

Search query (4): [SP]: smooth interior water collection and storage assembly a water collection and storage assembly for receipt and gradual dispersion of water comprises a half pipe assembly defining a chamber and having an interior, the half pipe assembly having at least one half pipe having an inlet, an outlet, and a corrugated exterior comprising alternating ribs and valleys, wherein the chamber is defined by the interior of the half pipe assembly and the interior is smooth.

Results: 35

Search history

Search FT=(VERSICKERBOX~) (Results 3)

1:

Search FT=(VERSICKERBOX~) (Results 3)

2:

Search FT=(DRAIN~ AND WATER~ AND COLLECT~ AND RECUPERATION~ AND INFILTRATION~) (Results 323)

3:

Search [SP]: smooth interior water collection and storage assembly a water collection and storage assembly for receipt and gradual dispersion of water comprises a half pipe assembly defining a chamber and having an interior, the half pipe assembly having at least one half pipe having an inlet, an outlet, and a corrugated exterior comprising alternating ribs and valleys, wherein the chamber is defined by the interior of the half pipe assembly and the interior is smooth. (Results 35)

Title: SMOOTH INTERIOR WATER COLLECTION AND STORAGE ASSEMBLY

Priority: US20060797261P 20060503 US20070897326P 20070125 US20070744016 20070503
US20080018265 20080123

Family:

Publication number	Publication date	Application number	Application date
CN101260678 A	20080910	CN200810008839	20080125
EP1953297 A2	20080806	EP20080001233	20080123
EP1953297 A3	20100512	EP20080001233	20080123
US2007258770 AA	20071108	US20070744016	20070503
US2008181725 AA	20080731	US20080018265	20080123
US7628566 BB	20091208	US20080018265	20080123
US7887256 BB	20110215	US20070744016	20070503

Probable Assignee: MISKOVICH JOSEPH S

Assignee(s):(std): MISKOVICH JOSEPH ; MISKOVICH JOSEPH S

Inventor(s):(std): MISKOVICH JOSEPH ; MISKOVICH JOSEPH S

Agent(s): COYLE PHILIP AIDAN; MILLER CANFIELD PADDOCK AND STONE MARJORY G BASILE ESQ; MILLER CANFIELD PADDOCK AND STONE P L C C O ROBERT KELLEY ROTH; MILLER CANFIELD PADDOCK AND STONE PLC

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

International class (IPC 8-9): E02B11/00 E02B13/00 E02B5/08 E03B3/02 E03F1/00 E03F5/00 (Advanced/Invention); E02B11/00 E02B13/00 E02B5/00 E03B3/00 E03F1/00 E03F5/00 (Core/Invention)

CPC: E03F1/003 Y02A20/108

European class: E03F1/00B2

US class: 405/43 405/43P 405/43S 405/46 405/49 405/49P 405/51

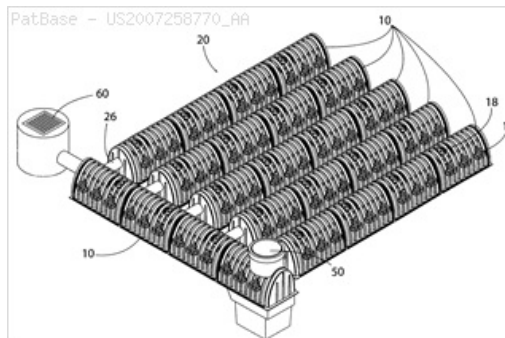
[Classification Explorer](#)

Cited documents: USD469187 S1, USD465545 S1, US980442 A, US89732607, US74401607, US7351006 BB, US7226241 BB, US7160059 BB, US6994490 BB, US6991734 BA, US6854925 BB, US6719490 BB, US6612777 BB, US6361248 BA, US6076992 A, US5996635 A, US5921711 A, US5839447 A, US5335945 A, US4950103 A, US4182581 A, US4182580 A, US2008240859 AA, US2008181725 AA, US2005100410 AA, US2004184884 AA, US2004101369 AA, GB2108623 A1,

DE202005012192 U1

Forward Citations: USD728825, US9885171, US9809968, US9739046, US9708807, US9637907, US9556576, US9371938, US9255394, US8894866, US8672583, US8414222, US8366346, US8147688, US7887256, US2015260313, US2013008841, US2011305513, US2011305512, US2010329788, US2010059430, US2007258770, NL2004892, GB2481498, GB2481498, EP2889435, EP2397615, EP2397615, DE102013225856, CN102535579,

Abstract:
A water collection and storage assembly for receipt and gradual dispersion of water comprises a half pipe assembly defining a chamber and having an interior, the half pipe assembly having at least one half pipe having an inlet, an outlet, and a corrugated exterior comprising alternating ribs and valleys, wherein the chamber is defined by the interior of the half pipe assembly and the interior is smooth.



