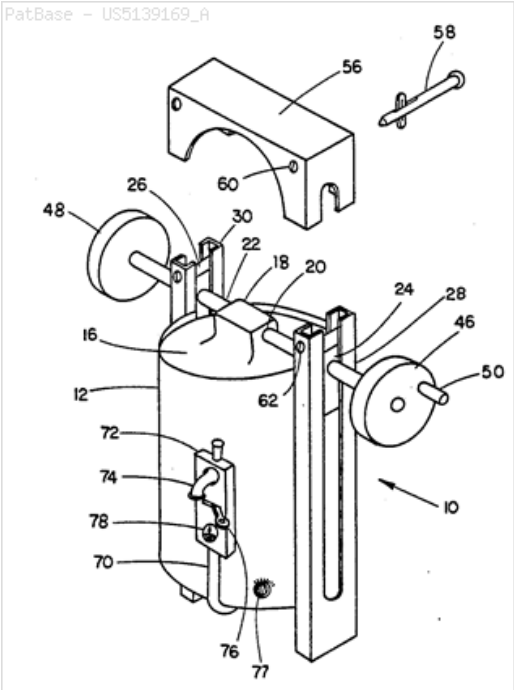
100/288 222/103 222/105 222/107 222/326 383/119 74/89.18

[Classification Explorer](#)

US5025953 A, US4989743 A, US4756450 A, US4456134 A, US4157103 A, US4155304 A, US3902635 A, US3565292 A, US3450309 A, US280333 A, US2106494 A, US1197824 A, GB2208113 A1, GB2178001 A1, GB2159583 A1, EP0167482 A1,

WO16034238, WO13124485, WO11060496, WO0001596, US9932217, US9546084, US8157127, US6695168, US6474093, US6449970, US6443335, US6360556, US6354342, US6354341, US6170715, US6076457, US5873490, US5433346, US5271528, US2015344280, US2006249535, US2005238765, US2004007589, US2003230356, US2003132245, RU2634809, FR2780708, FR2750109, EP1012073, DE202014106250, CN103702924, AU764887,

Abstract:
There is provided an improved carbonated drink dispensing system including a semi-rigid **plastic** collapsible bladder which holds the carbonated beverage and a dispensing apparatus which receives the semi-rigid bladder. The bladder includes a plurality of ribs to provide additional strength. The dispensing apparatus and bladder are generally cylindrical in shape. The dispensing apparatus includes a top **pressure** plate for applying downward **pressure** to the top of the bladder as the beverage is dispensed thereby collapsing a portion of the bladder so as to keep appropriate **pressure** within the bag thus preventing the escape of carbonation from the beverage. A gearing mechanism to provide a mechanical advantage is utilized in connection with the movement of the **pressure** plate.



Title:	Method and apparatus for storing and dispensing liquid									
Priority:	US19920856690 19920324		WO1993US02328 19930322		US19930105565 19930813					
US19940336041 19941104										
Family:	Publication number	Publication date	Application number	Application date						
	AU199348087 A1	19931021	AU19930048087	19930322						
	CA2131828 AA	19940909	CA19932131828	19930322						
	EP0632778 A1	19950111	EP19930908334	19930322						
	EP0632778 A4	19950705	EP19930908334	19930322						
	US5244117 A	19930914	US19920856690	19920324						
	US5390832 A	19950221	US19930105565	19930813						
	US5538028 A	19960723	US19940336041	19941104						
	WO9318970 A1	19930930	WO1993US02328	19930322						
Probable Assignee:	SAMUEL N LOMBARDO									
Assignee(s):(std):	LOMBARDO SAMUEL N ; SAMUEL N LOMBARDO									
Inventor(s):(std):	LOMBARDO SAMUEL N									
Inventor(s):	SAMUEL N LOMBARDO									
Agent(s):	MACRAE AND CO									
Designated states:	AT AU BB BE BG BR CA CH CZ DE DK ES FI FR GB GR HU IE IT JP KP LI LU MC MG MN MW NL NZ PL PT RO RU SD SE SK UA VN									
International class (IPC 8-9):	B67D1/04 B67D1/07 B67D1/14 (Advanced/Invention); B67D1/00 (Core/Invention)									
International class (IPC 1-7):	B65B31/00 B65B7/00 B65D83/00 B67D1/07 B67D5/60 F16K47/00 F16K47/04									
CPC:	B67D1/0456 B67D1/1455 B67D1/1461 Y10T137/0385 Y10T137/2984 Y10T137/9464									
European class:	B67D1/04D B67D1/14B6A B67D1/14B6A2									
US class:	137/12.5 137/170.1 137/801 141/3 215/4 222/1 222/394 222/464 222/464.1 222/464.3 222/505 222/511 251/118 251/122 251/155 251/331 53/133.2 53/432 53/470									

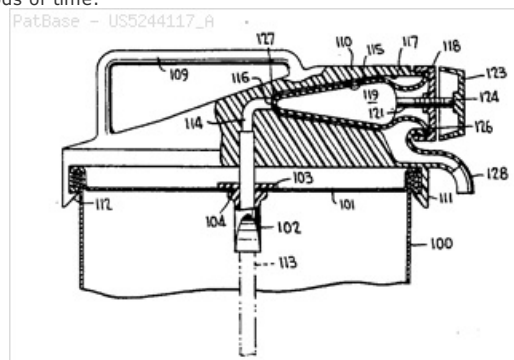
Classification Explorer

Cited documents: US865451 A, US782648 A, US711458 A, US676009 A, US597842 A, US5244117 A, US5118009 A, US5050806 A, US502451 A, US5022565 A, US4995534 A, US4984717 A, US4867348 A, US4860932 A, US4784299 A, US4778081 A, US4720076 A, US4717048 A, US4707278 A, US4694975 A, US4693054 A, US4671436 A, US462576 A, US4347695 A, US4269387 A, US4211386 A, US4194653 A, US417336 A, US4078578 A, US4000829 A, US3998364 A, US3830265 A, US3823848 A, US3592351 A, US3460589 A, US3426798 A, US3410456 A, US3291441 A, US327402 A, US3238963 A, US3194533 A, US3135412 A, US2928576 A, US2924238 A, US2899170 A, US2678747 A, US2661019 A, US2633150 A, US2628062 A, US2575658 A, US2461909 A, US2345840 A, US234395 A, US2325228 A, US2236619 A, US2234816 A, US2202179 A, US2176947 A, US2173979 A, US2162842 A, US2125102 A, US2119383 A, US2096202 A, US2051509 A, US2035202 A, US2006688 A, US1563916 A, US1235418 A, US1010665 A, IT269321 A, GB9500677 A, GB278180 A, GB187401168 A, GB1486245 A, GB1168, FR2636918 A1, FR2597462 A1, EP03067379 A1, DE3240718 A1,

Forward Citations: WO9803812, WO9743203, WO9743203, WO9743202, WO17213849, WO13014618, WO13014618, WO05097665, US6769940, USD585228, US9878273, US9643746, US9610551, US9309103, US9051166, US8935905, US8931522, US8505442, US8371478, US8297483, US8196783, US8132697, US8033431, US7958919, US7717294, US7669738, US7517385, US7513398, US7419132, US7040514, US7025329, US6994275, US6926176, US6637176, US6557584, US6247614, US5887756, US5842617, US5615804, US5538028, US5390832, US5341956, US2018149279, US2017297886, US2013042940, US2012132670, US2011168736, US2011113973, US2011000250, US2010304944, US2010187264, US2010108192, US2010024660, US2009130274, US2008308575, US2008277422, US2007228315, US2006278668, US2006180781, US2006124879, US2005242314, US2005236439, US2005167528, US2004261962, US2004144807, US2002162458, US2002150657, LU91190, ITTO20110678, FR2810660, EP2206677, EP2082987, EP2082986, EP1847508, EP1752413, DE20108618, CN102514754, AU2005231653, AU2002234639.

Abstract:

Carbonated and non-carbonated beverages are selectively dispensed under the driving force of a one time charge of pressurized inert gas inserted into the headspace of the beverage container at the time of bottling/canning. The gas, preferably nitrogen, is inert to the beverage liquid and is pressurized sufficiently to permit dispensing of all of the liquid from the container via a siphon tube. A cap valve seals the container and includes an elastomeric check valve preventing escape of gas while permitting the siphon tube to be inserted into the container. A throttling and diffusing valve controls outflow from the siphon tube to ambient and prevents fracturing of gas from the beverage liquid to minimize foaming/fothing. The valve has a conical valve member movable axially in a similarly conical valve chamber to establish a flow path having an annular cross-section that increases in circumference as the valve proceeds downstream to thereby gradually reduce the **pressure** of the liquid flowing through the valve to ambient **pressure**. A rounded tip on the upstream end of the valve member establishes a **pressure** stagnation point for the liquid entering the valve chamber. The resulting arrangement minimizes carbonation loss in the liquid so that it does not go flat as successive portions of the beverage are dispensed over long periods of time.



Title:	NANOCRYSTAL-CONTAINING FILTRATION MEDIA																																																																																													
Priority:	US19940261998 19940617		US19950478863 19950607		US19960599925 19960212																																																																																									
	US19970819999 19970318		US20000560824 20000428		US20010259523P 20010103																																																																																									
	US20010772542 20010130		US20010805758 20010313		WO2001US13619 20010427																																																																																									
	US20010854010 20010511		WO2002US00025 20020102		US20020256177 20020926																																																																																									
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	US20070808695 20070612																																																																																													
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Inventor(s):(std):	LEVY EHUD																																																																																													
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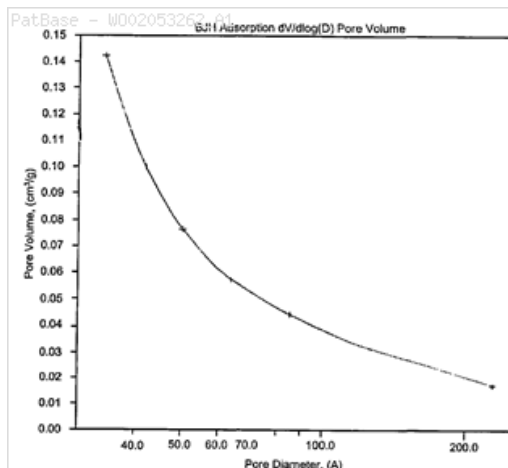
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Abstract:

The invention relates to filtration media having nanocrystals of metal oxides, such as zinc oxide or titanium oxide or mixtures thereof, encapsulated in or impregnated into a binder matrix.



Title: Preservation and dispensation by volumetric displacement

Priority: US19960659820 19960607 WO1997US09934 19970607 US19980194622 19981201

Family:

Publication number	Publication date	Application number	Application date
AU199733822 A1	19980105	AU19970033822	19970607
US6220311 BA	20010424	US19980194622	19981201
WO9746446 A1	19971211	WO1997US09934	19970607

Probable Assignee: LITTO CLAUDE R

Assignee(s):(std): LITTO CLAUDE R

Assignee(s): CLAUDE R LITTO

Inventor(s):(std): CLAUDE R LITTO ; LITTO CLAUDE R

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

International class (IPC 8-9): B67D1/04 B67D7/02 (Advanced/Invention); B67D1/00 B67D7/00 (Core/Invention)

International class (IPC 1-7): B65B1/04

CPC: B67D1/045 B67D1/0462 B67D7/0244

European class: B67D1/04C B67D1/04E B67D7/02E2

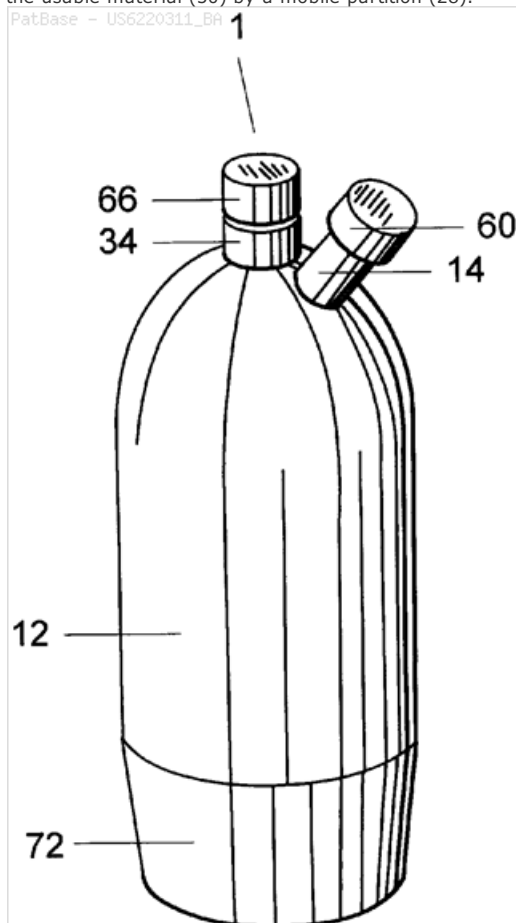
US class: 141/114 141/67 141/98 220/403 220/495.03 220/495.04

[Classification Explorer](#)**Cited documents:** US5284028 A, US262773 A,

Forward Citations: WO14184313, WO12050914, WO12048398, WO08105001, WO08045313, USD713193, USD682710, USD676334, USD670573, USD669367, USD663631, USD660719, USD660718, USD652719, USD652718, USD652298, USD649406, USD644101, USD641642, USD641238, USD640921, USD636220, USD634643, USD632570, USD632569, USD632568, USD632567, USD632566, USD632565, USD632564, USD632560, USD629702, USD628903, USD623074, USD623073, USD623072, USD621719, USD620809, US9959845, US9834338, US9533797, US9452875, US9452592, US9238533, US9181021, US9061796, US8820551, US8815360, US8727151, US8622098, US8579142, US8561853, US8499960, US8449663, US8403161, US8354578, US8153873, US8151599, US8061158, US8051674, US7997099, US7895938, US7891199, US7861900, US7802703, US7597124, US7140519, US7096677, US7051901, US6945435, US6871629, US6571977, US6561222, US6547503, US6168048, US2013306673, US2012252118, US2012145717, US2012103926, US2011253725, US2011163094, US2011024438, US2011024429, US2011024422, US2010320206, US2010270330, US2010236376, US2010176125, US2010108182, US2010102094, US2010089488, US2010000250, US2009300829, US2009061061, US2009061057, US2009052975, US2008178630, US2008164289, US2008053117, US2007175237, US2007101758, US2007090131, US2007084351, US2006100117, US2005268985, US2005173440, US2005161424, US2005058877, US2004216467, US2004206782, US2004182888, US2004153589, US2004081739, US2004021049, US2003070443, RU2507123, EP0989090, CN102992919, CN102665641,

Abstract:

An apparatus and method including providing a container (12) containing a given quantity of usable material (50). A full container (12) is maintained by providing displacement matter (52) separated from the usable material (50) by a mobile partition (28).

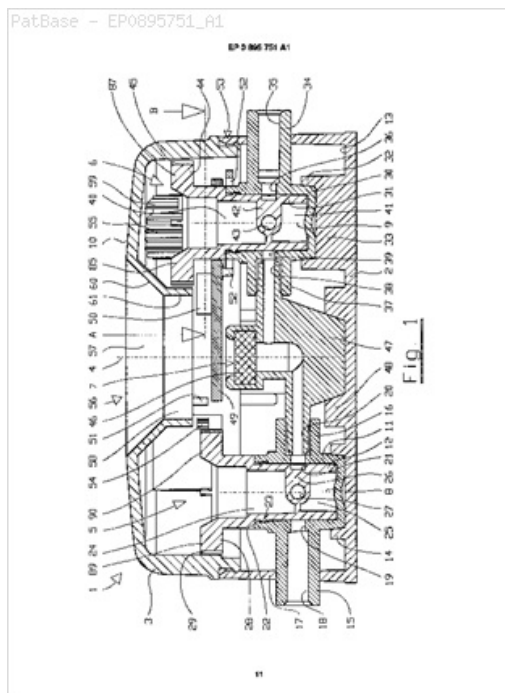


Title: BLOOD SAMPLING DEVICE**Priority:** DE19971031742 19970723

Family:	Publication number	Publication date	Application number	Application date
	DE19731742 C1	19981217	DE19971031742	19970723
	EP0895751 A1	19990210	EP19980113841	19980723

Probable Assignee: PVB MEDIZINTECHNIK GMBH**Assignee(s):(std):** PVB MEDIZINTECHNIK GMBH ; PVB MEDIZINTECHNIK GMBH AND CO K**Assignee(s):** PVB MEDIZINTECHNIK GMBH AND CO KG ; PVB MEDIZINTECHNIK GMBH 85614 KIRCHSEEON DE**Inventor(s):(std):** BECK BERND**Inventor(s):** BECK BERND 72414 RANGENDINGEN DE**Designated states:** AT DE GB IT SE**International class** A61B5/155 (Advanced/Invention);**(IPC 8-9):** A61B5/15 (Core/Invention)**International class** A61B5/14 A61M39/02 A61M39/22**(IPC 1-7):****CPC:** A61B5/15003 A61B5/150221 A61B5/150992 A61B5/155**European class:** A61B5/14B8[Classification Explorer](#)**Cited documents:** WO9101769 A1, US5135492 A, US3834372 A, DE9200306 U,**Abstract:**

Source: EP0895751A1 [DE] Die Blutentnahmeverrichtung (1) enthaelt einen Entnahmeport (7) und zwei Haehne (5, 6), die jeweils mit dem Entnahmeport (7) verbunden sind. Der Entnahmeport (7) weist einen Hohlraum (104) auf, in den zwei Kanale (107, 108) einmuenden. Der Hohlraum (104) hat eine oeffnung, die durch einen Verschlussstopfen (46) verschlossen ist. Der Verschlussstopfen (46) kann zum Entnehmen von Blut aus dem Hohlraum (104) mit einer Nadel eines Blutentnahmegeraets durchstochen werden. Der Entnahmeport (7) und die beiden Haehne (5, 6) sind raumfest zueinander angeordnet. Ferner ist ein bewegliches Abdeckorgan (49) vorgesehen, das in einer seiner moeglichen Stellungen den Verschluss (46) des Entnahmeports (7) abdeckt und ihn in einer anderen Stellung freigibt. Die Haehne (5, 6) und das Abdeckorgan (49) sind durch ein gemeinsames Betaetigungsorgan (3) der Blutentnahmeverrichtung (1) mechanisch miteinander gekoppelt. Durch die Stellung des Betaetigungsorganes (3) sind die Stellungen beider Haehne (5, 6) und des Abdeckorganes (49) festgelegt. Durch Betaetigen des Betaetigungsorganes (3) koennen konstruktiv vorgebbare Stellungskombinationen der beiden Haehne (5, 6) und des Abdeckorganes (49) der Blutentnahmeverrichtung (1) eingestellt werden.