Title: Subsurface fluid distribution apparatus and method

Priority: US19970787859 19970123

Family:

Publication number	Publication date	Application number	Application date
US5921711 A	19990713	US19970787859	19970123

Probable Assignee: EPIC GREEN HOLDINGS

Assignee(s): DON EVANS INC ; DON EVANS INC D B A EVCO PLASTICS ; EPIC GREEN HOLDINGS ; MATHEWSON CHARLES N ; SIPAILA JONAS Z

Inventor(s):(std): SIPAILA JONAS Z

International class (IPC 8-9): E03F1/00 (Advanced/Invention)

International class (IPC 1-7): E02B11/00

CPC: E03F1/003

European class: E03F1/00B2

US class: 405/45 405/46 405/49

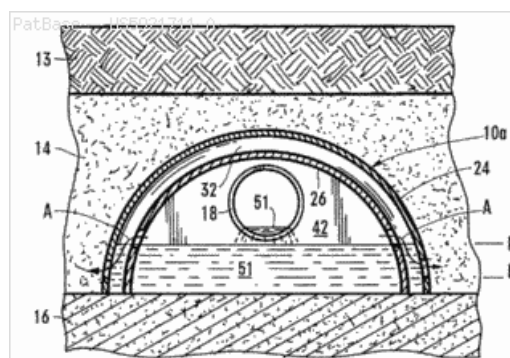
[Classification Explorer](#)

Cited documents: WO8101580 A1, US5383744 A, US5294212 A, US5156488 A, US5152634 A, US5074708 A, US5017041 A, US4950103 A, US4920694 A, US4904112 A, US4759661 A, US4740104 A, US4538377 A, US4402631 A, US4192628 A, US4188154 A, US4145157 A, US4094466 A, US4003408 A, US3946762 A, US3416321 A, US299347 A,

Forward Citations: USD728825, US9556604, US8815094, US8636444, US8632273, US8007201, US7887256, US7754072, US7637691, US7628566, US7517172, US7465390, US7309423, US7300577, US7273330, US7118669, US6991734, US6941972, US6854925, US6821424, US6739800, US6467995, US6443652, US6270661, US6202700, US2013105392, US2011174378, US2010008727, US2009297280, US2009232600, US2009071884, US2009067928, US2008240859, US2007258770, US2007033871, US2005269253, US2005098488, US2004223807, US2004101369, US2004016468, EP2889435, EP2248770, EP2248770, EP1953297,

Abstract:

A subsurface fluid distribution system for sewage effluent and irrigation water utilizes one or more arrays of serially connected leaching chambers. Each leaching chamber is a double-walled construction of arch-shaped cross section with an open bottom and closed ends. A plurality of vertically off-set openings are formed in the inner and outer walls, with the inner openings located at a higher liquid level than the outer openings to prevent clogging of the leaching chambers by either sand or root growth. The leaching chambers are connected to one another to permit fluid communication between adjacent chambers, and are installed below ground in shallow trenches that are backfilled with sand and then topped with top soil. The sewage effluent or irrigation water flows through the array of leaching chambers in an unpressurized flow. The even distribution of the fluid, both laterally and vertically, through the sand bed and then to the surrounding soil is enhanced by the capillary action properties of sand and the evapo-transpiration effect provided by the overlying plant growth.



Title:	FLEXIBLE PIPE CONNECTOR			
Priority:	US19920913143 19920714			
Family:	Publication number	Publication date	Application number	Application date
	US5335945 A	19940809	US19920913143	19920714
Probable Assignee:	TUF TITE INC			
Assignee(s):(std):	TUF TITE INC			
Assignee(s):	TUF TITE INC A OF IL CORP			
Inventor(s):(std):	MEYERS THEODORE W			
International class (IPC 8-9):	F16L25/00 F16L37/084 (Advanced/Invention); F16L25/00 F16L37/00 (Core/Invention)			
International class (IPC 1-7):	F16L21/00			
CPC:	Y10S285/903 F16L25/0045 E03F5/021 F16L37/084			
European class:	F16L25/00K2 F16L37/084			
US class:	285/236 285/383 285/423 285/903			

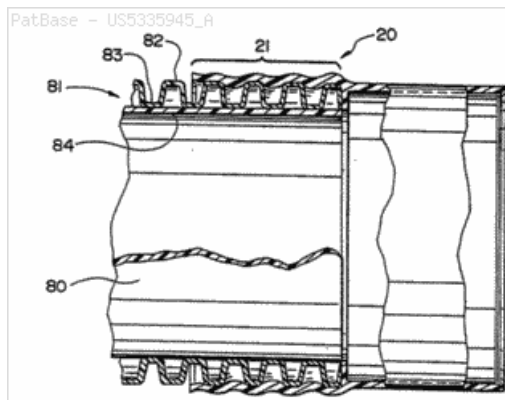
[Classification Explorer](#)

Cited documents: US5180197 A, US5180196 A, US5180195 A, US5060983 A, US5042844 A, US4923227 A, US4915425 A, US4909547 A, US4865357 A, US4779902 A, US4763695 A, US4747621 A, US4702502 A, US4690414 A, US4663036 A, US4247136 A, US4172607 A, US4141576 A, US4061368 A, US3899198 A, US3825288 A, US3785682 A, US3695643 A, US2270604 A, DE2906317 A1,

Forward Citations: WO09100522, USD752722, US8733405, US8419077, US7681586, US7661720, US7628566, US7543368, US7527065, US7520042, US7490397, US7434850, US7314066, US7240930, US7140648, US7096584, US7077166, US7077166, US7063358, US6994381, US6899359, US6854925, US6457725, US6399002, US5876039, US5711536, US5695222, US5609713, US2009211646, US2009206595, US2008284068, US2008210327, US2008197624, US2007137703, US2007126230, US2007079495, US2007075544, US2006123617, US2006049628, US2005184524, US2005184523, US2005177994, US2005121904, US2005104376, US2005048907, US2004187947, RU2474747, EP1922509, EP1694997, EP0978595, DE10357892, CN104196108, CN104196108,

Abstract:

A flexible pipe connector is disclosed having two female ends, each for receiving a length of corrugated pipe and creating a gravity flow water-tight seal between the two lengths of corrugated pipe. The flexible pipe connector is made of flexible, stretchable plastic material, with each female end having a receiving length with a mouth at a first end thereof and a stopping flange at a second end thereof. Each female receiving end is constructed to stretch radially outward along a substantial length of the corrugated pipe which is inserted into the mouth and receiving length, such that the receiving length exerts radially inward compressive forces against the outer diameter of the corrugated pipe effectuating a gravity flow water-tight seal. The invention also includes a male-to-female form of connector having a female end and a male end, which coupler is adapted to be used to connect a corrugated pipe to a flexible seal member of a drop box and is able to receive a speed leveling device. Additionally, a female-to-female connector for use in sealably connecting smooth-walled, hard plastic drain pipes. Clamp means are disclosed to assist the flexible pipe connector in creating a pressure water-tight seal.



Title: Cigarette filter containing a humectant

Priority: US19930002951 19930111 US19940363975 19941223 US19950543050 19951013
 AU19960045231 19951219 BR1995PI10674 19951219 JP19970522732T 19951219
 CA19952239494 19951219 CN19951098004 19951219 RU19980113716 19951219
 NZ19950300477 19951219 NZ19950336523 19951219 WO1995US16486 19951219
 US19960648314 19960515 US19960739316 19961031 JP19980513036 19970514
 WO1997US08285 19970514 US19980013483 19980126 US19990398638 19990917
 US20000716613 20001120

Family:	Publication number	Publication date	Application number	Application date
	AT206880 E	20011115	AT19950943867T	19951219
	AU199645231 A1	19970714	AU19960045231	19951219
	AU199731285 A1	19980505	AU19970031285	19970514
	AU199912172 A1	19990325	AU19990012172	19990121
	AU697996 B2	19981022	AU19960045231	19951219
	AU707775 B2	19990722	AU19990012172	19990121
	AU712657 B2	19991111	AU19970031285	19970514
	BRPI9510674 A	19991130	BR1995PI10674	19951219
	BRPI9711802 A	20000118	BR1997PI11802	19970514
	CA2239494 AA	19980604	CA19952239494	19951219
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	CA2254895 AA	19981113	CA19972254895	19970514
	CA2254895 C	20000125	CA19972254895	19970514
	CN1106810 C	20030430	CN19951098004	19951219
	CN1163163 C	20040825	CN19971095540	19970514
	CN1204948 A	19990113	CN19951098004	19951219
	CN1222058 A	19990707	CN19971095540	19970514
	DE69523345 D1	20011122	DE19956023345	19951219
	DE69523345 T2	20020905	DE19956023345T	19951219
	DK0868126 T3	20020128	DK19950943867T	19951219
	EP0868126 A1	19981007	EP19950943867	19951219
	EP0868126 B1	20011017	EP19950943867	19951219
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	EP0918474 A4	20000927	EP19970926544	19970514
	ES2165928 T3	20020401	ES19950943867T	19951219
	HK1020845 A1	20050225	HK20000100022	20000104
	JP11500926 T2	19990126	JP19970522732T	19951219
	JP11514888 T2	19991221	JP19980513036T	19970514
	JP2002233351 A2	20020820	JP20020035912	20020213
	JP3204511 B2	20010904	JP19970522732	19951219
	JP3451095 B2	20030929	JP19980513036T	19970514
	KR100281486 B1	20010215	KR19980704659	19980619
	KR100301342 B1	20011122	KR19980709154	19981113
	KR20000011004 A	20000225	KR19980709154	19970514
	NZ300477 A	20000128	NZ19950300477	19951219
	NZ333314 A	19991129	NZ19970333314	19970514
	NZ336523 A	20000428	NZ19950336523	19951219
	PT868126 T	20020429	PT19950943867T	19951219
	RU2155529 C2	20000910	RU19980122362	19970514
	RU2156099 C2	20000920	RU19980113716	19951219
	RU98113716 A	20000427	RU19980113716	19980720
	SI0868126 T1	20021031	SI19950030555T	19951219
	SI868126 T1	20021031	SI19950030555T	19951219
	US5501238 A	19960326	US19940363975	19941223
	US5746231 A	19980505	US19960648314	19960515
	US5839447 A	19981124	US19960739316	19961031
	US5860428 A	19990119	US19950543050	19951013
	US5975086 A	19991102	US19980013483	19980126
	US6164288 A	20001226	US19990398638	19990917
	US6530377 BA	20030311	US20000716613	20001120
	VN1915 A1	20010525	VN19980000515	19980616
	VN3663 A1	20030825	VN19980001009	19970514
	WO9722268 A1	19970626	WO1995US16486	19951219
	WO9815197 A1	19980416	WO1997US08285	19970514