Title: Dispensing device for a liquid container

Priority: DE19981037947 19980821 DE19995001656 19990819 WO1999EP06078 19990819

Family:

Publication number	Publication date	Application number	Application date
AU199955177 A1	20000314	AU19990055177	19990819
AU199955177 A5	20000314	AU19990055177	19990819
AU743840 B2	20020207	AU19990055177	19990819
BRPI9914292 A	20010619	BR1999PI14292	19990819
CA2340681 AA	20010214	CA19992340681	19990819
CA2340681 C	20051227	CA19992340681	19990819
DE19837947 A1	20000224	DE19981037947	19980821
DE59901656 D1	20020711	DE19995001656	19990819
EP1105342 A1	20010613	EP19990941642	19990819
EP1105342 B1	20020605	EP19990941642	19990819
ES2178460 T3	20021216	ES19990941642T	19990819
US6446845 BA	20020910	US20010763099	20010216
WO0010908 A1	20000302	WO1999EP06078	19990819

Probable Assignee: KUNSTSTOFFWERK AND FORMENBAU

Assignee(s):(std): KUNST STOFFWERK AND FORMENBAU AR ; STEIGER ARTHUR ; KUNSTSTOFFWERK AND FORMENBAU ART

Assignee(s): KUNSTSTOFFWERK AND FORMENBAU ARTHUR STEIGER AG ; KUNSTSTOFFWERK AND FORMENBAU BERGSTRASSE ; KUNSTSTOFFWERK AND FORMENBAU ARTHUR STEIGER AG UET ; KUNSTSTOFFWERK AND FORMENBAU ARTHUR STEIGER AG UETIKON AM SEE ; KUNST STOFFWERK AND FORMENBAU ARTHUR STEIGER AG ; KUNST STOFFWERK AND FORMENBAU ARTHUR STEIGER AG UETIKON AM SEE ; KUNSTSTOFFWERK AND FORMENBAU

Inventor(s):(std): STEIGER ARTHUR

Inventor(s): ARTHUR STEIGER

Agent(s): FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; MARKS AND CLERK

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

International class (IPC 8-9): B65D47/06 B65D77/06 B67D3/04 (Advanced/Invention); B67D3/00 (Core/Invention)

International class (IPC 1-7): B65B35/56 B65D47/06 B65D77/06 B67D3/00 B67D3/04 B67D3/4

CPC: B67D3/043

European class: B67D3/04D

US class: 222/105 222/505 222/509 222/518 251/319 251/339

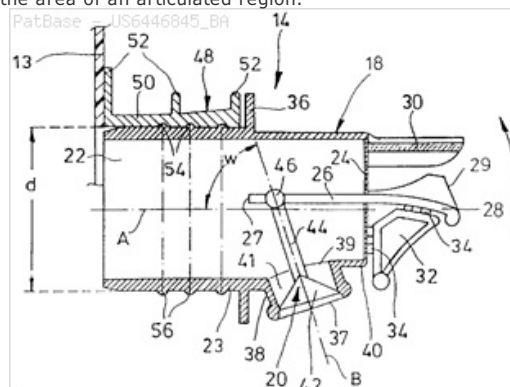
[Classification Explorer](#)

Cited documents: US4440316 A, US3868050 A, US3448897 A, US2764385 A, US2373294 A, US2324648 A, EP0553956 A1, EP0432070 B1, EP0432070, EP0043698 A1, DE7403450 U, DE7340692 U, DE3910425 A1, DE3212232 A1, DE3028547 A1, DE1550595 A1,

Forward Citations: WO18075184, WO17144985, WO11148232, USD676320, US9862533, US9676570, US9079728, US8967430, US8757452, US8690026, US8567645, US8459510, US8353428, US8113239, US7997462, US7789269, US7708164, US7681764, US7552746, US7246721, US7219819, US6863644, US2013015202, US2011017774, US2010200611, US2010038386, US2008135577, US2008105704, US2007209712, US2006261099, US2005211726, US2005087553, EP2277821, EP1918683, EP1580141,

Abstract:

The invention relates to a dispensing device for a liquid container, notably for a container made of a flexible material housed in a substantially dimensionally stable outer container which encloses same and is penetrated by the dispensing device. Said dispensing device comprises a tubular part with an outlet opening which can be shut by a valve element. A tubular housing body is closed at one end by a membrane-like front disk in which a rod-like transverse element in which a valve tappet for a valve head originates which is assigned to the lateral outlet opening provided for in the tubular housing body. The valve tappet and valve head further form a monobloc unit made a **plastic** material which is softer than the material of the housing body or rod-like element, and the valve tappet is mounted on the rod-like element in the area of an articulated region.



Title: COMPOSITE FILTER ELEMENT

Priority: US19980169204 19981008 US19990300249 19990427 WO1999US22851 19991004
EP20000920241 20000412 WO2000US09741 20000412 US20000628576 20000731
US20000678939 20001004 US20020186089 20020628 US20030739566 20031218

Family:	Publication number	Publication date	Application number	Application date
	AU199964085 A1	20000426	AU19990064085	19991004
	AU199964085 A5	20000426	AU19990064085	19991004
	AU200040817 A1	20001110	AU20000040817	20000412
	AU200040817 A5	20001110	AU20000040817	20000412
	AU748325 B2	20020530	AU19990064085	19991004
	AU759632 B2	20030417	AU20000040817	20000412
	BR0011213 A	20020226	BR20000011213	20000412
	BR0011213 C1	20040713	BR20000011213	20000412
	BRPI0011213 A	20020226	BR2000PI11213	20000412
	BRPI0011213 C1	20040713	BR2000PI11213	20000412
	BRPI9914768 A	20050531	BR1999PI14768	19991004
	CA2346792 AA	20000413	CA19992346792	19991004
	DE69917666 D1	20040701	DE19996017666	19991004
	DE69917666 T2	20050602	DE19996017666T	19991004
	EP1121187 A1	20010808	EP19990951699	19991004
	EP1121187 B1	20040526	EP19990951699	19991004
	EP1189673 A1	20020327	EP20000920241	20000412
	EP1189673 A4	20060329	EP20000920241	20000412
	EP1273334 A2	20030108	EP20020079267	20000412
	EP1273334 A3	20031203	EP20020079267	20000412
	JP2002542026 T2	20021210	JP20000613547T	20000412
	MXPA01003639 A1	20020918	MX2001PA03639	19991004
	US2003000884 AA	20030102	US20020186089	20020628
	US2004129624 AA	20040708	US20030739566	20031218
	US6139739 A	20001031	US19990300249	19990427
	US6325929 BA	20011204	US20000678939	20001004
	US6432233 BA	20020813	US20000628576	20000731
	WO0020093 A1	20000413	WO1999US22851	19991004
	WO0064560 A1	20001102	WO2000US09741	20000412

Probable Assignee: 3M CO

Assignee(s):(std): CUNO INC

Assignee(s): CUNO INC MERIDEN ; HAMLIN THOMAS J ; 3M CO ; 3M INNOVATIVE PROPERTIES CO ; BASSETT LAURENCE W ; CHEN WEI CHI ; CHEN WEI CHIH ; CONTAXIS WILLIAM

Inventor(s):(std): BASSETT W ; CHEN WEI CHI ; CHEN WEI CHIN ; LAURENCE W BASSETT ; THOMAS J HAMLIN ; WEI CHIH CHEN ; WILLIAM CONTAXIS III ; HAMLIN THOMAS J ; CONTAXIS III WILLIAM ; CHEN WEI CHIH ; BASSETT LAURENCE W ; CONTAXIS WILLIAM III ; CONTAXIS WILLIAM

Inventor(s): WEI CHIN CHEN ; WILLIAM CONTAXIS

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; IP SOLVED ANZ PTY LTD; HODGKINSON MCINNES PATENTS; RIDOUT AND MAYBEE LLP

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

International class (IPC 8-9): B01D35/04 B01D39/14 B01D53/04 B01D61/18 B01D63/00 B01D63/02 C02F1/00 C02F1/28 C02F1/44 C02F9/00 (Advanced/Invention); B01D39/14 B01D63/00 C02F1/28 (Advanced/Non-invention); B01D53/04 B01D61/18 B01D63/02 C02F1/00 C02F9/00 (Core/Invention); C02F1/28 (Core/Non-invention)

International class (IPC 1-7): B01D27/00 B01D27/14 B01D33/42 B01D35/04 B01D39/14 B01D39/16 B01D46/24 B01D53/04 B01D63/00 B01D63/02 B01D63/04 B65B7/00 B65B7/01 C02F1/00 C02F1/28 C02F1/44

CPC: B01D2313/44 B01D2313/90 B01D2313/20 C02F1/444 C02F9/005 B01D61/18 B01D63/024 B01D2201/0415 B01D2201/4015 C02F1/003 C02F1/283 C02F2201/006

European class: B01D53/04C B01D53/04C2 B01D53/04C6 B01D61/18 B01D63/02D C02F1/00D4 C02F9/00B L01D201/04C L01D201/40B L01D253/102 L01D253/25 L01D253/306 L01D253/308 L01D257/91 M02F1/28D M02F1/44D M02F201/00D8

US class: 156/293 156/293S 156/69 156/69S 210/238 210/315 210/32 210/320 210/321.61 210/321.610S 210/321.8 210/321.800S 210/321.88 210/321.880S 210/456 210/458 210/470 210/484 210/489 210/497.01 210/502.1 210/502.100S

[Classification Explorer](#)

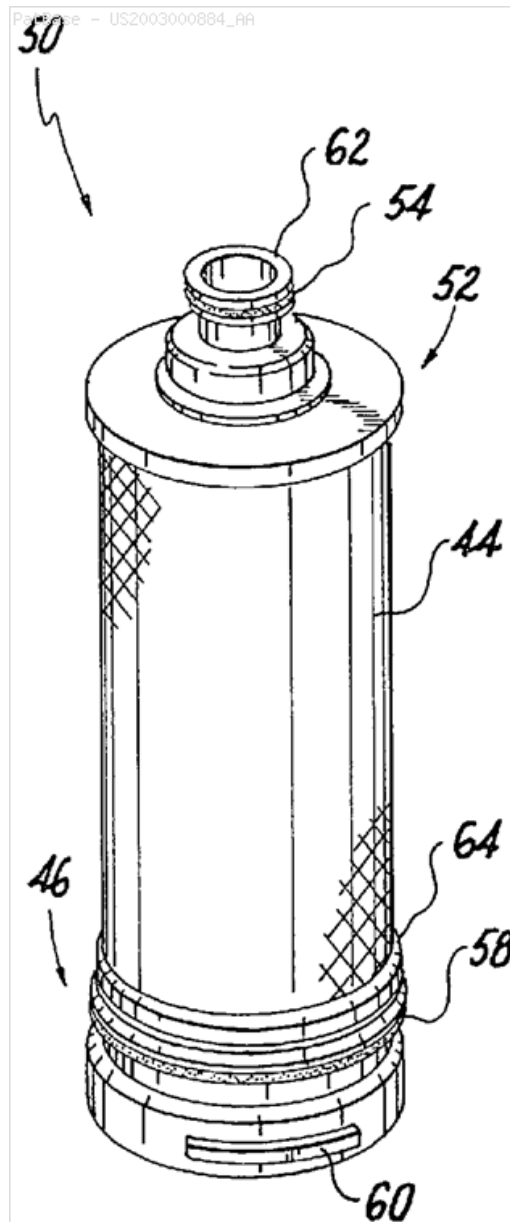
Cited documents: WO9726066 A1, WO0020093 A1, US6325929 BA, US6139739 A, US5707518 A, US5700371 A, US5670042 A, US5656160 A, US5647950 A, US5643444 A, US5582907 A, US5554283 A, US5510031 A, US5505892 A, US5460702 A, US5256285 A, US5225079 A, US5215655 A, US5188727 A, US5164085 A, US5160038 A, US5151180 A, US5139668 A, US5130015 A, US5102542 A, US5092990 A, US5066391 A, US5041220 A, US5032269 A, US4836923 A, US4828698 A, US4814078 A, US4804467 A, US4781830 A, US4749484 A, US4636307 A, US4334993 A, US4139468 A, US4045851 A, US3519134 A, US3342340 A, US2081198 A, JP1135583 A2, EP0364111 A1,

Forward Citations: WO14151322, WO14047301, WO13052120, WO11147656, WO03089104, WO03020398, WO03014025, WO0236248, USD813978, USD793521, USD793520, USD792940, USD774623, USD773607, USD764626, USD764021, USD762813, USD760868, USD755344, USD753790, USD752179, USD752177, USD750736, USD717397, USD717396, USD716909, USD712507, USD643090, USD642658, USD642657, USD548306, USD547825, USD547823, USD547822, USD510368, USD494654, USD492753, US9994461, US9901855, US9857368, US9789424, US9782706, US9750834, US9713781, US9568404, US9433720, US9173414, US9114335, US9056281, US8562831, US8377299, US8367389, US8216466, US8177977, US8177973, US8146752, US8123938, US8080160, US7964103, US7909998, US7909997, US7862720, US7775375, US7736503, US7704388, US7673756, US7658212, US7638042, US7610932, US7303683, US7294262, US7182858, US7147772, US7081201, US7022228, US7000894, US6989101, US6641727, US6632355, US6517720, US6432233, US6274041, US2018099238, US2016083278, US2012073454, US2011197971,

US2011147298, US2010237001, US2010237000, US2010191497, US2010170835, US2010096302, US2010025323, US2009321339, US2009200223, US2009078625, US2008203033, US2008035553, US2007221561, US2007199886, US2007199880, US2007199879, US2007175809, US2007158251, US2007032407, US2006272995, US2006157398, US2006157391, US2006065607, US2006060512, US2006049096, US2006018940, US2005043244, US2005035041, US2004254103, US2004232064, US2004206682, US2004164006, US2004149640, US2004129624, US2003222010, US2003217959, US2003168389, JP2009500149, JP2003071443, EP2241361, EP1936306, EP1936306, EP1901825, EP1901825, EP1354857, EP1354857, EP1189673, CN104114256, AU2003231002,

Abstract:

A combination filter element comprising a bundle of hollow microporous fibers housed within an extruded carbon block, wherein the carbon block is fabricated to balance particle retention capacity against absorption capacity to provide a composite filter with desirable **pressure** drop, filter life, and particulate and chemical contamination reduction, and a filtration device, in which combination filter element may be employed, having a base portion including a sump which has an inlet and an outlet and a base which has a reception port for receiving the filter element.

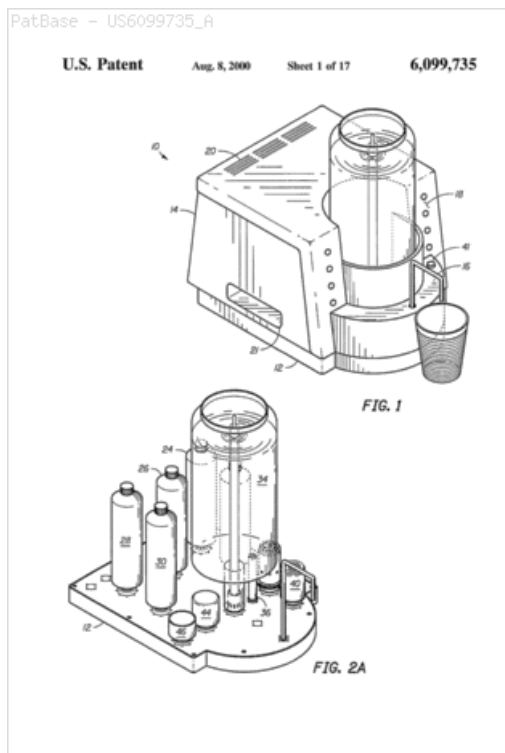


Title: Counter top reverse osmosis water purification system**Priority:** US19980090496 19980604

Family:	Publication number	Publication date	Application number	Application date
	US6099735 A	20000808	US19980090496	19980604

Probable Assignee: KELADA MAHER I**Assignee(s):** KELADA MAHER I**Inventor(s):(std):** KELADA MAHER I**International class (IPC 8-9):** B01D61/08 B01D61/10 C02F1/44 C02F9/00 (Advanced/Invention); C02F1/28 C02F1/32 C02F1/50 (Advanced/Non-invention)**International class (IPC 1-7):** B01D61/00 B01D63/00**CPC:** B01D61/08 B01D61/10 C02F1/283 C02F1/32 C02F1/441 C02F1/505 C02F9/005**European class:** B01D61/08 B01D61/10 C02F1/44B C02F9/00B M02F1/28D M02F1/32 M02F1/50B**US class:** 210/134 210/137 210/195.1 210/257.2 210/258 210/652 210/660 210/85 210/97[Classification Explorer](#)**Cited documents:** US5928503 A, US5911884 A, US5879558 A, US5827428 A, US5658457 A, US5632892 A, US5597487 A, US5445729 A, US5358635 A, US5296148 A, US5290442 A, US5244579 A, US5221473 A, US5215657 A, US5160608 A, US5096574 A, US5078876 A, US5045197 A, US4877521 A, US3849305 A, US3716143 A,**Forward Citations:** WO16033491, WO16028737, WO15121349, WO15057914, WO14014884, WO12118793, WO12118793, WO11143100, WO09138084, WO09010144, WO09010144, WO07011352, USRE46554, USRE45080, USD667076, USD501912, US9919933, US9889478, US9873621, US9783405, US9731984, US9517958, US9371245, US9352979, US9327216, US9320993, US9314716, US9303380, US9067154, US8940163, US8893927, US8741148, US8728313, US8556127, US8480979, US8454826, US8413844, US8409386, US8377314, US8309030, US8308942, US8262910, US8186518, US8182699, US8177966, US8158084, US8119012, US8045849, US7947181, US7922008, US7900791, US7883619, US7862723, US7850859, US7820059, US7775374, US7763171, US7749394, US7740766, US7740765, US7736504, US7726511, US7670494, US7670479, US7615152, US7601256, US7597807, US7513278, US7497957, US7476312, US7424399, US7378015, US7368055, US7332075, US7316544, US7312151, US7249000, US7175808, US7104115, US7101480, US7100427, US7015568, US6872306, US6379560, US6370884, US6335191, US2016276753, US2016175746, US2013270159, US2011309011, US2011147284, US2011121036, US2011084006, US2010326917, US2010307966, US2010258268, US2010116742, US2010116741, US2010100242, US2010024893, US2009288999, US2009242485, US2009132089, US2009123347, US2009120851, US2009081089, US2008237109, US2008203026, US2008190827, US2008105620, US2008041775, US2008020096, US2007227598, US2007144952, US2007050157, US2007045327, US2007045187, US2007045165, US2007012628, US2006266381, US2006226060, US2006191824, US2006169629, US2006162806, US2006144766, US2006113499, US2006020427, US2006006107, US2005251367, US2005251366, US2005247609, US2005247114, US2005247113, US2005173320, US2005173319, US2005163629, US2005150235, US2005133427, US2005098491, US2005042886, US2004251192, US2004211713, US2004117665, US2004055948, US2003138346, GB2419589, FR2895917, ES2353175, EP2086890, EP1922292, EP1520497, EP1520497, EP1487560, EP1487560, EP1424312, EP1136447, CN105705214, CN105705214, AU2014337267, AU2014337267, AU2007307626,**Abstract:**

A counter top reverse osmosis water purification system, suitable for home use, is connected to a water supply and contains a closed fluid treatment circuit extending to a water outlet. The closed fluid circuit flows through a plurality of replaceable water treatment modules mounted on a flowboard and each having a specific water treatment function, such as the removal of a particular material from the water by the use of reverse osmosis, filtration, carbon adsorption, ion exchange or the addition of a chemical to balance the desired water conditions. Preferably the circuit also includes traversing a radiation device, for example an ultraviolet light, for the purpose of sanitizing the water.