Probable Assignee: FILLIGENT LTD**Assignee(s):(std):** CRAIG LESSER ; LESSER C ; VON BORSTEL REID W ; LESSER CRAIG ; FILLIGENT LTD ; BORSTEL REID W VON ; KREJG LESSER**Assignee(s):** C LESSER ; LESSER CRAIG PO BOX ; LESSER KREJG ; FILLIGENT LTD HONG KONG ; FEILIGEN CORP ; FILLIGENT LIMITED ; LESSER CRAFT THAT**Inventor(s):(std):** BORSTEL C LESSER R W VON ; BORSTEL R W VON ; BORSTEL REID VON DR ; BORSTEL REID W VON ; BORSTEL VON REID W ; KREJG LESSER ; LESSER C ; LESSER CRAIG ; LESSER KREJG ; CRAIG LESSER ; REID W VON BORSTEL ; REID V VON BORSTEL ; VON BORSTEL REID W ; VON BORSTEL REID V**Inventor(s):** VON BORSTEL W ; DR REID VON BORSTEL ; R W VON BORSTEL ; C LESSER ; C LESSER R W VON BORSTEL**Agent(s):** FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; GOWLING LAFLEUR HENDERSON LLP**Designated states:** AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GH GN GR HU IE IL IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU

International class (IPC 8-9): A24D3/00 A24D3/04 A24D3/06 A24D3/08 A24D3/14 B01J13/04 (Advanced/Invention); A24D3/00 A24D3/06 A24D3/14 (Advanced/Non-invention); A24D3/00 (Core/Invention)

International class (IPC 1-7): A24B15/00 A24B15/10 A24B15/18 A24B15/28 A24B15/30 A24D3/00 A24D3/04 A24D3/06 A24D3/14

CPC: A24D3/061 A24D3/14 B01J13/04

European class: A24D3/06B A24D3/14 B01J13/04

US class: 131/331 131/332 131/333 131/334 131/335 131/337 131/338 131/342 131/343 131/345 55/350.1

[Classification Explorer](#)

Cited documents: WO9722268 A1, WO9600019 A1, US5975086 A, US5860428 A, US5839447 A, US5746231 A, US5501238 A, US5249588 A, US5244880 A, US5218096 A, US5198363 A, US5060672 A, US5058607 A, US5009239 A, US4964426 A, US4946968 A, US4896683 A, US4848376 A, US4763674 A, US4761277 A, US4612942 A, US4537204 A, US4532947 A, US4508525 A, US4506684 A, US4489739 A, US4438775 A, US4434804 A, US4414988 A, US4396026 A, US4333484 A, US4260523 A, US4258730 A, US4257430 A, US4248251 A, US4194517 A, US4156431 A, US4138413 A, US4126708 A, US4126141 A, US4096158 A, US4092333 A, US4076031 A, US4037607 A, US3982897 A, US3886955 A, US3884246 A, US3674540 A, US3658070 A, US3355317 A, US3313305 A, US3279476 A, SU1163832 T, JP63152969 A2, JP6214774, JP62014774 A2, JP5768777, JP5739767, JP57138375 A2, JP57068777 A2, JP57039767 A2, JP5032171, JP50032171 A2, JP4861695, JP48061695 A2, JP2184629 A2, GB1435504 A, GB1305369 A, FR2149674 A5, FR2149674, FR149674, EP0649607 A2, EP0058463 A1, DE2702234 A1,

Forward Citations: WO9849911, WO9815197, WO14044044, WO12010880, WO08139042, WO07121439, WO07121439, WO04074449, WO04074449, WO04026053, WO03056945, WO03037114, WO0221948, WO0119210, US9943672, US9554594, US9532942, US9462828, US9220301, US9149451, US9101166, US9089163, US8826916, US8758561, US8734316, US8678013, US8602961, US8201564, US7946296, US7661432, US7628566, US7487782, US7232475, US7104265, US6959712, US6866045, US6832612, US6802891, US6796312, US6792953, US6789548, US6615842, US6571802, US6530377, US6524375, US6481442, US6281407, US6164288, US6153119, US6145511, US5975086, US5860428, US5839447, US2015315350, US2015264921, US2012165596, US2011232658, US2011220135, US2011184356, US2010206318, US2010186757, US2009025736, US2008199727, US2008149121, US2008029112, US2007215168, US2007215167, US2006289023, US2006278249, US2006032511, US2005211260, US2005166933, US2005161054, US2005145260, US2005000532, US2005000526, US2004200490, US2004173227, US2004122389, US2004091864, US2003234025, US2003183239, US2003119693, US2003116022, US2003005940, KR101230721, KR100699125, KR100695606, JP2010526550, JP2008532530, JP2002119270, GR1004550, GR1004550, EP2762020, EP2517584, EP2517584, EP2152103, EP1594376, EP1594376, EP1541044, EP1541044, EP1541043, EP1317192, EP1317192, EP1269087, EP1269087, EP1213977, EP0918474, CN107136559, CN105249528, CN104824836, CN102933104, CN102834027, CN102834027, CN102824887, CN102824887, CN102783708, CN102697181, CN102132953, AU2007237935, AU2004213840, AU2003252870, AU2003252870, AU2001242106,

Abstract:

A cigarette filter has a humectant, preferably sodium pyroglutamate, and optionally a surfactant. The humectant absorbs moisture from the tobacco smoke for wet-filtration of the tobacco smoke.

PatBase - W09815197_A1

INTERNATIONAL SEARCH REPORT		International Publication No. PCT/JP98/0260
A. CLASSIFICATION OF SUBJECT MATTER IPC CL. A24D 3/06 US CL. 131/331-131/334, 350, 359 According to International Patent Classification (IPC) or to both national classification and IPC		
B. PRIOR ART Minimum documentation searched (classification system followed by classification symbols) US : 131/331-131/334, 350, 359 Documentation searched after that minimum documentation to the extent the said document(s) included in the fields searched Electronic data base consulted during the international search phase of this case and, where practicable, search terms used APS		
C. DOCUMENTS CONSIDERED TO BE RELEVANT (Category) X US 4,414,988 A (YAGI) 18 November 1983, entire document. 6, 11 Y US 3,313,305 A (INDENICK) at all 11 April 1987, entire document. 1, 7, 12, 13 Y US 4,946,368 A (KRIMMER et al) 7 August 1990, entire document. 2-6, 8-10, 12-13 Y US 5, 501, 238 A (VDN BORSTEL et al) 26 March 1996, entire document. 2, 4, 5, 8, 10, 12, 13		
☐ Further documents are listed in the compilation of Box C. ☐ See paragraph 2, category 1.		
1. Special categories of cited documents 131 International Classification of the IPC is not used in the compilation of Box C. 132 Documents published after the international filing date or priority date but before the date of the international search report are not cited. 133 Documents published in a language other than English are not cited. 134 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 135 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 136 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 137 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 138 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 139 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 140 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 141 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 142 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 143 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 144 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 145 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 146 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 147 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 148 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 149 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English. 150 Documents published in a language other than English are cited only if they are in the English language or if they are in a language other than English and are accompanied by an abstract in English.		
Date of the actual completion of the international search 21 JULY 1997		Date of mailing of the international search report 15 AUG 1997
Name and mailing address of the ISA/IB Continuation of PCT/JP98/0260 ISA/IB Washington, D.C. 20540 Telephone No. (202) 352-3130		Authorized officer KELLY CHAKA Telephone No. (202) 352-3130