Title:	Method and apparatus for disinfecting a water cooler reservoir					
Priority:	US19980220554	19981223	US19990472320	19991223	US20010881796	20010615
	US20010954849	20010918	US20010996328	20011128	US20020173133	20020617
	WO2002US19158	20020617	US20020389439P	20020618	US20030463870	20030617
	WO2002US19158	20031215	US20040564178P	20040421	US20040875078	20040623
	US20050109913	20050420	US20060457365	20060713	US20060535754	20060927
	US20070674318	20070213	US20070842476	20070821	US20070976899P	20071002
	US20080137233	20080611	CN200880118883	20081002	EP20080836137	20081002
	US20080681342	20081002	WO2008US78601	20081002	US20100652421	20100105
	US20100754195	20100405	US20100830918	20100706	US20100681342	20100802
	US20130737636	20130109	US20130786015	20130305	US20130960656	20130806
	US20140177510	20140211	US20140525188	20141027	US20160257791	20160906
	US20160263578	20160913	US20170707001	20170918	US20170714171	20170925

Family:

Publication number	Publication date	Application number	Application date
AU2002316266 AA	20030102	AU20020316266	20020617
AU2002316266 AB	20040318	AU20020316266	20020617
AU2002316266 BB	20080501	AU20020316266	20020617
CA2450117 AA	20031209	CA20022450117	20020617
CA2450117 C	20110426	CA20022450117	20020617
CA2701745 AA	20100406	CA20082701745	20081002
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CN104386640 B	20180209	CN201410484115	20081002
CN1281477 C	20061025	CN20028012032	20020617
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DK2198222 T3	20150608	DK20080836137T	20081002
EP1414736 A1	20040506	EP20020746558	20020617
EP1414736 A4	20051012	EP20020746558	20020617
EP2198222 A2	20100623	EP20080836137	20081002
EP2198222 A4	20110504	EP20080836137	20081002
EP2198222 B1	20150225	EP20080836137	20081002
ES2537635 T3	20150610	ES20080836137T	20081002
HK1064659 A3	20050204	HK20040107343	20040923
HK1145706 A1	20151120	HK20100112087	20101223
HK1207054 A1	20160122	HK20150107748	20150811
IL159330 A0	20040601	IL20020159330	20020617
JP2005521017 T2	20050714	JP20030505259T	20020617
JP4083677 B2	20080430	JP20030505259T	20020617
KR100926383 B1	20091111	KR20037016419	20020617
KR20040010717 A	20040131	KR20037016419	20020617
MY154264 A	20150529	MY20110001138	20081002
NZ530493 A	20060929	NZ20020530493	20020617
PL200873 B1	20090227	PL20020367546	20020617
PL220123 B1	20150831	PL20080391811	20081002
PL367546 A1	20050221	PL20020367546	20020617
PL391811 A1	20110228	PL20080391811	20081002
PT2198222 T	20150630	PT20080836137T	20081002
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RU2474773 C2	20130210	RU20100117266	20081002
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US2006191960 AA	20060831	US20010996328	20011128
US2007057389 AA	20070315	US20060457365	20060713
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WO09046201 A3	20090806	WO2008US78601	20081002

Probable Assignee: SIP TECHNOLOGIES LLC

Assignee(s):(std): S I P TECHNOLOGIES L L C ; SHELTON JAMES J ; S I P TECHNOLOGIES LLC ; JAMES SHELTON ; S I P TECHNOLOGIES L L C A LOU ; S I P TECHNOLOGIES ; DAVIS KENNETH A ; EHS AJ PI TEKNOLODZHIS EHL EHL SI ; S I P TECH L L C ; S I P TECH LLC ; S I P TECH INC ; SIP TECHNOLOGIES LLC

Assignee(s): SIP TECHNOLOGIES LLC CENTREVILLE ; SIPTechnologies LLC ; SIP TECHNOLOGIES INC ; EHS AJPI TEKNOLODZHIS EHLEHLSI ; JAMES J SHELTON ; S I P TECHNOLOGIES L L C A LOUISIANA LIMITED LIABILITY COMPANY ; S ; BANKERS TRUST CO

Inventor(s):(std): DAVIS ; DAVIS KENNETH A ; DAVIS KENNETH A A ; SHELTON J J ; SHELTON JAMES J ; DEHVIS KENNET A ; DAVIS KENNETH

Inventor(s): SHELTON JAMES ; KENNETH A DAVIS ; JJ SHELTON ; J J SHELTON ; JAMES J SHELTON

Agent(s): HERBERT SMITH FREEHILLS; FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; KIRBY EADES GALE BAKER; GOWLING LAFLEUR HENDERSON LLP; WITTMANN HERNANDEZ PATENTANWAELTE PARTNERSCHAFT MBB; HARRISON GODDARD FOOTE; VAUGHAN CHRISTOPHER TAMMO; LAZCANO JESUS; MARUYAMA TOSHIYUKI; HANDE MUMCUOGLU; GARVEY SMITH NEHRBASS AND DOODY LLC; GARVEY SMITH NEHRBASS AND NORTH LLC; CHARLES C; VANESSA M; GARVEY SMITH NEHRBASS AND NORTH L L C; BRETT A; GARVEY SMITH AND NEHRBASS PATENT ATTORNEYS LLC; NEHRBASS SETH M ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI 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 ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8-9): A47J31/46 A61L2/20 B01D21/30 B01D35/00 B01J19/08 B67D1/07 B67D1/08 B67D3/00 B67D5/06 B67D5/58 B67D5/62 B67D7/06 B67D7/76 B67D7/80 C01B13/11 C02F1/00 C02F1/50 C02F1/68 C02F1/72 C02F1/78 C02F9/00 C10J1/08 F25B49/00 F25D11/00 F25D23/12 F25D3/00 F25D31/00 (Advanced/Invention); B67D1/00 B67D7/80 C02F1/00 C02F1/68 (Advanced/Non-invention); A61L2/20 B67D1/00 B67D3/00 B67D7/76 C02F1/78 C02F9/00 C10J1/00 F25D11/00 F25D3/00 (Core/Invention); B67D1/00 C02F1/00 C02F1/68 (Core/Non-invention); B67D C02F (Subclass/Invention)

International class (IPC 1-7): A47J31/46 B67D1/07 B67D3/00 B67D5/06 B67D5/58 B67D5/62 C02F1/50 C02F1/68 C02F1/72 C02F1/78 F25D11/00 F25D3/02

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US class: 1/1 210/104 210/139 210/140 210/141 210/150 210/192 210/205 210/220 210/760 210/86 210/97 222/1 222/146.1 222/146.100P 222/146.6 222/146.600S 222/185.1 222/185.100P 222/189.06 222/189.060P 222/19 222/190 222/190P 222/190S 261/122.1 261/122.100P 261/DIG.42 422/186.14 422/186.140P 62/157 62/289 62/318 62/318P 62/389 62/389S 62/392 62/392P

[Classification Explorer](#)

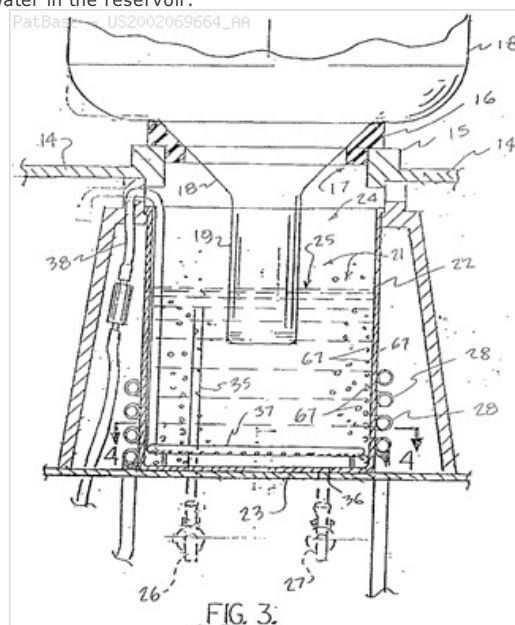
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Forward Citations: WO18081352, WO17207246, WO16197242, WO16197230, WO13153073, WO13067003, WO13045508, WO11044143, WO10124124, WO10003241, WO09046201, WO09046201, WO06133113, WO06130786, WO06015480, WO05118462, WO05118462, WO02081361, USD819190, USD812194, USD802788,

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Abstract:

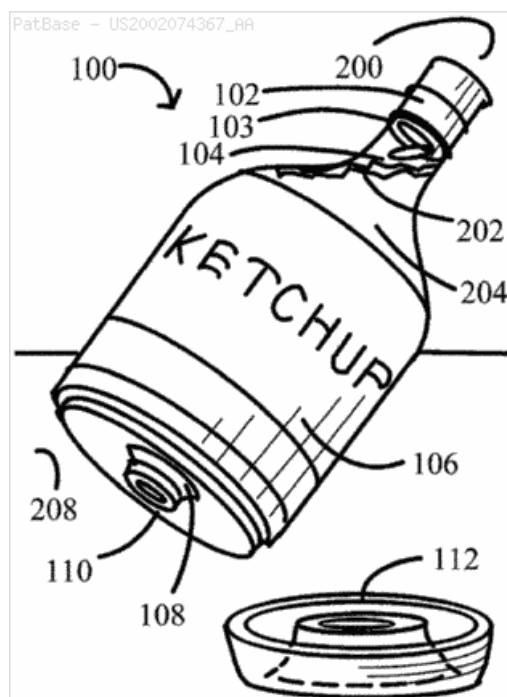
A method and apparatus for providing sanitized water in a bottled water dispenser uses a refrigeration system to cool the water and an ozone generating system to generate ozone for sanitizing the water. Ozone is generated and collected within an ozone generator housing. A blower transmits air to the housing, the air carrying the ozone through a flow line to an air diffuser that is positioned inside the reservoir of the water dispenser. A time deactivates the refrigeration system and at about the same time activates the ozone generator and the blower. The blower continues to pump air for a selected time period after the ozone generator is shut down, the water in the reservoir having been sanitized. This action dispenses any ozone odor. The pump then shuts off and the refrigeration system resumes operation of cooling the water in the reservoir.



Title:	GRAVITY-FED LIQUID CHEMICAL DISPENSER BOTTLE				
Priority:	US20000256103P 20001218		US20010837314 20010419		US20060451547 20060612
Family:	Publication number	Publication date	Application number	Application date	
	US2002074367 AA	20020620	US20010837314	20010419	
	US2006243756 AA	20061102	US20060451547	20060612	
Probable Assignee:	KAWABOINGO CORP				
Assignee(s):(std):	KAWAKITA KEVIN				
Assignee(s):	KAWABOINGO CORP				
Inventor(s):(std):	KAWAKITA KEVIN				
Agent(s):	KEVIN KAWAKITA				
International class (IPC 8-9):	B65D1/06 B65D23/00 B65D23/04 B65D51/16 B67D3/00 (Advanced/Invention); B65D1/06 B65D23/00 B65D51/16 (Core/Invention)				
International class (IPC 1-7):	B67D3/00 B67D5/06				
CPC:	B65D1/06 B65D23/001 B65D23/04 B65D51/1683				
European class:	B65D1/06 B65D23/00B B65D23/04 B65D51/16E2				
US class:	222/185.1 222/185.100S 222/478 222/517 222/534				
Classification Explorer					
Cited documents:	US6705492 BB, US6494346 BB, US6161737 A, US5996850 A, US5888288 A, US5868288 A, US5819984 A, US5655687 A, US5626262 A, US5482172 A, US5421488 A, US5263787 A, US5188253 A, US5146957 A, US5141136 A, US5133482 A, US5060830 A, US5033655 A, US5010830 A, US5005737 A, US4930668 A, US4762241 A, US4723671 A, US4516697 A, US4428507 A, US3779472 A, US315096 A, US315086 A, US2779472 A, US2281651 A, US1660606 A,				
Forward Citations:	WO15033002, WO09123885, USD777039, USD767991, US9789988, US7959036, US7762433, US6877645, US2015203259, US2010252578, US2009242588, US2009200336, US2005178803, US2005173457, US2004194816, US2004129740, US2004007280, JP2010519145, FR2942722, FR2903388, EP2114789, CN105600059, CN103587795.				

Abstract:

Drawing Fig. 3 shows a Gravity-fed Liquid Chemical Dispenser Bottle (100), which stops the irritating wait for a bottle turned upside down to dispense thick Liquid Chemical (204) such as condiments, pharmaceuticals, motor oil, etc. especially with a low bottle, furthermore, the gravity-fed device stops the need to flip the bottle over to dispense such as in prior art ketchup bottles or motor oil bottles which can create a messy spill, furthermore, said gravity-fed device also stops the undesirable dispensing of Non-emulsified Liquid from Liquid Chemical (202) which floats to the top of a prior art bottle and is dispensed first along with air (202), furthermore, this invention stops the waste of Liquid Chemical (204) near the bottom and on the sides of prior art bottles which is now often thrown away, furthermore, the device is useful for, but, not limited to thicker, slow Liquid Chemicals (204) such as ketchup, mustard, barbecue sauce, relish, mayonnaise, etc, pharmaceuticals such as hand lotions, creams, shampoos, etc., and automobile chemicals such as anti-freeze, hydraulic fluid, motor oil, etc., furthermore, the device consists of a glass or squeezable plastic bottle shaped like a prior art ketchup bottle having a Twist Ventilation Only Cap (102) on top of the bottle, a One-way Trapdoor Diaphragm (103) to prevent spills and Liquid Chemical (204) dispensing from the top, a Real Bottle Top with Ventilation Hole (104), a Liquid Chemical Bottle Body (106), a Real Bottle Bottom with Nozzle (108), a Flip-off/Flip-on Nozzle Cap (110), and a False Bottle Bottom or Stand (112), furthermore, the Twist Ventilation Only Cap (102) is optionally rotatable to allow air (202) intake through the Real Bottle Top with Ventilation Hole (104) with means to prevent a vacuum developing on large dispenses, furthermore, the False Bottle Bottom or Stand (112) is detachable by a screwing, flipping, or snapping motion revealing the Real Bottle Bottom with Nozzle (108).



Title:

MICROORGANISM-REMOVING FILTER MEDIUM HAVING HIGH ISOELECTRIC MATERIAL AND LOW MELT INDEX BINDER

Priority:

US20030407506 20030404 CA20042462815 20040331 US20040880625 20040629 CA20052510816 20050622

Family:

Publication number	Publication date	Application number	Application date
CA2462815 AA	20041004	CA20042462815	20040331
CA2462815 C	20111115	CA20042462815	20040331
CA2510816 AA	20051229	CA20052510816	20050622
CA2510816 C	20130312	CA20052510816	20050622
US2004195180 AA	20041007	US20030407506	20030404
US2004251190 AA	20041216	US20040880625	20040629
US6989101 BB	20060124	US20030407506	20030404
US7303683 BB	20071204	US20040880625	20040629

Probable Assignee:

CLOROX CO

Assignee(s):(std):

CLOROX CO ; THE CLOROX COMPANY

Assignee(s):

COLOROX CO ; CUMBERLAND SCOTT L ; ENRIQUEZ CARLOS ; RINKER EDWARD B

Inventor(s):(std):

RINKER EDWARD B ; ENRIQUEZ CARLOS ; CUMBERLAND SCOTT L

Agent(s):

RICHS MCKENZIE AND HERBERT LLP; RSUE P; STACY

International class (IPC 8-9):

B01D15/00 B01D24/00 B01D39/06 B01D39/20 B01J20/02 B01J20/20 B67D5/58 B67D7/76 C02F1/00 C02F1/28 C12M1/12 (Advanced/Invention); B01D24/00 B01D39/02 B01D39/20 B01J20/02 B01J20/20 B67D7/76 C02F1/00 C02F1/28 C12M1/12 (Core/Invention)

International class (IPC 1-7):

B01D24/00 B01D39/06 B01D39/20 B01J20/02 B01J20/20 B67D5/58 C02F1/00 C12M1/12

CPC:

Y02W10/37 B01D39/2062 B01D2239/0407 B01D2239/0442 B01D2239/086 B01D2239/1216 B01D2239/1291

European class:

B01D39/20F2B L01D239/04B L01D239/04H L01D239/08D L01D239/12D L01D239/12Y

US class:

210/263 210/266 210/660 210/764 210/807 210/807S 502/416 502/416S

[Classification Explorer](#)

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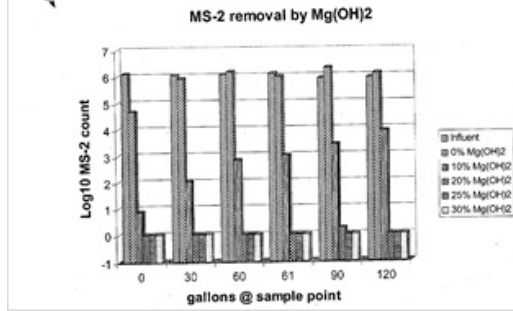
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Abstract:

A filter medium capable of removing microorganisms from a fluid such as water. The filter medium includes particles of activated carbon, particles of a substantially insoluble inorganic material having an isoelectric point greater than the fluid being filtered. A low melt index binder, preferably with a melt index of less than about 1 gram per 10 minutes, binds the particles of activated carbon and particles of inorganic material, such that the binder will become tacky at elevated temperatures without becoming sufficiently liquid to substantially wet the particles of activated carbon and inorganic material.



Title: WATER PROCESSING APPARATUS

Priority: US20030526530P 20031202 US20030526580P 20031202 WO2004US39993 20041201
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Family:

Publication number	Publication date	Application number	Application date
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WO07103117 A3	20071108	WO2007US05270	20070302

Probable Assignee: SYLVAN SOURCE INC**Assignee(s):(std):** SYLVAIN SOURCE INC ; SYLVAN SOURCE INC ; THOM DOUGLAS M ; URBAN JOSEPH A ; THIERS EUGENE ; THIERS EUGENE A ; THOM DOUGLAS MICHAEL ; DEEP RICHARD J ; DEMMONS LAURA ; LUM GARY W**Assignee(s):** SIMMONS GOODSPEED INVESTMENT MANAGEMENT LLC ; SSI ACQUISITION ENTITY LLC ; SYLVAN SOURCE INC285 N. WOLFE ROADSNUNYVALECA94085US**Inventor(s):(std):** DEEP RICHARD J ; DEMMONS LAURA ; EUGENE THIERS ; LUM GARY W ; MICHAEL THOM DOUGLAS ; THIERS EUGENE ; THIERS EUGENE A ; THOM DOUGLAS M ; THOM DOUGLAS MICHAEL ; URBAN JOSEPH A**Inventor(s):** DEEP RICHARD ; URBAN JOSEPH ; THIERS EUGENEUS ; THOM DOUGLAS ; LUM GARY**Agent(s):** SMART AND BIGGAR; BARRIGAR INTELLECTUAL PROPERTY LAW; HOEIBERG A/S; KNOBBE MARTENS OLSON AND BEAR LLP; SONNENSCHN NATH AND ROSENTHAL LLP; DAVIS WRIGHT TREMAINE LLP - SAN FRANCISCO; DAVIS WRIGHT TREMAINE LLP SAN FRANCISCO; DAVIS WRIGHT TREMAINE LLP**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM 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 MA MC MD 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

International class (IPC 8-9): B01D1/00 B01D1/30 B01D15/00 B01D19/00 B01D3/00 B01D3/02 B01D3/42 B01D45/00 B01D45/12 B01D5/00 B1D45/12 C02F1/00 C02F1/02 C02F1/04 C02F1/18 C02F1/20 C02F1/38 C02F1/68 F22B35/00 F22D5/26 F24J2/00 F24J2/10 F24J2/12 F24J2/13 F24J2/24 F24J2/36 F24J2/38 F24J2/52 F24J2/54 G01F23/18 G05D9/12 (Advanced/Invention); B01D3/02 C02F1/20 (Advanced/Non-invention); B01D1/00 B01D19/00 B01D3/00 B01D3/42 B01D45/00 B01D45/12 B01D5/00 C02F1/02 C02F1/04 C02F1/20 C02F1/38 C02F1/68 F24J2/00 F24J2/04 F24J2/06 F24J2/36 F24J2/38 G01F23/14 G05D9/00 (Core/Invention); B01D (Subclass/Invention)

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CPC: F22B35/00 F22D5/26 G01F23/185 G05D9/12 B01D19/0005 B01D19/0042 C02F1/045 C02F2303/02 Y02E10/45 Y02E10/47 B01D3/007 B01D5/0039 Y10S159/02 Y02W10/37 B01D19/001 B01D5/0069 B01D3/04 B01D19/00 C02F1/042 B01D1/305 B01D45/16 B04C1/00 B04C5/04 B04C5/08 B04C5/103 C02F1/04 B01D3/42 C02F1/043 C02F1/18 C02F1/68 C02F2209/03 C02F2209/05 B01D3/02 F24S23/77 F24S23/745 F24S50/20

European class: B01D1/30B B01D19/00B B01D19/00P B01D3/00D B01D3/02 B01D3/04 B01D3/42 B01D45/16 B01D5/00F12 B01D5/00H12 B04C1/00 B04C5/04 B04C5/08 B04C5/103 C02F1/04 C02F1/04E C02F1/04G C02F1/04K C02F1/18 C02F1/20 F22B35/00 F22D5/26 F24J2/14C F24J2/16 F24J2/38 G01F23/18A G05D9/12 L01D19/00 M02F1/20 M02F1/68 M02F209/03 M02F209/05 M02F303/02 Y02E10/45 Y02E10/47

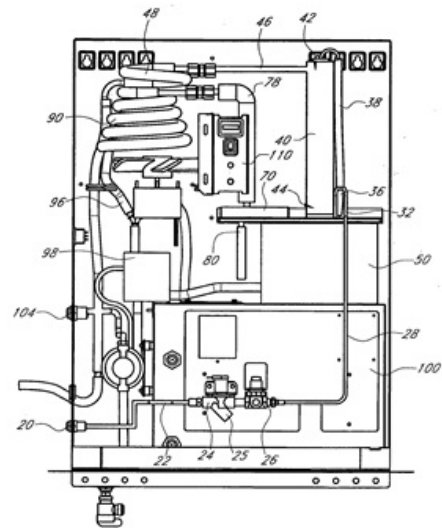
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Abstract: Embodiments of the invention provide systems and methods for water purification. The unit can include a boiler chamber, a degasser, and a demister.



Title: PRESERVATION AND DISPENSATION BY VOLUMETRIC DISPLACEMENT UTILIZING POTENTIAL ENERGY CONVERSION

Priority: US20040862717 20040607 US20090545864 20090824

Family:	Publication number	Publication date	Application number	Application date
	US2005268985 AA	20051208	US20040862717	20040607
	US2010096040 AA	20100422	US20090545864	20090824
	US7597124 BB	20091006	US20040862717	20040607
	US9284177 BB	20160315	US20090545864	20090824

Probable Assignee: LITTO CLAUDE RAMON

Assignee(s):(std): LITTO CLAUDE ; LITTO CLAUDE RAMON

Inventor(s):(std): LITTO CLAUDE ; LITTO CLAUDE RAMON

Agent(s): CLAUDE LITTO

International class (IPC 8-9): B65B1/04 B65B1/08 B65B1/30 B65B3/16 B65D35/28 B65D83/00 B67C3/06 B67D1/04 B67D1/08 B67D1/12 (Advanced/Invention); B67D1/00 (Advanced/Non-invention); B65B1/04 B65B1/30 B65B3/04 B65D35/24 B65D83/00 B67C3/02 B67D1/00 (Core/Invention)

International class (IPC 1-7): B65B1/08

CPC: B67D1/0462 B67D1/0431 B67D1/0878 B67D1/0888 B67D1/12 B67D1/1243 B67D1/125 B67D1/1252 B67D2001/0098

European class: B67D1/04B4B B67D1/04E B67D1/08H B67D1/08J B67D1/12 B67D1/12B6H B67D1/12C B67D1/12F B67D1/12G L67D1/00Y90C L67D1/12G

US class: 1/1 141/114 141/114S 141/285 141/285S 141/4 141/67 141/95 141/95P 222/105 222/397 222/399 222/95

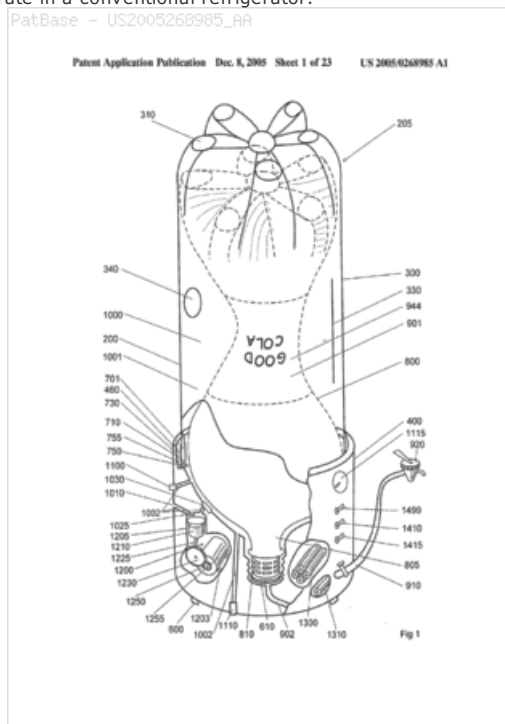
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Abstract:

A volumetric displacement device, especially good for preserving and dispensing carbonated beverages has been constructed that is extremely light, small, safe, attractive, easy to use, energy efficient and inexpensive. It can use battery power, has an ovaloid shape, can be constructed of thin flexible **plastics**, and operates in various positions that eliminate the need for a pickup tube. A consistent problem with soda savers, in that they destroy carbonated beverages by delivering them in a violent manner, has been solved by utilizing a low **pressure** delivery mode. The can operate in a conventional refrigerator.



Title:	GRAVITY FLOW CARBON BLOCK FILTER					
Priority:	US20040881517	20040630	US20060846162P	20060920	US20070858765	20070920
	WO2007US79077	20070920	US20070927372	20071029	US20080207284	20080909
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	US20110386504F	20110301				

Family:	Publication number	Publication date	Application number	Application date
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	KR20090059162 A	20090610	KR20097008008	20090420
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Probable Assignee:	OMNIPURE
Assignee(s):(std):	KNIPMEYER ELIZABETH L ; KNIPMEYER ELIZABETH LOUISE ; RINKER EDWARD B ; LYNCH TONI L ; TIPTON ALEX ; SAASKI BRUCE D ; OMNIPURE FILTER COMPANY INC ; REID ROGER P ; BRITA LP ; CHAN RUTH W ; OMNIPURE FILTER CO INC
Assignee(s):	CLOROX CO ; OMNIPURE ; OMNIPURE FILTER CO
Inventor(s):(std):	CHAN RUTH W ; KNIPMEYER ELIZABETH L ; KNIPMEYER ELIZABETH LOUISE ; LYNCH TONI L ; RINKER EDWARD B ; SAASKI BRUCE D ; TIPTON ALEX ; REID ROGER P
Inventor(s):	CHAN RUTH ; SAASKI BRUCE ; REID ROGER ; RINKER EDWARD ; LYNCH TONI
Agent(s):	GEE STEVEN WILLIAM; THE CLOROX COMPANY; CLOROX CO; PEDERSEN AND CO PLLC; STACY H; KEN J; BARBARA S; PEDERSEN KEN J ET AL
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TG TH TJ TM TN TR TZ UA UG US UZ VC VN ZA ZM ZW
International class (IPC 8-9):	B01D24/00 B01D27/02 B01D29/52 B01D35/00 B01D37/00 B01D39/02 B01D39/14 B01D39/16 B01D39/20 B01D46/00 B01D63/14 B01D71/02 (Advanced/Invention); B01D24/00 (Advanced/Non-invention); B01D24/00 B01D27/00 B01D35/00 B01D37/00 B01D39/02 B01D39/14 B01D39/16 B01D39/20 B01D46/00 B01D63/14 B01D71/00 (Core/Invention)
International class (IPC 1-7):	B01D39/20
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Locarno class:	23/01

[Classification Explorer](#)

Cited documents:	WO9910076 A1, WO9814265 A1, WO08036844 A2, WO06121932 A1, WO06037420 A1, WO05095284 A1, WO05094966 A1, WO04000732 A1, WO03048693 A1, WO0241970 A1, WO02053262 A1, WO0123306 A1, USRE37216 E, USRE037216 E, USD633595 S1, USD618761 S1, USD617869 S1, USD615150 S1, USD615149 S1, USD614259 S1, USD612906 S1, USD579515 S1, USD529127 S1, USD435084 S1, USD416163 S1, USD415922 S1, USD405157 S1, USD398184 S1, USD380535 S1, USD245999 S1, US7429326 BB, US7396461 BB, US7378015 BB, US7303683 BB, US7297263 BB, US7169466 BB, US6989101 BB, US6841067 BA, US6638426 BA, US6569329 BA, US6565749 BA, US6524477 BA, US6413303 BB, US6395190 BA, US6368504 BA, US6322615 BA, US6290848 BA, US6290847 BA, US6290646 BA, US6280824 BA, US6238552 BA, US6200471 BA, US6165362 A, US6099728 A, US6074550 A, US605809 A, US6056809 A, US5980743 A, US5922803 A, US5873995 A, US5679248 A, US5609759 A, US5486285 A, US5443735 A, US5352274 A, US5344558 A, US5329939 A, US5329390 A, US532939 A, US526285 A, US5256285 A, US5225078 A, US5189092 A, US5147722 A, US5076912 A, US5024764 A, US5019311 A, US5017318 A, US4980073 A, US4969996 A, US4895648 A, US4859386 A, US4753728 A, US4749485 A, US4692431 A, US4666600 A, US466660 A, US4665050 A, US4664683 A, US4306971 A, US3788486 A, US3746642 A, US3730886 A, US3721072 A, US3538020 A,
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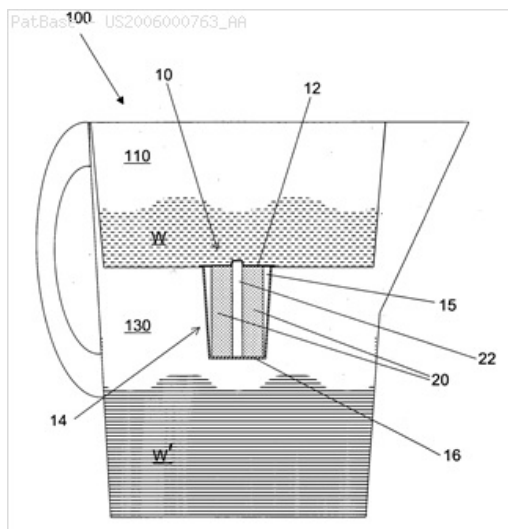
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Forward Citations:

WO14025689, WO14003841, WO13151654, WO12150506, WO12150506, WO12041879, WO11142816, WO10111692, WO10111692, WO10083149, WO10083149, WO10043472, USD804626, USD804610, USD763041, USD760546, USD751391, USD729344, USD709592, USD708888, USD708887, USD707082, USD687861, USD684597, USD684009, USD652637, USD651813, USD647595, USD645538, USD643099, USD640347, USD639901, USD639900, USD639899, USD633595, USD618761, USD617869, USD615150, USD614259, USD612906, US9975787, US9956511, US9950933, US9943785, US9937446, US9839881, US9745105, US9670076, US9656880, US9352979, US9339747, US9233863, US9149745, US8887923, US8871093, US8741137, US8702990, US8701895, US8597512, US8592219, US8557730, US8475658, US8414805, US8349764, US8252087, US8216465, US8177966, US8167141, US8128820, US8066874, US8043502, US7897039, US7438799, US2017334741, US2017036925, US2016237388, US2016200598, US2016151724, US2015231576, US2015136356, US2015068967, US2015041390, US2014110325, US2013180913, US2013118997, US2013056428, US2011303618, US2011278242, US2011220592, US2011203991, US2011114574, US2011110817, US2011084006, US2011073551, US2011042298, US2010258448, US2010255559, US2010243554, US2010243542, US2010230359, US2010215552, US2010187178, US2010155330, US2010044317, US2010006508, US2009242480, US2009136809, US2009112043, US2009111689, US2009057241, US2009057220, US2009001011, US2008223797, US2008017571, US2007209984, US2006231476, US2005186685, KR101373665, JP6283435, JP6204820, JP2017136589, JP2014237131, JP2014138929, GB2478587, EP2833984, EP2644571, EP2536497, EP2242725, EP2177252, EA018789, CN106739231, CN104948358, CN104083944,

Abstract:

A gravity flow carbon block filter comprising approximately 20-90 wt percent activated carbon particles having a mean particle size in the range of approximately 90-220 mum, and approximately 10-50 wt percent low melt index polymeric material. The low melt index polymeric material can have a melt index less than 1.0 g/10 min or greater than 1.0 g/10 min and a mean particle size in the range of approximately 20-150 mum.

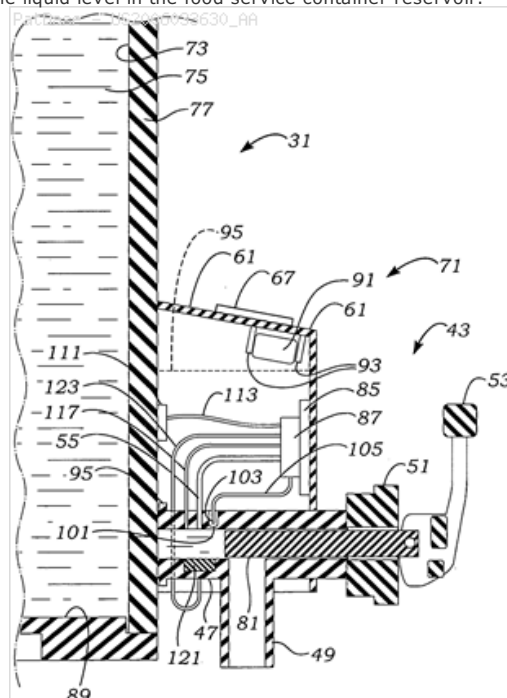


Title: AUTOMATED LEVEL INDICATOR FOR LIQUIDS CONTAINER**Priority:** US20040917883 20040813 US20070881454 20070727

Family:	Publication number	Publication date	Application number	Application date
	US2006033630 AA	20060216	US20040917883	20040813
	US2008036615 AA	20080214	US20070881454	20070727

Probable Assignee: WILBUR CURTIS CO**Assignee(s):(std):** LYALL LUCIAN H III**Assignee(s):** WILBUR CURTIS CO ; WILBUR CURTIS CO INC ; WILBUR CURTIS CO INC (CALIFORNIA CORPORATION) ; WILBUR CURTIS CO INC CALIFORNIA CORP ; WILBUR CURTIS CO INC CALIFORNIA CORPORATION**Inventor(s):(std):** LYALL LUCIAN H III**Inventor(s):** LYALL LUCIAN HIII ; LYALL LUCIAN HITE ; LYALL LUCIAN**Agent(s):** CHRISTOPHER C WINSLADE, MC ANDREWS HELD AND MALLOY; CHRISTOPHER C WINSLADE MC ANDREWS HELD AND MALLOY; HARRINGTON AND HARRINGTON CURTIS L HARRINGTON**International class (IPC 8-9):** G01F23/00 G01F23/02 G01F23/14 (Advanced/Invention);
G01F23/00 G01F23/02 G01F23/14 (Core/Invention)**CPC:** G01F23/18 B67D3/0077 B67D3/0093 G01K13/00 G01K2207/02 B67D3/045**European class:** G01F23/16**US class:** 340/612 340/614 340/614P 73/293[Classification Explorer](#)**Cited documents:** US7000468 BB, US6666085 BA, US5563584 A, US5469739 A, US2005195263 AA, US2004195263 AA, US2002145527 AA,**Forward Citations:** WO17221223, US9372036, US9341518, US8646474, US7857004, US7724154, US2015059469, US2011061745, US2010057234, US2009165868, US2009165477, US2008144697, US2007029005, US2006032939, CN102410861,**Abstract:**

An improved level indicator takes advantage of the universal visual impression of typical sight glasses, but without the disadvantages of a physical sight glass protruding from the main body of the reservoir. In addition, other quantities are measured, including two-phase presence in a drainage pipe, temperature of the liquid product measured against either the drain pipe or reservoir, and temporal passage. Each of the measured quantities can result in an individual visual indication, or can thresholded combinationally to provide a combined threshold limit for initiating visual indication. A sealed unit is provided low on a food dispensing reservoir and upstream of a dispensing valve with a sensor in fluid communication with the static **pressure** in the dispensing valve. Because the sealed unit is in communication with the liquid in the reservoir at the lower position only, several alternatives may be utilized to equate the static **pressure** with the liquid level in the food service container reservoir.