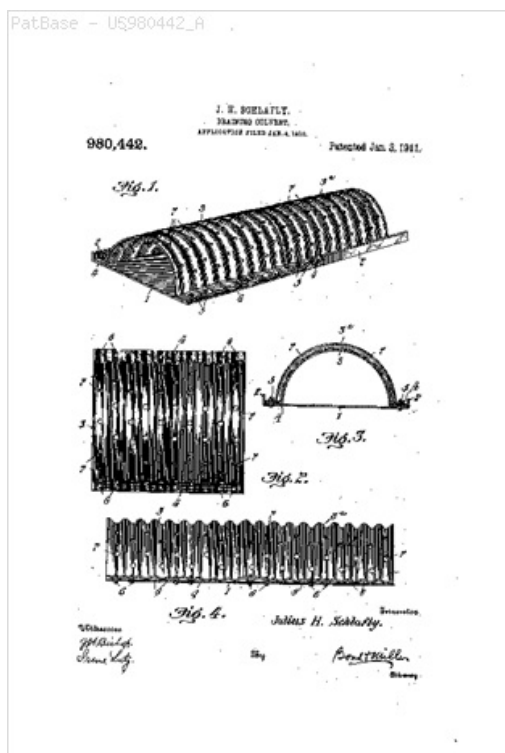
Title: DRAINING-CULVERT.
Priority: US19100536395 19100104
Family:

Publication number	Publication date	Application number	Application date
US980442 A	19110103	US19100536395	19100104

Probable Assignee: CANTON CULVERT CO
Assignee(s):(std): CANTON CULVERT CO ; CANTON CULVERT COMPANY
Inventor(s):(std): SCHLAFLY JULIUS H
Inventor(s): JULIUS H SCHLAFLY
CPC: E02B13/00 E03F1/003
US class: 138/159 138/173 405/48 405/49

[Classification Explorer](#)

Forward Citations: WO8001196, WO0188288, WO0188288, USD469187, USD465545, US9885171, US9850648, US9803326, US9765509, US9637907, US9556576, US9297135, US9255394, US8672583, US8491787, US8366346, US8322948, US8297880, US7841801, US7730673, US7628566, US7611306, US7585130, US7517172, US7473053, US7419331, US7351005, US7189027, US7118306, US7118306, US7052209, US7052209, US6854925, US6722818, US6719490, US6705800, US6361248, US6322288, US6273641, US6270287, US6129482, US6076993, US5669733, US5556231, US5498104, US5441363, US5336017, US5156488, US4523613, US4245924, US4163619, US3849991, US3495410, US3201507, US2866319, US2011305512, US2009067929, US2008240859, US2008010911, US2007264082, US2007154261, US2006289075, US2005074287, US2005074286, US2003095838, NL1027065, GB2481498, EP1285140,

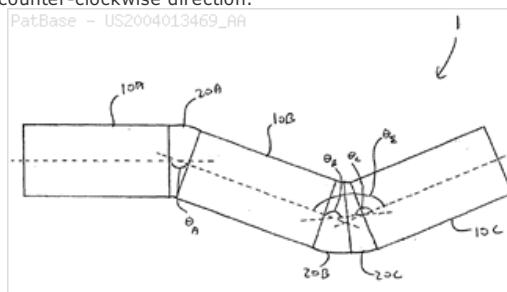


Title: ADJUSTABLE ANGLE COUPLER FOR LEACHING CHAMBER SYSTEMS**Priority:** US20000662473 20000915 CA20012357378 20010914 US20030619060 20030714
US20070620645 20070105 US20080193684 20080818

Family:	Publication number	Publication date	Application number	Application date
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	CA2357378 C	20101130	CA20012357378	20010914
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	US2007196175 AA	20070823	US20070620645	20070105
	US2009180834 AA	20090716	US20080193684	20080818
	US6592293 BA	20030715	US20000662473	20000915
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	US7413382 BB	20080819	US20070620645	20070105
	US8002497 BB	20110823	US20080193684	20080818