Title:	MOBILE SURFACE CLEANER HAVING A SPARGING DEVICE			
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Family:	Publication number	Publication date	Application number	Application date
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Probable Assignee: TENNANT CO

Assignee(s):(std): FIELD BRUCE F ; GRONLUND PATRICK J ; TENNANT CO ; TENNANT CO US

Assignee(s): TENNANT CO MINNEAPOLIS ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; JPMORGAN CHASE BANK NATIONAL ASSOCIATION AS COLLAT ; JPMORGAN CHASE BANK NATIONAL ASSOCIATION COLLATERA ; JPMORGAN CHASE BANK NATIONAL ASSOCIATION COLLATERAL AGENT AS ; TENNANT COMPANY

Inventor(s):(std): FIELD BRUCE F ; GRONLUND PATRICK J

Inventor(s): GRONLUND PATRICK J SOMERSET ; PATRICK J GRONLUND ; FIELD BRUCE F GOLDEN VALLEY ; BRUCE F FIELD

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; FPA PATENT ATTORNEYS PTY LTD; VOSSIUS AND PARTNER PATENTANWAELTE RECHTSANWAELTE MBB; VOSSIUS AND PARTNER; FRHRSCHENCK ZU SCHWEINSBERG ELARD; FRHR SCHENCK ZU SCHWEINSBERG ELARD; VOSSIUS AND PARTNER PATENTANWAELTE RECHTSANWAELTE MBB; WESTMAN CHAMPLIN AND KELLY PA; DAVID D; WESTERMAN CHAMPLIN AND KELLY PA; WESTMAN CHAMPLIN AND KOEHLER PA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK MN MR 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 ZA ZM ZW

International class (IPC 8-9): A47L11/03 A47L11/14 A47L11/282 A47L11/29 A47L11/292 A47L11/30 A47L11/34 A47L11/40 A47L15/00 A47L5/38 A47L7/00 B08B3/00 B08B3/02 B08B3/08 B08B3/12 B08B5/04 B08B6/00 B08B7/00 B08B7/04 C02F1/46 C02F1/461 C02F1/467 C11D17/08 C11D7/02 C11D7/04 C25B1/04 C25B1/24 C25B1/26 C25B15/00 C25B9/00 C25D17/00 (Advanced/Invention); A47L11/00 A47L11/29 B08B3/00 B08B3/02 B08B3/08 B08B3/12 B08B5/00 B08B7/00 B08B7/04 C02F1/46 C02F1/461 C11D17/08 C11D7/02 C25B1/00 C25B15/00 C25B9/00 (Core/Invention)

CPC: A47L11/293 A47L11/4016 A47L11/4088 C02F1/4674 C02F2201/46115 C02F2201/4619 A47L11/305 C02F1/4672 A61L2202/16 A61L2202/17 A61L2202/25 C02F1/32 C02F1/4606 C02F2201/46175 C02F2209/008 C02F2209/04 C02F2209/44 A47L11/03 A47L11/4038 A47L11/4044 C11D11/007 B08B3/026 B08B2203/0217 A47L11/292 C02F2201/4618 C02F2305/023 B08B3/10 A47L11/4011 A47L11/4083 A61L2/035 A61L2/186 A61L2/22 A61L2202/11 A61L2209/213 C02F2001/46152 C02F2201/003 C02F2201/4613 C02F1/4618 C02F2001/46185 C02F2001/4619 C02F2001/46195 C02F2201/008 C25B9/20 C25B9/206 B08B3/024 A47L11/302 A47L11/40 Y02E60/366

European class: A47L11/03 A47L11/292 A47L11/293 A47L11/30B A47L11/30B2 A47L11/40 A47L11/40C A47L11/40D2 A47L11/40F2 A47L11/40F6 A47L11/40N2 A47L11/40N6 A61L2/03E A61L2/18P A61L2/22 B08B3/02

B08B3/02C B08B3/02H C02F1/461B6 C11D11/00B10 C25B9/20 C25B9/20B2 K61L202/110
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M02F201/461B6B2 M02F209/00T4 M02F209/04 M02F209/44 M02F305/02B Y02E60/36F
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[Classification Explorer](#)

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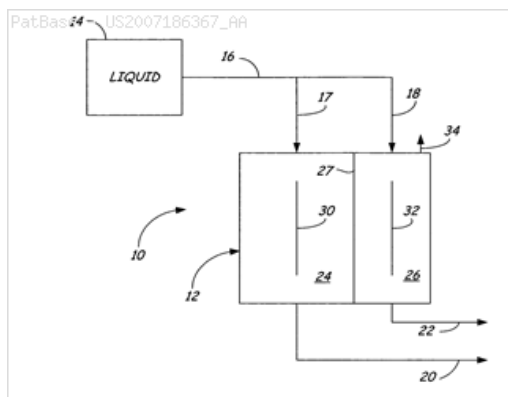
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Abstract:

A mobile surface cleaner is provided, which includes a mobile body configured to travel over a surface, a source of a liquid, a liquid dispenser, a flow path from the liquid source to the liquid dispenser, and an electrolyzing sparging device in fluid communication with the flow path.



Title:
Priority:

METHOD AND APPARATUS FOR APPLYING ELECTRICAL CHARGE THROUGH A LIQUID HAVING ENHANCED SUSPENSION PROPERTIES
US20080138465P 20081217 US20090146903P 20090123 US20090248557P 20091005
US20090639622 20091216 US20090639628 20091216 WO2009US68289 20091216
WO2009US68295 20091216 US20100693114 20100125 WO2010US21974 20100125
US20100835441 20100713 US20110017706 20110131

Family:	Publication number	Publication date	Application number	Application date
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	AU2009333186 AA	20100708	AU20090333186	20091216
	BRP11007231 A2	20170530	BR2010PI07231	20100125
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	WO10085742 A1	20100729	WO2010US21974	20100125

Probable Assignee: TENNANT CO

Assignee(s):(std): DENISON THOMAS R ; FIELD BRUCE F ; TENNANT CO ; ZIMMERMAN JONATHAN A

Assignee(s): TENNANT COMPANY ; TENNANT COMPANYUS

Inventor(s):(std): DENISON THOMAS R ; FIELD BRUCE F ; ZIMMERMAN JONATHAN A ; THOMAS R DENISON ; JONATHAN A ZIMMERMAN ; BRUCE F FIELD

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; FPA PATENT ATTORNEYS PTY LTD; MARKS AND CLERK; VOSSIUS AND PARTNER; STELLBRINK AXEL; TSUKUNI HAJIME; WESTMAN CHAMPLIN AND KELLY PA; DAVID D; BRUSH DAVID D ET AL; MORRISON BRIAN R ET AL

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

International class (IPC 8-9): A47L11/03 A47L11/30 A47L11/34 A47L11/40 A47L13/22 A47L15/42 A61L2/02 A61L2/03 A61L2/18 A61L2/22 A61L2/24 A61L9/14 B08B3/00 B08B3/04 B08B3/08 B65D88/54 B67D7/00 C02F1/46 C02F1/461 C02F1/48 C25B9/00 C25B9/04 C25F1/00 D06F35/00 D06F39/08 F23D11/32 (Advanced/Invention); A47L11/00 A61L2/02 A61L2/22 B65D88/00 B67D7/00 C02F1/46 C02F1/461 C25B9/00 C25B9/04 D06F35/00 (Core/Invention); A47L11/30 A47L11/40 A61L2/03 A61L2/22 A61L2/24 A61L9/14 (Core/Non-invention)

International class (IPC 1-7): A61L2/03 A61L2/22

CPC: D06F35/002 D06F35/003 A47L15/42 A47L15/4238 A61L2/24 Y02W10/37 A61L2/035 A47L11/4083 A47L13/22 A47L13/26 A61L2/22

European class: A47L11/40N2 A47L13/22 A47L13/26 A47L15/42 A47L15/42F2 A61L2/03E A61L2/22 A61L2/24 D06F35/00B D06F35/00C

US class: 134/58D 134/58R 134/60 15/3 204/224.00RS 204/224R 204/230.2 204/230.200S 204/232 204/232S 204/263 204/263S 204/269 204/269S 204/271 204/271S 204/275.1 204/275.100S 205/687 205/701 210/259 210/259S 210/282 210/282S 222/1 222/192 222/192S 222/1S 222/321.7 222/321.700S 239/690 239/690P

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US4600495 A, US4502929 A, US4405418 A, US4374711 A, US4324635 A, US4244079 A, US4154578 A, US4121543 A, US4108052 A, US4107046 A, US4099489 A, US4018658 A, US3933614 A, US3897320 A, US3859195 A, US3725226 A, US2011219555 AA, US2011121110 AA, US2010276301 AA, US2010192987 AA, US2010189805 AA, US2010181208 AA, US2010147700 AA, US2009314658 AA, US2009212132 AA, US2009184186 AA, US2009162505 AA, US2009148342 AA, US2009127128 AA, US2009008268 AA, US2008264778 AA, US2007187263 AA, US2007187262 AA, US2007187261 AA, US2007186958 AA, US2007186957 AA, US2007186954 AA, US2007186368 AA, US2007186367 AA, US2007170072 AA, US2007141434 AA, US2007037267 AA, US2007023273 AA, US2007018368 AA, US2006280664 AA, US2006231503 AA, US2006169575 AA, US2006162735 AA, US2006076248 AA, US2006037869 AA, US2005244556 AA, US2005194261 AA, US2005139808 AA, US2005139239 AA, US2005136520 AA, US2005126928 AA, US2005121334 AA, US2005067289 AA, US2004256247 AA, US2004250323 AA, US2004226123 AA, US2004168933 AA, US2004166019 AA, US2004112763 AA, US2004069611 AA, US2004037737 AA, US2004012913 AA, US2004011665 AA, US2003213505 AA, US2003164306 AA, US2003159233 AA, US2003159231 AA, US2003159230 AA, US2003102270 AA, US2003070919 AA, US2003062068 AA, US2003001439 AA, US2002185423 AA, US2002112314 AA, US2002074237 AA, US2002032141 AA, US2002027070 AA, US2002023847 AA, US2001034922 AA, US2001002500 AA, NL1012257, KR100599229, JP8112574 A2, JP8071131 A2, JP7233493, JP6137788 A2, JP2008073604 A2, JP2007239041, JP2007000402, JP2006036341 A2, JP2004525748 T2, JP2004148109, JP2004148108, JP2004129954, JP2003334557, JP20033266073, JP2003266073, JP2003261190, JP2003181338, JP2003062573, JP2000079393, JP1997174054, JP1111483, JP11090442, JP11010159, GB611819, GB2393737, GB2381187, GB2149423, GB2141738, FR2909370, FR2381835, EP1978142 A1, EP1941912, EP1932809, EP1903128, EP1754804, EP1741676, EP1671560, EP1533041, EP1386995 A1, EP1309519, EP1308421, EP1293481, EP1188719, EP1065170, EP1008662, EP1000554, EP0761235, EP0672623, EP0663176, EP0636581, EP0438902, EP0199493, EP0104345, EP0041373, DE8430251, DE4406320, DE2951993,

DE202007005471 U1

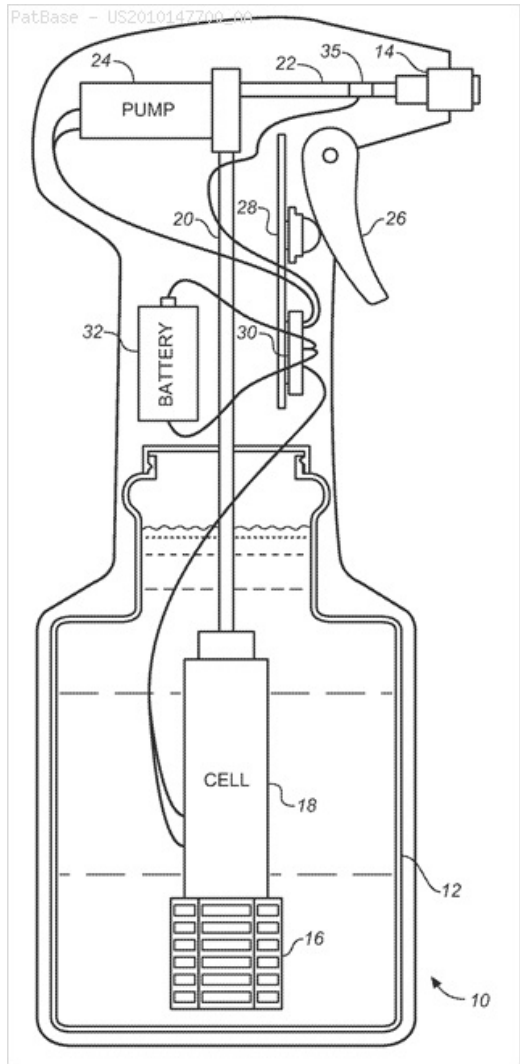
DE202004010572, DE19752174, CN200977495, AU732602,

Forward Citations:

WO18034144, WO17112898, WO17112781, WO17110406, WO15080361, WO14019991, WO13184994, WO13126725, WO13115763, WO13112807, WO13090540, WO13034548, WO12158145, WO12128771, WO12122001, WO12109556, WO12040351, WO11026075, USD652299, US9949756, US9850117, US9847015, US9831641, US9725296, US9556526, US9486481, US9451867, US9440867, US9377521, US9162904, US9156671, US9061323, US8951360, US8920622, US8919356, US8786429, US8603320, US8394253, US8337690, US8319654, US2016214147, US2016068413, US2016051997, US2014333433, US2014259907, US2014155745, US2014143959, US2013277211, US2013192642, US2013146449, US2013068630, US2012145198, US2012145197, US2012121731, US2011316695, US2011121110, US2011079520, US2011048472, US2010308083, US2010276301, US2010147701, US2009314655, US2009095639, TWI539539, KR101546400, KR101528512, KR101240571, JP6251425, JP6251349, JP5813786, JP2018027213, JP2017113395, JP2015537116, JP2014511228, ES2538951, EP2886133, DE102015203744, CN105543885, CN105054870, CN104602586, CN103781392, CN103635207, CN102324760, AU2012214278,

Abstract:

An apparatus and method are provided. The method includes for example, treating a liquid in an apparatus to increase suspension properties of the liquid and dispensing the treated liquid from the apparatus to a surface or volume of space so as to create an electrically conductive path by the treated liquid from the apparatus to the surface or volume of space. During the step of dispensing, an alternating electric field is generated from the apparatus to the surface or volume of space, through the liquid along the conductive path, wherein the electric field is sufficient to destroy at least one microorganism from the surface or in the volume of space.



Title:

APPARATUS AND METHOD FOR TREATING AQUEOUS SOLUTIONS AND CONTAMINANTS THEREIN

Priority:

US20110566490P 20111202 US20120583974P 20120106 US20120584210P 20120106
US20120584012P 20120106 US20120613357P 20120320 US20120647372P 20120515
US20120544721 20120709 US20120689089 20121129 WO2012US67083 20121129
WO2013US20308 20130104 US20130769741 20130218 US20130796310 20130312
US20130894621 20130515 US20130899993 20130522 US20130859395P 20130729
US20130878505P 20130916 US20130035993 20130925 US20140150915 20140109
US20140445584 20140729 US20150698646 20150428

Family:	Publication number	Publication date	Application number	Application date
	BR112014013372 A2	20170613	BR20141113372	20121129
	BR112014013372 A8	20170620	BR20141113372	20121129
	BR112014013372 A8	20170613	BR20141113372	20121129
	CA2862419 AA	20140627	CA20132862419	20130104
	CA2862419 C	20160112	CA20132862419	20130104
	IN04510DN2014 A	20150206	IN2014DN04510	20140604
	MX2014006561 A1	20140922	MX20140006561	20121129
	US2013175162 AA	20130711	US20130769741	20130218
	US2013270196 AA	20131017	US20130894621	20130515
	US2014021041 AA	20140123	US20130035993	20130925
	US2014332455 AA	20141113	US20140445584	20140729
	US2015246829 AA	20150903	US20150698646	20150428
	US8398828 BA	20130319	US20120544721	20120709
	US8568573 BB	20131029	US20130769741	20130218
	US9045357 BB	20150602	US20130894621	20130515
	WO13103834 A1	20130711	WO2013US20308	20130104
	ZA201403964 A	20150826	ZA20140003964	20140529

Probable Assignee:

AQUAMOST INC

Assignee(s):(std):

BARRY TERENCE P ; CARLSON ALAN ; WINKIE DOUGLAS S ; DOOLITTLE CRAIG ; AQUAMOST INC

Assignee(s):

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Inventor(s):(std):

BARRY THOMAS P ; CARLSON ALAN ; DOOLITTLE CRAIG ; FRANK GRANT ; HENRICKSON MARK ; JAKE MYRE ; KAPSOS DAVID ; MYRE JAKE ; TERENCE P BARRY ; THOMAS P BARRY ; WINKIE DOUGLAS S ; ANDREWS EDWARD ; ANTON ASMUTH ; ASMUTH ANTON ; BARRY TERENCE P

Inventor(s):

BARRY TERENCE PUS ; WINKIE DOUGLAS SUS

Agent(s):

LEDGLEY LAW; BOARDMAN AND CLARK LLP; HUSSIN CHRISTOPHER J

Designated states:

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

International class (IPC 8-9):

B01J19/08 C02F C02F1/00 C02F1/32 C02F1/46 C02F1/461 C02F1/467 C02F9/00 C25B1/00 C25B9/00 C25F7/00 (Advanced/Invention); C02F1/461 C02F1/72 (Advanced/Non-invention)

CPC:

C02F1/24 C02F1/40 C02F2101/32 C02F1/4672 C02F9/00 C02F1/46109 C02F1/461 C02F2201/3223 C02F2201/326 C02F1/008 C02F1/46104 C02F1/725 C02F2001/46142 C02F2201/3227 C02F2201/4613 C02F2201/46135 C02F2209/006 C02F2209/02 C02F2209/42 C02F2209/44 C02F2305/10 C25B1/003 C02F1/467 Y02W10/37 C02F2303/22 C02F2201/32 C02F1/4602 C02F1/32 C02F1/325

US class:

1/1 204/242 204/253 204/267 205/340 205/628 205/637 205/740 210/200 210/748.14

Classification Explorer

Cited documents:

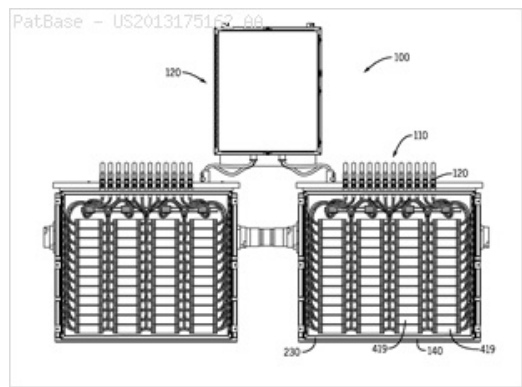
WO12123412 A1, WO06027659 A1, US8398828 BA, US7862700 BB, US7425272 BB, US7326330 BB, US7230255 BB, US7008473 BB, US6645366 BB, US6547951 BA, US6524447 BA, US6409928 BA, US6409893 BA, US6379560 BA, US6261464 BA, US6218035 BA, US6180014 BA, US6180014 B1, US6159421 A, US6136186 A, US6074072 A, US5963417 A, US5935522 A, US5932111 A, US5858199 A, US5846390 A, US5736023 A, US5712037 A, US5622791 A, US5616152 A, US5603843 A, US5543034 A, US5449466 A, US5439624 A, US5395522 A, US5382358 A, US5308454 A, US5227342 A, US5215943 A, US5202031 A, US5137607 A, US5035784 A, US5022970 A, US4908109 A, US4793910 A, US4592807 A, US4521499 A, US4471036 A, US4349765 A, US4181593 A, US4042758 A, US2282024 A, US2012031852 AA, US2011215055 AA, US2011180423 AA, US2011114506 AA, US2010326833 AA, US2010294726 AA, US2010270167 AA, US201010209294 AA, US2010201239 AA, US201010187122 AA, US2009320894 AA, US2009314711 AA, US2009281480 AA, US2009154060 AA, US2009130748 AA, US2009031471 AA, US2008259338 AA, US2008220535 AA, US2008170971 AA, US2008156658 AA, US2008121531 AA, US2008050471 AA, US2007272877 AA, US2007251811 AA, US2007205097 AA, US2007131621 AA, US2007108056 AA, US2007020158 AA, US2006144700 AA, US2006123885 AA, US2006060787 AA, US2005249659 AA, US2005051439 AA, US2005014066 AA, US2004022700 AA, US2004020861 AA, US2003066750 AA, US2002185080 AA, US2002037240 AA, US2001042682 AA, US2001004962 AA, KR20110010953 U, KR20110010953, KR20100003902 A, JP7039273 A2, JP2011055795 A2, JP2007167029 A2, JP2007069124 A2, JP2006526500 T2, JP2006230345 A2, JP20060601886 A2, JP2005193216 A2, JP2005152815 A2, JP2004154742 A2, JP2003200178 A2, JP2003200043 A2, JP2003190777 A2, JP2002059177 A2, JP2001170204 A2, JP2001136862 A2, JP2001062469 A2, JP2001029747 A2, JP2000210570 A2, JP2000201569 A2, EP2394963 A1, DE19602947 A1, CN2558656 Y, CN2558646 Y, CN201031159 Y, CN1538939 A, CN101913678 A, CN101863548 A, CN101584996 A, CN101543771 A, CN101219371 A, CN101186380 A, CN101172674 A, CN101033105 A, CN100558652 C, CA2632788 AA,

Forward Citations:

WO15054502, WO15054214, USD817439, US9832979, US9528189, US9096450, US9045357, US8663471, US8658046, US8658035, US8568573, US2017320765, US2014048470, US2012168318, EP3318616, EP3315580, CN105905998, CN105130074, AU2013287151,

Abstract:

The present disclosure is generally directed to devices and methods of treating aqueous solutions to help remove or otherwise reduce levels, concentrations or amounts of one or more contaminants. The present disclosure relates to an apparatus comprising spaced-apart electrode structural support members extending from a first sidewall to a second sidewall, the spaced-apart electrode structural support members each having at least one photoelectrode and counterelectrode coupled to respective terminals adapted to be electrically coupled to a power supply, and at least one ultraviolet light source between the spaced-apart electrode support members.



Title: SURFACE MODIFIED CERAMIC FILTER

Priority: US20110561137P 20111117 US20120679800 20121116

Family:

Publication number	Publication date	Application number	Application date
US2013341281 AA	20131226	US20120679800	20121116
US9731982 BB	20170815	US20120679800	20121116
WO13075018 A1	20130523	WO2012US65667	20121116

Probable Assignee: UNIV OF KANSAS

Assignee(s):(std): UNIV KANSAS ; UNIV OF KANSAS

Assignee(s): UNIVERSITY OF KANSAS ; OF KANSAS UNIV

Inventor(s):(std): ADAMS CRAIG D

Agent(s): STINSON LEONARD STREET LLP; KNEDLIK LANA M

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

International class (IPC 8-9): B01D39/20 C02F1/28 C04B41/50 C04B41/85 (Advanced/Invention)

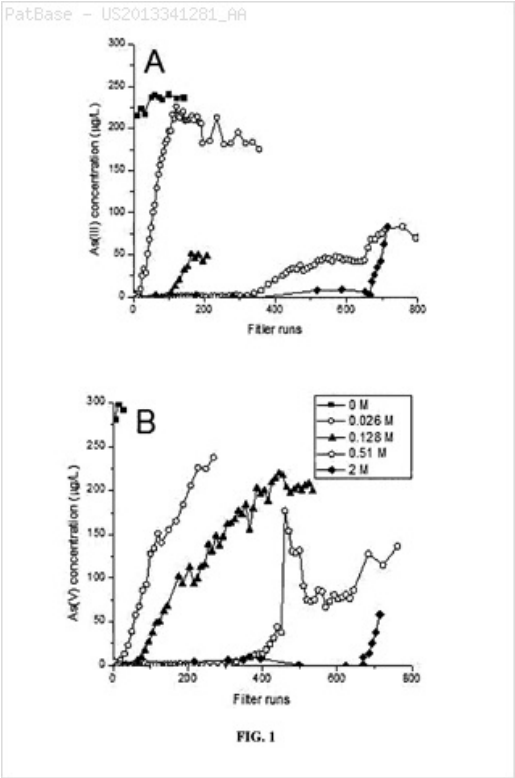
CPC: C02F1/288 B01D39/20 B01D39/2093 B01D2239/0478 C04B41/50 C04B41/85 Y02W10/37 H05K999/99

US class: 210/497.01 210/502.1 210/660 210/670 427/244

[Classification Explorer](#)

Cited documents: US7947619 BB, US5749955 A, US2011139726 AA, US2008053895 AA,

Abstract:
A porous ceramic filter having one or more coatings of elemental or compounds of iron, manganese, aluminum, titanium, or mixtures thereof deposited on the surface of the pores.



Title: BUTTERFLY VALVE**Priority:** FR20110003839 20111214 EP20120813903 20121130 WO2012FR00496 20121130

Family:	Publication number	Publication date	Application number	Application date
	DE602012021296 D1	20160915	DE201260021296T	20121130
	EP2791557 A1	20141022	EP20120813903	20121130
	EP2791557 B1	20160803	EP20120813903	20121130
	FR2984446 A1	20130621	FR20110003839	20111214
	FR2984446 B1	20140613	FR20110003839	20111214
	KR20140100997 A	20140818	KR20147019034	20121130
	WO13088002 A1	20130620	WO2012FR00496	20121130

Probable Assignee: KSB SAS**Assignee(s):(std):** KSB SAS**Assignee(s):** KSB S A S**Inventor(s):(std):** DUBOY DOMINIQUE**Inventor(s):** DOMINIQUE DUBOY**Agent(s):** EIDELSBURG VICTOR ALBERT; CABINET FLECHNER; EIDELSBURG VICTOR ALBERT ET AL

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

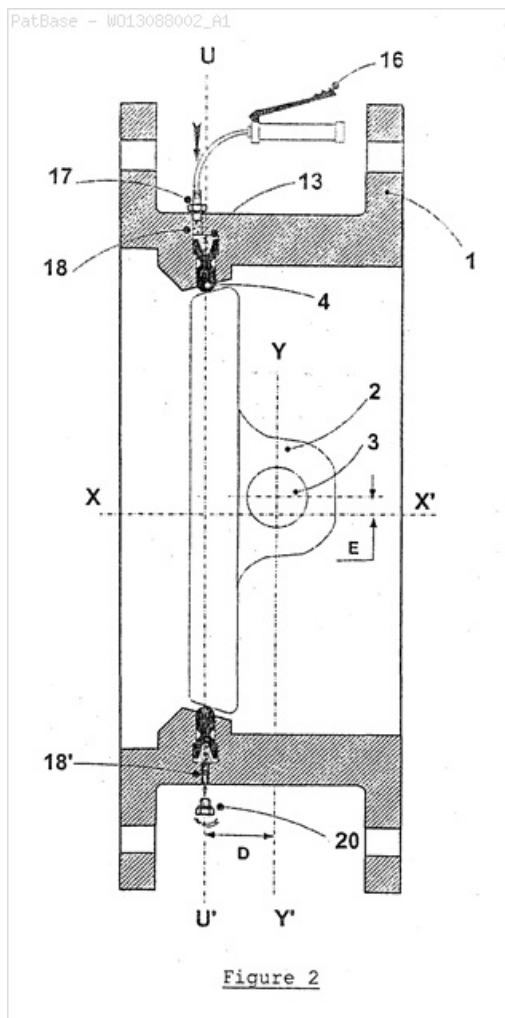
International class (IPC 8-9): F16J15/16 F16J15/46 F16K1/22 F16K1/226 F16K27/02 (Advanced/Invention)

CPC: F16J15/46 F16K1/2266 F16K1/2263 F16K27/0218[Classification Explorer](#)

Cited documents: WO9322588 A1, WO11141641 A1, US4130285 A, US4010633 A, GB1508283 A, FR2820184 A1, FR2570789 A1, FR2415760 A1, FR2260041 A1, FR1589005 A, FR1000267 A, EP1696157 A2, EP0156581 A1,

Abstract:

The invention relates to a valve including a body (1), a butterfly plate (2), and an elastomeric seal (4) arranged in a recess (13) and including a dynamic sealing cross-section and a static sealing cross-section, the static sealing cross-section consisting of two flexible lips that define a space therebetween, said space being filled with a flowable material capable, and the body (1) having two through-holes (18, 18') pass therethrough, said through-holes leading into the recess (13), wherein one of the through-holes is plugged by a removable plug (20).



Title:

PORTABLE NIPPLE BASED POULTRY WATERER

Priority:

US20120622147P 20120410 US20130797389 20130312 US20160048799 20160219
US20170789656 20171020

Family:

Publication number	Publication date	Application number	Application date
US2013263789 AA	20131010	US20130797389	20130312
US2016165857 AA	20160616	US20160048799	20160219
US2018035649 AA	20180208	US20170789656	20171020
US9265231 BB	20160223	US20130797389	20130312

Probable Assignee:

CHICKENWATERERCOM LLC

Assignee(s):(std):

CHICKENWATERER COM LLC

Assignee(s):

CHICKENWATERERCOM LLC

Inventor(s):(std):

DELMAN H MARK

Agent(s):

OSHA LIANG LLP

International class (IPC 8-9):

A01K39/02 A01K7/06 B23P17/00 (Advanced/Invention)

CPC:

B23P17/00 Y10T29/49826 A01K39/0213 A01K7/06

US class:

1/1 119/72 119/72.5 29/428

Classification Explorer

Cited documents:

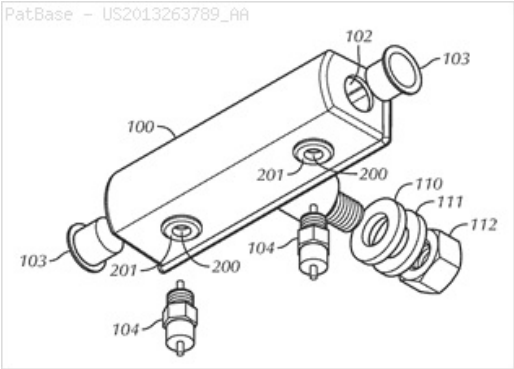
US8065833 BB, US778624 A, US7735455 BB, US7090261 BB, US6933446 BA, US6718911 BB, US6591782 BA, US6561129 BA, US6079361 A, US6067935 A, US5924382 A, US5862987 A, US5809934 A, US5400744 A, US5239944 A, US5230302 A, US5218926 A, US5184570 A, US5136983 A, US5105768 A, US5099798 A, US5097798 A, US5025754 A, US4794881 A, US4669422 A, US4491088 A, US4310990 A, US4211034 A, US3985105 A, US3921587 A, US3724425 A, US3675627 A, US3664305 A, US3610206 A, US3537430 A, US3285227 A, US3263652 A, US3122131 A, US3063217 A, US2775227 A, US2690160 A, US2510252 A, US2009194032 AA, US1983613 A, US1933723 A, US1912530 A,

Forward Citations:

USD729342, USD729341, USD727458, USD708402, US9751548, US9708113, US9643768, US9428326,

Abstract:

A portable poultry waterer is provided having a manifold with a connector placed on the back surface to attach the manifold to a water storage vessel. The connector extends outward in a substantially perpendicular fashion to the manifold. Holes are placed into the manifold to accept a plurality of longitudinally spaced poultry nipples. One or more holes are placed into the manifold to accept a clean out plug(s).



Title: LIGHTWEIGHT ASSEMBLABLE APPLIANCE AND RESPECTIVE METHOD FOR PRODUCTION OF BIOGAS AND LIQUID FERTILIZER

Priority: IL20120220531 20120620 WO20131B01272 20130618 WO20131B90361 20130618
US20130916246P 20131215 EP20130887350 20131219 US20130899620 20131219
WO20131B61160 20131219 US20150899620 20151218 US20170632367 20170625

Family:	Publication number	Publication date	Application number	Application date
	AP201609039 A0	20160229	AP20160009039	20131219
	AP201609123 A0	20160430	AP20160009123	20131219
	AU2013392951 AA	20141224	AU20130392951	20131219
	AU2013392951 BB	20160414	AU20130392951	20131219
	CN105473515 A	20160406	CN201380078958	20131219
	CN105473515 B	20180410	CN201380078958	20131219
	DE602013023925 D1	20170831	DE201360023925T	20131219
	EP3010863 A1	20160427	EP20130887350	20131219
	EP3010863 A4	20160629	EP20130887350	20131219
	EP3010863 B1	20170719	EP20130887350	20131219
	IL220531 A0	20121129	IL20120220531	20120620
	IN201617001594 A	20160805	IN201617001594	20160115
	MX2015017766 A1	20161028	MX20150017766	20131219
	PH2015502822 A	20160321	PH20150502822	20151218
	US2016137562 AA	20160519	US20130899620	20131219
	US2017291858 AA	20171012	US20170632367	20170625
	US9688585 BB	20170627	US20130899620	20131219
	WO13190361 A1	20131227	WO20131B01272	20130618
	WO14203047 A1	20141224	WO20131B61160	20131219

Probable Assignee: ECOGAS ISRAEL LTD

Assignee(s):(std): ECOGAS ISRAEL LTD ; EFRATI OSHIK MOSHE ; EILON TAL ; MOSHE RONEN ; TELLER YAIR ; LANTSER EREZ ; LANZER EREZ ; MILLER YARIV ; HOME BIOGAS LTD ; ZAK SHOHAM

Assignee(s): OSHIK MOSHE EFRATI ; RONEN MOSHE ; EREZ LANTSER

Inventor(s):(std): SHOHAM ZAK ; TAL EILON ; TELLER YAIR ; YAIR TELLER ; YARIV MILLER ; ZAK SHOHAM ; MILLER YARIV ; LANZER EREZ ; EILON TAL ; EREZ LANZER ; LANTSER EREZ ; MOSHE EFRATI OSHIK ; MOSHE RONEN ; OSHIK MOSHE EFRATI ; EFRATI OSHIK MOSHE

Inventor(s): EREZ LANTSER ; RONEN MOSHE

Agent(s): ECOGAS ISRAEL LTD; HARRISON IP LTD; PATWRITE LLC; MARK DAVID; SHILON ZUCKERSTEIN AND CO; VAPNIARSKY ANDREY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR 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 PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): A01D C02F11/04 C02F3/28 C05F17/00 C05F17/02 C05F9/02 C05F9/04 C05G3/00 C12M1/00 C12M1/107 C12M3/00 C12P5/02 (Advanced/Invention)

CPC: C05F17/0036 C05F17/0205 C12M45/02 C05F17/0258 C05F17/0018 C05F9/02 C05F17/0063 C05F17/0211 C12M23/46 C12M23/36 C12M29/00 C12M21/04 C12M23/14 C05F17/0027 C12M23/26 C12M23/38 C12M23/48 C12M23/52 C12M23/54 C12M47/18 C12P5/023 Y02E50/343 Y02P20/145 Y02W10/37 Y02W30/43 Y02W30/47 C05G3/0064 C05F17/0276 C05F17/027 C02F3/28 C02F11/04 C02F2103/002 Y02A40/215

US class: 435/262.5 435/290.4 71/10

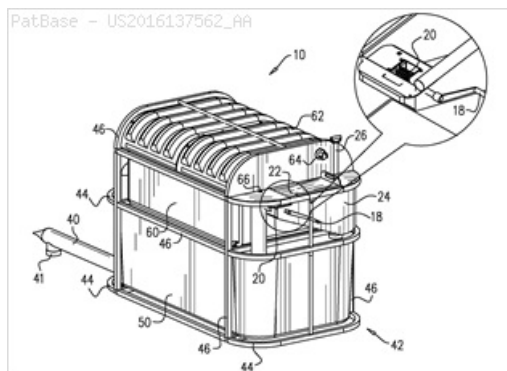
[Classification Explorer](#)

Cited documents: WO10100309 A1, WO02062497 A1, US7186339 BA, US6887374 BB, US6375838 BA, US5651890 A, US5316387 A, US4632692 A, US4169048 A, US4100023 A, US2008131960 AA, US2007191527 AA, US2004045899 AA, GB2162195 A1, FR2983848 A1, EP0033724 A2, DE8304514 U, CN202610224 U, CN202022927 U, CN201400673 Y, CN102518599 A, CN101460413 B, CN101460413 A, CN101337737 B, CN101337737 A, CA2731439 AA,

Forward Citations: WO17021415, USD802726,

Abstract:

A system and method of recycling organic waste into biogas, implementing an anaerobic digestion processes, is disclosed. The system includes structural scaffolding and a pliable collapsible anaerobic digester. The aerobic digester includes at least one suspension tab, rendering the anaerobic digester suspendable from the structural scaffolding. A respective kit-of-parts is disclosed for assembling the aforementioned system.



Title:

INTERNAL BACKWASH SYSTEM FOR ROBOTIC POOL AND TANK CLEANER

Priority:

US20120545339 20120710 US20150745915 20150622

Family:

Publication number	Publication date	Application number	Application date
US2014014140 AA	20140116	US20120545339	20120710
US2015283483 AA	20151008	US20150745915	20150622
US9091093 BB	20150728	US20120545339	20120710

Probable Assignee:

AQUA PRODUCTS INC

Assignee(s):(std):

AQUA PRODUCT INC ; AQUA PRODUCTS INC ; CORREA WILLIAM LONDONO ; LONDONO CORREA WILLIAM

Inventor(s):(std):

CORREA WILLIAM LONDONO ; LONDONO CORREA WILLIAM

Agent(s):

ABELMAN FRAYNE AND SCHWAB

International class

B01D29/68 B08B3/02 B08B9/087 E04H4/16 (Advanced/Invention)

(IPC 8-9):

CPC:

B08B9/087 B01D29/68 E04H4/1654

US class:

1/1 134/34 15/1.7 210/798

Classification Explorer

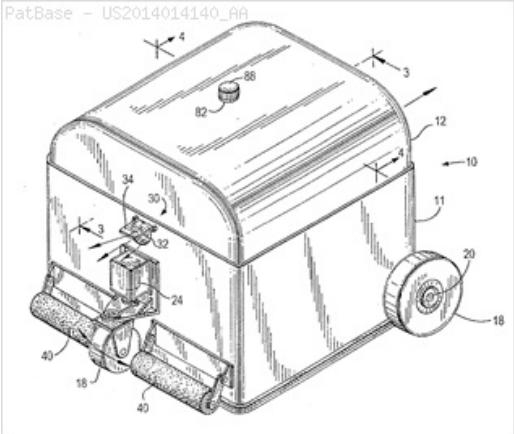
Cited documents:

US4872238 A, US4683067 A, US4429429 A, US3571840 A, US2009100619 AA, US2008250580 AA, US2007056124 AA, US2002121289 AA,

Forward Citations:

US9982453, US9920545, US9909333, US9896858, US9896856, US9885196, US9885195, US9885194, US9878739, US9856669, US9809990, US9506262, US9366049, EP3228783, EP3228782, EP3205793, DE102014013109,

Abstract:
A self-propelled robotic cleaning apparatus for cleaning a submerged surface of a pool or tank includes a housing defining an interior chamber containing a filter assembly for filtering water flowing through at least one water inlet formed in the base plate. A filter backwash assembly is positioned within the interior chamber and has at least one fluid discharge outlet for providing a pressurized flow of a fluid towards the exterior surface of the filter assembly as a backwash to rinse and dislodge the debris therefrom.



Title:	APPARATUS AND METHOD FOR TREATING AQUEOUS SOLUTIONS AND CONTAMINANTS THEREIN					
Priority:	US20110566490P	20111202	US20120583974P	20120106	US20120584012P	20120106
	US20120613357P	20120320	US20120544721	20120709	US20120689089	20121129
	US20130763336P	20130211	US20130769741	20130218	US20130796310	20130312
	US20130782969P	20130314	US20130812990P	20130417	US20130899993	20130522
	US20130035993	20130925	US20130887777P	20131007	US20130898090P	20131031
	US20140150915	20140109	US20140930337P	20140122	US20140930827P	20140123
	WO2014US15628	20140210	US20140177314	20140211	US20140508421	20141007
	US20140529817	20141031	US20150744421	20150619		

Family:	Publication number	Publication date	Application number	Application date
	CA2900722 AA	20150807	CA20142900722	20140210
	EP2953903 A1	20151216	EP20140749161	20140210
	EP2953903 A4	20170104	EP20140749161	20140210
	MX2015010269 A1	20160510	MX20150010269	20140210
	US2014224648 AA	20140814	US20140177314	20140211
	US2015027879 AA	20150129	US20140508421	20141007
	US2015076002 AA	20150319	US20140529817	20141031
	US2015284267 AA	20151008	US20150744421	20150619
	US9096450 BB	20150804	US20140177314	20140211
	WO14124393 A1	20140814	WO2014US15628	20140210
	WO15054214 A1	20150416	WO2014US59444	20141007
	WO15066493 A1	20150507	WO2014US63461	20141031

Probable Assignee:	AQUAMOST INC
Assignee(s):(std):	ANDREWS EDWARD ; AQUAMOST INC ; ASMUTH ANTON ; BARRY TERENCE P ; KAPSOS DAVID ; DOOLITTLE CRAIG ; MYRE JAKE ; CARLSON ALAN
Inventor(s):(std):	ANDREWS EDWARD ; ASMUTH ANTON ; BARRY TERENCE P ; CARLSON ALAN ; DOOLITTLE CRAIG ; FRANK GRANT ; KAPSOS DAVID ; KROPP RAMSEY ; MYRE JAKE
Inventor(s):	TERENCE P BARRY ; JAKE MYRE ; EDWARD ANDREWS ; DAVID KAPSOS ; CRAIG DOOLITTLE ; ANTON ASMUTH ; ALAN CARLSON
Agent(s):	BORDEN LADNER GERVAIS LLP; GIBSON MARK; BOARDMAN AND CLARK LLP; HUSSIN CHRISTOPHER J
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR 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 PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9):	B82Y30/00 C02F1/32 C02F1/46 C02F1/461 C02F1/467 C02F1/72 C25B11/10 (Advanced/Invention)
CPC:	C02F1/283 C02F2307/10 C02F2201/4615 C02F1/725 C02F2001/46142 C02F2201/3227 C02F2209/02 C02F2209/42 C02F2305/10 C02F2201/4614 Y02W10/37 C02F1/463 C02F1/4674 C02F2103/008 C02F1/325 C02F2101/10 C02F2101/30 C02F2103/06 C02F2103/08 C02F2103/20 C02F2103/30 C02F2103/365 C02F2201/32 C02F2303/04 C02F1/4672 B82Y30/00 C25B1/003 C25B9/00

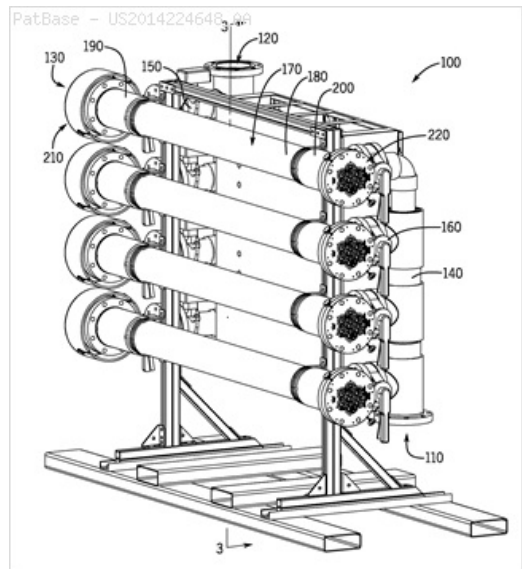
US class:	1/1 204/242 204/252 204/260 205/744 205/759 210/192
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[Classification Explorer](#)

Cited documents:	WO12123412 A1, WO06027659, US8663471 BA, US8658046 BB, US8658035 BB, US8568573 BB, US8398828 BA, US7862700 BB, US7683343 BB, US7425272 BB, US7326330 BB, US7230255 BB, US7008473 BB, US6645366 BB, US6589489 BB, US6547951 BA, US6524447 BA, US6409928 BA, US6409893 BA, US6379560 BA, US6261464 BA, US6218035 BA, US6180014 BA, US6180014 B1, US6159421 A, US6136186 A, US6074072 A, US5963417 A, US5935522 A, US5932111 A, US5858199 A, US5846390 A, US5736023 A, US5712037 A, US5622791 A, US5616152 A, US5603843 A, US5543034 A, US5449466 A, US5439624 A, US5395522 A, US5352359 A, US5308454 A, US5227342 A, US5215943 A, US5137607 A, US5116582 A, US5035784 A, US5022970 A, US4908109 A, US4793910 A, US4592807 A, US4521499 A, US4496440 A, US4471036 A, US4349765 A, US4181593 A, US4042758 A, US2282024 A, US2014291591 AA, US2013213900 AA, US2012279872 AA, US2012267240 AA, US2012160695 AA, US2012031852 AA, US2011215055 AA, US2011180423 AA, US2011114506 AA, US2010326833 AA, US2010294726 AA, US2010270167 AA, US2010209294 AA, US2010201239 AA, US2009320894 AA, US2009314711 AA, US2009281480 AA, US2009154060 AA, US2009130748 AA, US2008259338 AA, US2008220535 AA, US2008170971 AA, US2008156658 AA, US2008121531 AA, US2008050471 AA, US2007272877 AA, US2007251811 AA, US2007205097 AA, US2007131621 AA, US2007108056 AA, US2007020158 AA, US2006144700 AA, US2006124442 AA, US2006123885 AA, US2006060787 AA, US2005249659 AA, US2005224360 AA, US2005051439 AA, US2005014066 AA, US2004022700 AA, US2004020861 AA, US2003066750 AA, US2002185080 AA, US2002037240 AA, US2001042682 AA, US2001004962 AA, KR20110010953, KR20100003902, JP7039273, JP2011055795 A2, JP2007167029 A2, JP2007069124 A2, JP2006526500 T2, JP2006230345, JP2006061886 A2, JP2005193216 A2, JP2005152815 A2, JP2004154742 A2, JP2003200178 A2, JP2003200043 A2, JP2003190777 A2, JP2002059177 A2, JP2001170204 A2, JP2001136862 A2, JP2001062469 A2, JP2001029747 A2, JP2000210570 A2, JP2000201569 A2, EP2394963 A1, DE19602947 A1, CN2558656 Y, CN201031159 Y, CN1538939 A, CN101913678 A, CN101863548 A, CN101584996 A, CN101543771 A, CN101306851 A, CN101219371 A, CN101172674 A, CN101033105 A, CN100558652 C, CA2632788 AA,
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Forward Citations:	USD817439, US9981863, US9688560, US9475717, US2017225970, US2014054222, TWI572564,
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Abstract:
The present disclosure is generally directed to devices and methods of treating aqueous solutions to help remove or otherwise reduce levels, concentrations or amounts of one or more contaminants. The present disclosure relates to a system and apparatus which is adapted to receive components including at least one counterelectrode (e.g. cathode) and at least one photoelectrode (e.g. anode) provided or arranged around at least one UV light source, and/or receive, contain and/or circulate fluid or aqueous solution.



Title: DISPENSING/DOSING CLOSURE ASSEMBLY FOR ANY TYPE OF LIQUID CONTAINER AND FLOW-AND TEMPERATURE-CONTROLLED COOLED DISPENSER USING SAID CLOSURE ASSEMBLY

Priority: WO2013ES70208 20130327

Family:

Publication number	Publication date	Application number	Application date
WO14154916 A1	20141002	WO2013ES70208	20130327

Probable Assignee: ALENUR EXPORTACION S L

Assignee(s):(std): ALENUR EXPORTACION S L

Assignee(s): ALENUR EXPORTACION SL

Inventor(s):(std): GOMEZ LOPEZ LUIS MIGUEL ; MOLINA MARTINEZ VITALINIO DAVID ; PARRENO TORRES ALFONSO

Agent(s): CARVAJAL Y URQUIJO ISABEL ET AL

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

International class (IPC 8-9): B65D3/04 B65D47/26 (Advanced/Invention)

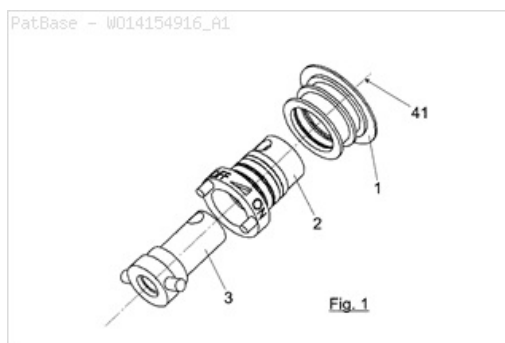
CPC: B65D47/263

[Classification Explorer](#)

Cited documents: US3561487 A, US2012138635 AA, US2011193004 AA, US2006249476 AA, JP7002266 A2, FR2596039 A1, FR1433967 A, DE29813832 U1, DE1816315 A1,

Abstract:

The invention relates to a dispensing/dosing closure assembly for any type of liquid container, comprising a hollow cylindrical female lid (2) into which a hollow cylindrical male lid (3) is inserted such that it can rotate relative to the female lid. Each lid includes outlet holes (13, 20) facing one another and end stops (17, 18) for limiting the relative rotational movement. Each lid can occupy two positions, namely: an open position in which the holes (13) in the female lid (2) are in communication with the holes (20) in the male lid (3), establishing a connection between the interior of the container and the outlet opening (21) for the liquid; and a closed position in which the holes (13) in the female lid (2) are not in communication with the holes (20) in the male lid (3). The invention also relates to a flow- and temperature-controlled cooled dispensing device that uses a dispensing/dosing closure assembly element suitable for any type of liquid container.



Title:

THERMAL ACTIVATED COLD WATER DIVERSION VALVE

Priority:

US20120680998P 20120808 US20130960623 20130806

Family:

Publication number	Publication date	Application number	Application date
US2015075631 AA	20150319	US20130960623	20130806
US8978993 BA	20150317	US20130960623	20130806

Probable Assignee:

ROMERO BERNABE

Assignee(s):(std):

ROMERO BERNABE

Inventor(s):(std):

ROMERO BERNABE

International class

B67D3/00 G05D23/02 G05D23/08 G05D23/275 G05D7/01 (Advanced/Invention)

(IPC 8-9):

CPC:

Y10T137/0391 Y10T137/7737 Y10T137/86308 F16K31/002 B67D3/00 E03B1/048

US class:

137/13 137/468 137/585 236/101A 236/101D 236/101R 236/91D 236/91R 236/93R

[Classification Explorer](#)

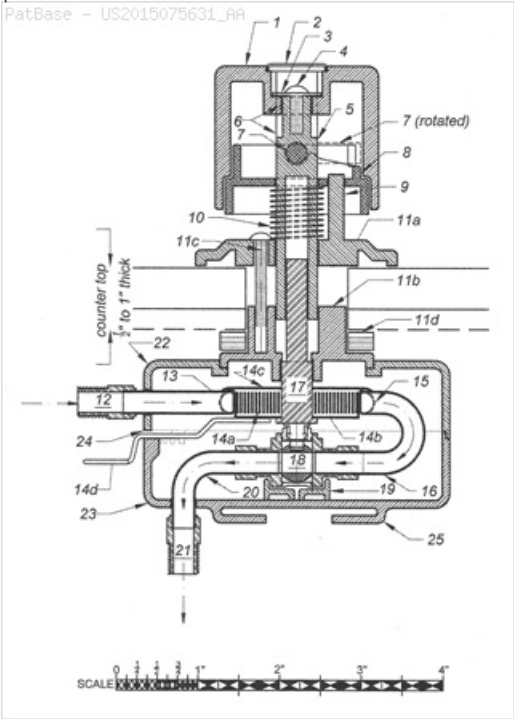
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US7934663 BB, US7707665 BA, US6588377 BA, US6219859 BA, US6032687 A, US5603344 A, US5277219 A, US5193780 A, US5042524 A, US4945942 A, US2603420 A, US2009095356 AA,

Forward Citations:

US9291281, US9285050, US2014158341, US2014158339,

Abstract:
A device that directs cooled and otherwise wasted water to storage for reuse is disclosed. The valve incorporates a single flow stream through internal piping around a thermally sensitive coil which imparts rotation for automatic closing of a valve upon arrival of heated water to the valve. Once closed, the device resets itself for the next activation and use. The device is basically self contained and requires only single point installation. The unit provides for many households to experience substantial saving on daily energy and water expenses. The installation can be readily retrofitted to existing structures or incorporated in new construction whether any be homes, apartments, hotels, condominiums and businesses with water distribution requirements. Further, the present invention, requiring no external energy input, offers an alternative to expensive circulating hot water systems incorporating substantial initial cost and extended energy consumption.



Title:
Priority:
Family:

BEVERAGE-DELIVERING SYSTEM WITH AUTOMATIC CONTAINER REPLACEMENT
ES20140030305 20140306 WO2015ES70159 20150305 ES20150031291 20150909

Publication number
ES2547497 AA
ES2547497 BA
ES2606341 AA
ES2606341 BA
WO15132441 A1

Publication date
20151006
20160713
20170323
20180525
20150911

Application number
ES20140030305
ES20140030305
ES20150031291
ES20150031291
WO2015ES70159

Application date
20140306
20140306
20150909
20150909
20150305

Probable Assignee:
Assignee(s):(std):
Assignee(s):
Inventor(s):(std):
Inventor(s):
Agent(s):
Designated states:

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

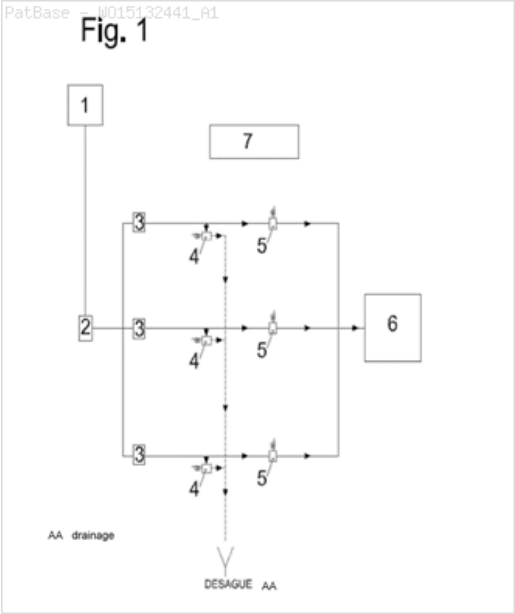
International class
(IPC 8-9):
CPC:

B67D1/00 B67D1/04 B67D1/12 (Advanced/Invention)

B67D1/0004 B67D2210/00097 B67D1/1245

[Classification Explorer](#)

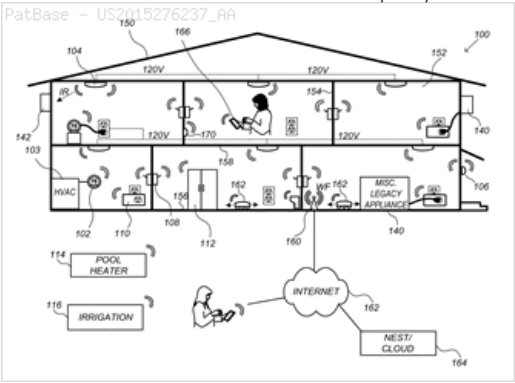
Abstract:
The invention relates to a system for delivering beverages from containers or barrels, comprising the combination of different devices which ensure the automatic replacement of the casks, containers, or barrels, without interruption and without requiring any manipulation, when the liquid of each corresponding container or barrel runs out.



Title:	MOUNTING STAND FOR MULTI-SENSING ENVIRONMENTAL CONTROL DEVICE																																																																			
Priority:	US20140229641 20140328	US20140229651 20140328	US20140229659 20140328																																																																	
	US20140229670 20140328	WO2015US22366 20150325	US20170444155 20170227																																																																	
	US20170725739 20171005																																																																			
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Publication number	Publication date	Application number	Application date																																																																	
EP2924532 A2	20150930	EP20150161257	20150327																																																																	
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Probable Assignee:	GOOGLE INC																																																																			
Assignee(s):(std):	GOOGLE INC ; GOOGLE LLC ; NEST LABS INC																																																																			
Inventor(s):(std):	CHAMBERLAIN JASON C ; DANIELS ERIC B ; DONG WILLIAM R ; FADELL ANTHONY M ; HIROFUMI HONJO ; HOLBROOK RICHARD W ; HONJO HIROFUMI ; HONJO SHIGEFUMI ; MATSUOKA YOKY ; ROGERS MATTHEW L ; SATTERTHWAITE EDWIN H ; SATTERTHWAITE JR EDWIN H ; SRINIVASAN SHYAM R ; VO HELEN ; WARREN DANIEL A																																																																			
Agent(s):	BOULT WADE TENNANT; KILPATRICK TOWNSEND AND STOCKTON LLP; BERGSTROM JAMES ET AL																																																																			
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR 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 PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW																																																																			
International class (IPC 8-9):	F24D11/00 F24D17/00 F24D19/10 F24D3/08 F24F11/00 F24H9/20 G01J5/00 G01J5/08 G05B11/01 G05B15/02 G05D23/19 G06N99/00 G06Q50/06 G08C19/16 H04L12/28 H04L12/64 H04L29/08 H04W4/00 (Advanced/Invention); G06N99/00 (Advanced/Non-invention)																																																																			
CPC:	F24D2220/003 G06N99/005 F24D11/002 F24D17/0031 F24D19/1066 F24D2200/04 G05B15/02 H04L12/6418 F24D3/08 H04L12/2827 H04L67/025 H04L2012/2841 F24D19/1018 F24D19/1048 F24D19/1081 F24D2220/04 F24F11/00 G05B2219/2614 G05B2219/2642 G05D23/1905 G05D23/1934 G06Q50/06 H04L12/2816 H04L2012/285 Y02B30/762 G01J5/0025 G01J5/08 F24D19/1009 F24D19/10 H04W4/70 F24F11/30 F24F11/46 F24F11/58 F24F11/62 H05K999/99																																																																			
US class:	165/237 236/51 237/2A 700/278 700/300																																																																			
Classification Explorer																																																																				
Cited documents:	WO15148596 A1, WO08054938 A2, WO07027554 A2, WO05019740 A1, US8659302 BA, US8630740 BB, US8594850 BA, US8255090 BB, US8091375 BB, US8067912 BB, US7900849 BB, US7847681 BB, US7844764 BB, US7841542 BA, US7775452 BB, US7748640 BB, US7673809 BB, US7648077 BB, US7634504 BB, US7571865 BB, US7562536 BB, US7537171 BB, US7510126 BB, US7476988 BB, US7360370 BB, US7181317 BB, US7174239 BB, US7167079 BB, US7156318 BA, US7083109 BB, US7055759 BB, US6997390 BB, US6956463 BB, US6886754 BB, US6851967 BB, US6851621 BA, US6798341 BA, US6623311 BA, US6622925 BB, US6513723 BA, US6356038 BB, US6337666 BA, US6336593 BA, US6315211 BA, US6213404 BA, US6102749 A, US6089310 A, US5950709 A, US5918474 A, US5808294 A, US5655709 A, US5646349 A, US5635896 A, US5611484 A, US5595342 A, US5570837 A, US5467921 A, US5462225 A, US5460327 A, US5456407 A, US5452762 A, US5422808 A, US5381950 A, US5251813 A, US5181389 A, US5161606 A, US5127464 A, US5107918 A, US5065813 A, US4948040 A, US4898229 A, US4815657 A, US4528459 A, US3159212 A, US2018011218 AA, US2017357856 AA, US2017223862 AA, US2016047573 AA, US2015276239 AA, US2015160339 AA, US2015102197 AA, US2014321160 AA, US2014142763 AA, US2014041846 AA, US2014031992 AA, US2013338839 AA, US201313926335, US201313926312, US201313926302, US201313842213, US2013099124 AA, US2013061021, US2012248211 AA, US2012173026 AA, US201213632152, US201213632112, US201213632070, US201213632041, US201213624881, US2012125559 AA, US2012061480 AA, US2012046859 AA, US2012031986 AA, US2012017611 AA, US2012000007, US2011253796 AA, US2011140972 AA, US201113269501, US2010298985 AA, US2010193592 AA, US2010182743 AA, US2010163635 AA, US2010131112 AA, US2010114382 AA, US2010084482 AA, US2010076605 AA, US2010070099 AA, US2010045470 AA, US2010006660 AA, US2009259713 AA, US2009236433 AA, US2009194601 AA, US2009143880 AA, US2009143879 AA, US2009140065 AA, US2009140064 AA, US2009140057 AA, US2009140056 AA, US2009099697 AA, US2009057425 AA, US2009057424 AA, US2008218245 AA, US2008161977 AA, US2008128523 AA, US2008094010 AA, US2008054082 AA, US2008015742 AA, US2008006708 AA, US2007241203 AA, US2007228183 AA, US2007221741 AA, US2007208461 AA, US2007183475 AA, US2007157639 AA, US2007132503 AA, US2007131787 AA, US2007105252 AA, US2007095082 AA, US2007045441 AA, US2007045432 AA, US2006186214 AA, US2005270151 AA, US2005159846 AA, US2005150967 AA, US2005145705 AA, US2005043907 AA, US2005040991 AA, US2005040250 AA, US2004238651 AA, US2004193324 AA, US2004164238 AA, US2004130454 AA, US2003213851 AA, US2003090243 AA, US2003037555 AA, US2002084943 AA, SI20556 C, JP9298780 A2, EP2302326 A1, EP0690363 A2, EP0660287 A1, EP0510807 A2, EP0447458 A1,																																																																			
Forward Citations:	WO18080743, WO17161291, USD816520, USD811392, US9992036, US9990002, US9985796, US9978194, US9974015, US9970672, US9964328, US9964316, US9955296, US9933177, US9920888, US9890971, US9848211, US9847569, US9843458, US9791839, US9784417, US9716902, US9692245, US9674932, US9651243, US9629475, US9581342, US9483933, US9464423, US9408282, US9234664, US2018058704, US2018027638, US2017351287, US2017344056, US2017299199, US2017289580, US2017270400, US2017206779, US2017178432, US2017082313, US2017071015, US2017062994, US2017006595, US2016330488, US2016269191, US2016183695, US2016177546, US2016173293, US2016169539, US2016161140, US2016138821, US2016124401, US2016123618, US2016054023, US2015276237, US2015145675, US2014237712, US2014174710, GB2553798, EP3321596, EP3318948, EP3217245, CN105259948,																																																																			

Abstract:

A thermostat stand for a thermostat device may include a base and a mounting fixture configured to receive a thermostat device. The thermostat stand may additionally include an opening configured to allow one or more wires to pass through the opening to connect to the thermostat device, the one or more wires originating from either a power supply or from the boiler control device. The thermostat stand may further include a reflective horizontal surface positioned such that motion detection of energy-emitting objects is enhanced by virtue of reflections of energy emissions off of the reflective horizontal surface into the occupancy sensor.



Title:	AUTOMATED FOOD PROCESSING SYSTEM AND METHOD							
Priority:	US20140031076P	20140730	US20140076188P	20141106	US20150133674P	20150316		
	US20150521542F	20150324	US20150154466P	20150429	US20150154489P	20150429		
	US20150808442	20150724	WO2015US41984	20150724	US20160555101F	20160218		
	US20160143058	20160429	WO2016US30199	20160429	US20160187396	20160620		
	US20170454994	20170309	US20170474991	20170330	US20170474980	20170330		
	US20170474989	20170330						

Family:	Publication number	Publication date	Application number	Application date
	CA2956573 AA	20170127	CA20152956573	20150724
	CA2984449 AA	20171030	CA20162984449	20160429
	EP3174442 A1	20170607	EP20150827341	20150724
	EP3174442 A4	20180530	EP20150827341	20150724
	JP2017528283 T2	20170928	JP20170526037T	20150724
	US2016029844 AA	20160204	US20150808442	20150724
	US2016270598 AA	20160922	US20160143058	20160429
	US2016296073 AA	20161013	US20160187396	20160620
	US2017172348 AA	20170622	US20170454994	20170309
	US2017202397 AA	20170720	US20170474980	20170330
	US2017202398 AA	20170720	US20170474989	20170330
	US2017202399 AA	20170720	US20170474991	20170330
	US9370279 BB	20160621	US20150808442	20150724
	US9629503 BB	20170425	US20160143058	20160429
	USD752971 S1	20160405	US20150521542F	20150324
	WO16018750 A1	20160204	WO2015US41984	20150724
	WO16176616 A1	20161103	WO2016US30199	20160429

Probable Assignee: NORTH AMERICAN ROBOTICS CORP

Assignee(s):(std): NORTH AMERICAN ROBOTICS CORP

Assignee(s): PINEDA ELVINE ; UDOMPHOL MATTHEW ; VENTURE LENDING AND LEASING VIII INC ; VU MY

Inventor(s):(std): PINEDA ELVINE ; UDOMPHOL MATTHEW ; VU MY

Agent(s): BORDEN LADNER GERVAIS LLP; COOPER JOHN; SHABBI S; FOLEY AND LARDNER LLP; JEFFREY; DIANA; SCHOX JEFFREY; KHAN SHABBI S ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR 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 PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): A47G19/30 A47J31/44 A47J31/60 A47J43/04 A47J43/042 A47J43/044 A47J43/046 A47J43/07 A47J47/00 B01F13/00 B01F15/00 B01F15/06 B01F3/12 B01F7/00 B01F7/18 B02C18/06 B08B9/093 B26D1/12 (Advanced/Invention); B01F15/00 (Advanced/Non-invention)

CPC: B01F7/0025 B01F15/063 B01F15/00435 B01F2215/0014 B01F2015/062 A47J43/0727 A47J43/042 B01F13/0098 B01F15/0074 B01F15/00876 B01F15/00896 B01F2015/00597 B01F7/18 B01F15/00162 B01F15/00785 B01F2015/00084 B01F15/00025 B08B9/093 A47J43/0716 A47J43/046 B01F7/1615 B01F13/065 B01F15/00032 B01F15/00357 B01F15/00733 B08B3/02 B08B5/02 H05K999/99

US class: 1/1 220/669 366/142 366/147 366/247 426/231 D9/429

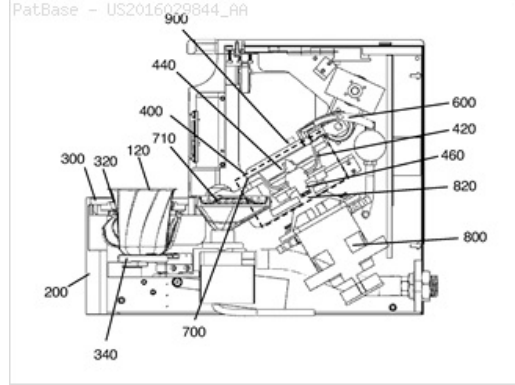
Locarno class: 09/03

[Classification Explorer](#)

Cited documents: WO12170821 A1, USD745825 S1, USD736617 S1, USD736614 S1, USD724426 S1, USD693673 S1, USD690198 S1, USD666904 S1, USD644924 S1, USD629683 S1, USD627636 S1, USD587995 S1, USD572133 S1, USD570650 S1, USD551909 S1, USD52692 S1, USD519831 S1, USD510843 S1, USD509109 S1, USD499645 S1, USD498390 S1, USD452434 S1, USD445310 S1, USD440829 S1, USD438794 S1, USD429150 S1, USD426160 S1, USD375683 S1, USD369971 S1, USD336041 S1, USD317568 S1, USD271378 S1, USD264686 S1, USD250929 S1, USD208829 S1, US9833109 BB, US8960999 BA, US8899147 BB, US8807823 BB, US8763515 BB, US8430257 BB, US7938574 BB, US7520662 BB, US7476018 BB, US7395726 BB, US7309156 BB, US7168845 BB, US7160023 BB, US7147365 BB, US7144150 BB, US6945157 BB, US6854875 BB, US6802641 BB, US6772675 BB, US6465034 BB, US6331070 BA, US6241381 BA, US6241380 BA, US6071006 A, US6068875 A, US5865538 A, US5803377 A, US5580007 A, US5439289 A, US5362509 A, US5351879 A, US5328263 A, US5326021 A, US5323956 A, US5253801 A, US5224623 A, US5208050 A, US5150967 A, US5067819 A, US5054933 A, US5042197 A, US4957373 A, US4883144 A, US4681030 A, US4676658 A, US4671666 A, US4547076 A, US4372686 A, US4247038 A, US4135828 A, US4042221 A, US3999742 A, US3854705 A, US3615673 A, US3505075 A, US3337109 A, US3164378 A, US3061279 A, US3029963 A, US2511357 A, US2232738 A, US2017202399 AA, US2017202398 AA, US2017202397 AA, US2017172348 AA, US2016367073 AA, US2016270598 AA, US2016029844 AA, US2015290607 AA, US2014211586 AA, US2014166530 AA, US2014043931 AA, US2013341446 AA, US2013272086 AA, US2013224341 AA, US2013217010 AA, US2012318810 AA, US2012087203 AA, US2010145522 AA, US2008279040 AA, US2008037360 AA, US2007119867 AA, US2006077756 AA, US2006039235 AA, US2005201198 AA, US2004120214 AA, US2004016761 AA, US2003226923 AA, US2003019871 AA, US2002189460 AA, US2001023870 AA, JP2002165710 A2, EP1026978 B1, EP1026978 A1, DE3208569 A1,

Forward Citations: WO18019620, USD769071, USD769070, US2016296073, GB2547106,

Abstract:
A system for food preparation, including a system body, a blade actuator retained by the system body; a set of blades; a blade platform rotatably mounting the set of blades, the blade platform pivotally connected along a first edge to the system body and operable between an engaged position and a disengaged position; and a container platform defining a container receptacle, the container platform pivotally connected along a first edge to the system body and operable between a loading position and a processing position.



Title:

WATER BLADDER SYSTEM AND RELATED METHODS

Priority:

US20030472429P 20030522 US20040850121 20040519 US20130805477P 20130326
US20140226720 20140326 US20150745288 20150619

Family:

Publication number	Publication date	Application number	Application date
CN106256376 A	20161228	CN201610069322	20160201
US2017073253 AA	20170316	US20150745288	20150619

Probable Assignee:

QORE SYSTEMS LLC

Assignee(s):(std):

QORE SYSTEMS LLC

Assignee(s):

CORE SYSTEMS LTD

Inventor(s):(std):

PETERSON II WILLIAM ROBERT ; PETERSON III WILLIAM ROBERT ; WILLIAM ROBERT PETERSON II ; WILLIAM ROBERT PETERSON III

International class (IPC 8-9):

A61L101/32 A61L2/232 C02F1/50 (Advanced/Invention);
A61L101/32 (Advanced/Non-invention)

CPC:

C02F1/50 C02F2303/04 A01N25/16 A01N55/00 A23L3/3463 A23L3/349 A23L3/358 A23V2002/00
A61L2/235 C02F1/002 A61L2/232

US class:

422/243

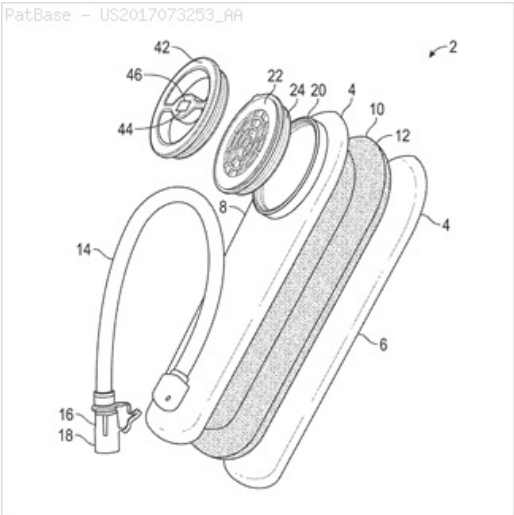
Classification Explorer

Cited documents:

US5954869 A, US5584409 A,

Abstract:

A water bladder system. An air valve, which may be a check valve, is configured to be coupled with the flexible container and selectively allow air to enter an interior of the flexible container. A release mechanism coupled with the flexible container selectively allows the fluid to exit the interior of the flexible container. An open-celled foam is included within the interior of the flexible container and is coated with a quaternary organosilane coating produced from a quaternary ammonium organosilane reagent.



Title:

APPARATUS, SYSTEMS, AND METHODS RELATING TO TRANSFER OF FLUIDS TO/FROM CONTAINERS AND/OR STORAGE/TRANSPORT OF FLUIDS IN CONTAINERS

Priority:

US20150825860 20150813

Family:

Publication number	Publication date	Application number	Application date
US2017043994 AA	20170216	US20150825860	20150813

Probable Assignee:

KRAENZLE DAVID G

Assignee(s):(std):

KRAENZLE DAVID G

Inventor(s):(std):

KRAENZLE DAVID G

International class

B67D1/00 B67D1/04 B67D1/08 B67D1/12 (Advanced/Invention)

(IPC 8-9):

CPC:

B67D1/0462 B67D1/0001 B67D1/0807 B67D2001/0822 B67D1/0805 B67D1/0869 B67D1/125 B67D1/1277

US class:

222/95

[Classification Explorer](#)

Cited documents:

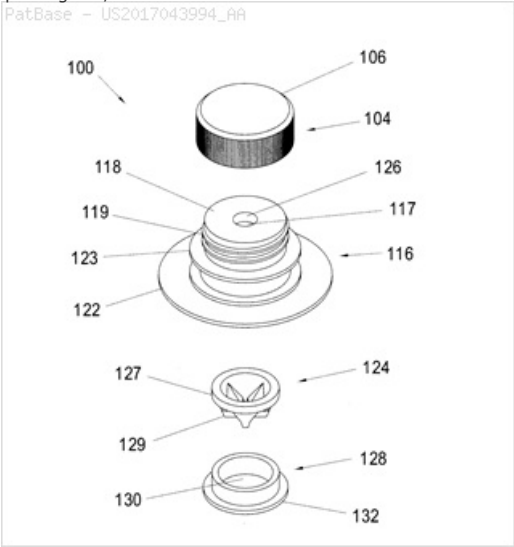
US9592944 BB, US9493278 BB, US9016528 BB, US8899445 BB, US8596496 BB, US8561856 BB, US8360278 BB, US8360277 BB, US7981090 BB, US7806299 BB, US7607555 BB, US7316329 BB, US7308991 BB, US6691893 BB, US6328543 BA, US6155465 A, US5782382 A, US5749861 A, US5732853 A, US5702019 A, US5673818 A, US5620434 A, US5613622 A, US5586690 A, US5520665 A, US5465938 A, US5390898 A, US5360413 A, US5280876 A, US5265766 A, US5251787 A, US5060826 A, US4996760 A, US4854486 A, US4842591 A, US4702397 A, US4570833 A, US4436519 A, US4436125 A, US4376634 A, US4264019 A, US4162030 A, US4143853 A, US4132334 A, US3922099 A, US2564163 A, US2263293 A, US2016251209 AA, US2014339258 AA, US2014319094 AA, US2014131380 AA, US2014117043 AA, US2012187158 AA, US2012187153 AA, US2010133273 AA, US2010024914 AA, US2009212071 AA, US2007235471 AA, US2006283879 AA, US2006249536 AA, US2006138177 AA, US2006043113 AA, US2004094572 AA, US2003102335 AA, US2003062383 AA, US2001002675 AA,

Forward Citations:

US2016059986, US2014183222,

Abstract:

Disclosed are exemplary embodiments of apparatus, systems and methods relating to transfer of fluids to/from containers and/or storage/transport of fluids in containers. In an exemplary embodiment, an apparatus comprises a container including a fitment having an opening. The apparatus may include a valve within the fitment. The valve may be configured to inhibit fluid flow out of the container. The apparatus may also include a transfer tube configured to be positioned through the opening of the fitment. The transfer tube may engage and open the valve to thereby provide an open passage to/from the container.



Title:
Priority:

Family:

WATER CONTAINER WITH FLOATABLE FILTER

US20130920021P 20131223
US20160375863P 20160816
US20170598234 20170517

US20140976276P 20140407
US20160348888 20161110
WO2017US43318 20170721

US20140302205 20140611
US20160420105P 20161110

Publication number	Publication date	Application number	Application date
CN107960061 A	20180424	CN201780001244	20170721
TW201808428 A	20180316	TW20170126218	20170803
US2017065914 AA	20170309	US20160348888	20161110
US9796600 BB	20171024	US20160348888	20161110
WO18034794 A1	20180222	WO2017US43318	20170721

Probable Assignee:
Assignee(s):(std):
Inventor(s):(std):
Agent(s):
Designated states:

BONVI WATER INC
BELL SPORTS INC ; BONVI WATER INC
DANIEL DAVID M ; REED DANIEL ; SHOTEY MARCUS J ; SWANSON JASON
BOOTH UDALL FULLER PLC; BOOTH KENNETH C
AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR
CU CY CZ DE DJ 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 IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG
MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC
SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class
(IPC 8-9):
CPC:
US class:

A47J31/20 B01D33/01 B01D35/02 B01D35/05 C02F1/00 (Advanced/Invention)
C02F2307/04 C02F2201/004 C02F1/003 A47J31/20 Y02A20/214
210/232

[Classification Explorer](#)

Cited documents:

WO05009215 A2, WO0057985 A1, US8313644 BB, US8216462 BB, US7955501 BB, US7807052 BB,
US7790117 BB, US7767087 BB, US7323104 BB, US6524477 BA, US6387260 BA, US6074550 A,
US5919365 A, US4151092 A, US3319577 A, US310204 A, US2014008311 AA, US2010320135 AA,
US2010065488 AA, US2007284300 AA, US2006151381 AA, RU2125974 C1, GB2197647 A1, FR3018459,
DE19603884 C1, DE1298882 B, CN104860368 A, CN104665434 A,

Abstract:
A portable drinking water filter system, such as a pitcher, having a floatable body including a filter opening configured to receive a water filter, the floatable body having a seal extending outward from an outer surface of the floatable body. The floatable body is disposed in a container cavity such that a body seal engages the sidewall and restricts water from passing between the floatable body and the sidewall. The seal is configured to create friction with the sidewall, wherein the friction created when the floatable body rises in the container is different than when the floatable body lowers in the container. The friction created when the floatable body rises in the container is greater than when the floatable body lowers in the container, allowing the floatable body to auto-retract toward a cavity base without burping.