Probable Assignee: ISI POLYETHYLENE SOLUTIONS LLC**Assignee(s):(std):** PSA INC**Assignee(s):** P INC SA ; PNC BANK NATIONAL ASSOCIATION ; SEWER TAP INC ; SPARTAN CONCRETE INC ; STORMTECH LLC ; SHAFFER WILLIAM V ; ADS INT INC ; ADS STRUCTURES INC ; ADS VENTURES INC ; ADS WORLDWIDE INC ; ADVANCED DRAINAGE OF OHIO INC ; ADVANCED DRAINAGE SYSTEMS INC ; HANCOR INC ; ISI POLYETHYLENE SOLUTIONS LLC ; GENERAL ELECTRIC CAPITAL CORP ; HANCOR HOLDING CORP ; HANCOR INT INC ; MEDIA PLUS INC ; GRAY TERRANCE H ; HEDSTROM KRISTEN K ; EZFLOW LP ; INFILTRATOR SYSTEMS INC ; DEUTSCHE BANK NEW YORK BRANCH AG ; INFILTRATOR WATER TECHNOLOGIES LLC**Inventor(s):(std):** GRAY TERRANCE H ; HEDSTROM KRISTEN K ; SHAFFER WILLIAM V**Inventor(s):** GRAY TERRANCE ; SHAFFER WILLIAM ; HEDSTROM KRISTEN**Agent(s):** BORDEN LADNER GERVAIS LLP; RD JOHNSON AND ASSOCIATES PC; RODNEY D; R D JOHNSON AND ASSOCIATES PC; JOHNSON IP LAW FIRM; JOHNSON RODNEY D**International class (IPC 8-9):** E02B11/00 E02B13/00 E03F1/00 (Advanced/Invention)**International class (IPC 1-7):** E02B11/00 E02B13/00**CPC:** E03F1/003**European class:** E03F1/00B2**US class:** 138/105 138/105S 138/155 138/155S 405/36 405/43 405/43P 405/43S 405/44 405/46 405/48 405/48P 405/49[Classification Explorer](#)**Cited documents:** US77285 A, US7413382 BB, US7351006 BB, US7160059 BB, US6592293 BA, US6375388 BA, US6270287 BA, US6120209 A, US6076993 A, US5924821 A, US5669733 A, US5588778 A, US5215338 A, US4976288 A, US4807370 A, US4783318 A, US4305683 A, US241465 A, US2008124177 AA, US2007196175 AA, US2004013469 AA, US2003219310 AA, US1976628 A, US1873495 A, US1541918 A, US1497549 A, US1255023 A,**Forward Citations:** WO03100180, WO03100180, USD728825, US9739046, US9708807, US9371938, US8414222, US8337119, US8002497, US7955027, US7914231, US7887256, US7517172, US7413382, US7364384, US7351006, US7217063, US2013008841, US2012229081, US2011305513, US2010061805, US2009180834, US2008240859, US2008226394, US2008124177, US2007258770, US2007196175, US2007077122, US2005111915, US2003219310,**Abstract:**

An adjustable coupler is disclosed for interconnecting leaching chambers to create a serpentine pathway for a leaching field. A coupler can connect a first leaching chamber and a second leaching chamber. The coupler can comprise a mating feature and an adjustment feature. The mating feature can be used to mate the coupler between the first leaching chamber and the second leaching chamber. The mating feature can include a swivel connector matable to an end of one of the chambers. The adjustment feature can adjust the angle between the first chamber and the second chamber between a range of angles. The adjustment feature can include a swivel connector. The range of angles can be particularly chosen to be about 45 degrees. More particularly, the range of angles can be about 22.5 degrees in either the clockwise or counter-clockwise direction.



Title:

TOP PORTAL FOR A WATER DISTRIBUTING CHAMBER

Priority:

US20020156680F 20020306

Family:

Publication number	Publication date	Application number	Application date
USD465545 S1	20021112	US20020156680F	20020306

Probable Assignee:

MAESTRO ROBERT M

Assignee(s):(std):

MAESTRO ROBERT M

Inventor(s):(std):

MAESTRO ROBERT M

US class:

D23/200 D23/267

[Classification Explorer](#)

Cited documents:

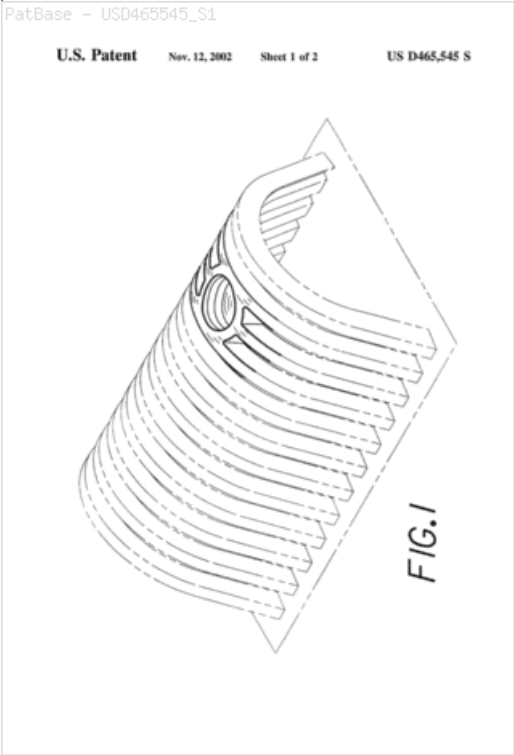
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Forward Citations:

USD728825, USD706609, USD566852, US8491224, US8147688, US7887256, US7628566, US2010059430, US2009220302,

Abstract:

1. The ornamental design for a top portal for a water distributing chamber, as shown and described.



Title:

Priority:

Family:

Probable Assignee:

Assignee(s):

Inventor(s):(std):

US class:

Classification Explorer

Cited documents:

Forward Citations:

PAIRED SIDE PORTAL STRUCTURE FOR A WATER DISTRIBUTING CHAMBER

US20020156644F 20020306

Publication number	Publication date	Application number	Application date
USD469187 S1	20030121	US20020156644F	20020306

MAESTRO ROBERT M

MAESTRO ROBERT M

MAESTRO ROBERT M

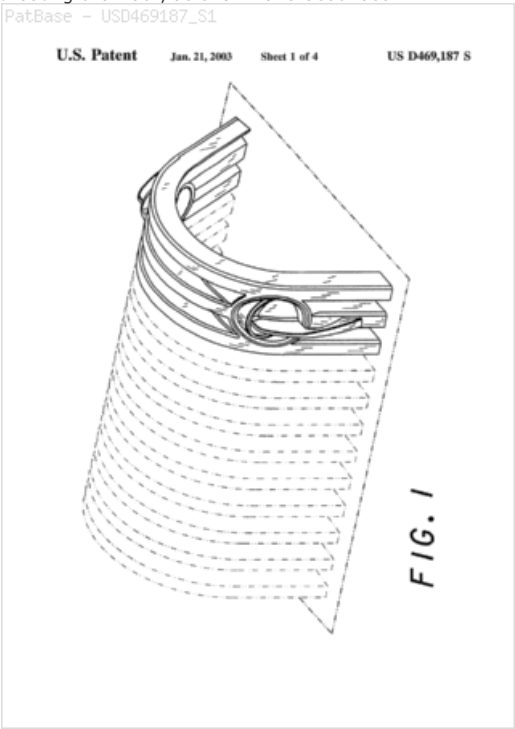
D25/1

USD454203, US980442, US5890838, US5773756, US5588778, US5087151,

USD728825, US8491224, US8147688, US7887256, US7628566, US2010059430, US2009220302,

Abstract:

1. The ornamental design for a paired side portal structure for a water distributing chamber, as shown and described.



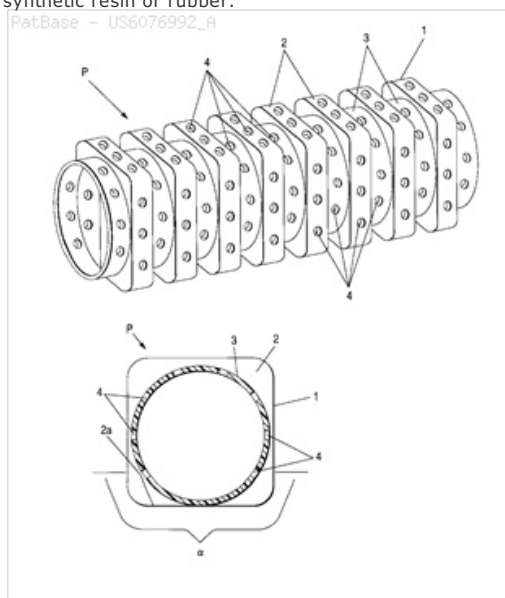
Title: Underdrain pipe
Priority: JP19960114172 19960410 CA19972202233 19970409 KR19970013243 19970410
Family:

Publication number	Publication date	Application number	Application date
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KR100486948 B1	20050804	KR19970013243	19970410
KR19970070679 A	19971107	KR19970013243	19970410
MY121661 A	20060228	MY19970001566	19970410
TH20367 B	20060815	TH19971001334	19970409
TH35035 A	19990921	TH19971001334	19970409
TW324039 B	19980101	TW19970104644	19970409
US6076992 A	20000620	US19970838535	19970409

Probable Assignee: TOTAKU IND INC
Assignee(s):(std): TOTAKU IND ; TOTAKU IND INC ; TOUTAKU KOGYO KK
Assignee(s): FUKUI KOUKI ; KIKUMORI YASUHIRO ; TOTAKU INDUSTRIES INC ; TOTAKU KOGYO KK ; TOTAKU KOGYO KKJP
Inventor(s):(std): FUKUI HIROTAKE ; FUKUI KOKI ; FUKUI KOUKI ; KIKUMORI YASUHIRO
Inventor(s): YASUHIRO KIKUMORI ; KOUKI FUKUI
Agent(s): RICHES MCKENZIE AND HERBERT LLP
International class (IPC 8-9): E02B11/00 E02B13/00 E02D3/10 E03B7/02 F16L11/00 F16L3/26 F16L9/12 (Advanced/Invention); F16L3/26 (Advanced/Non-invention); E02B11/00 (Core/Invention); E02D3/10 (Core/Non-invention)
International class (IPC 1-7): E02B11/00 E02B13/00 E02D3/10 E03B7/02 F16L11/00 F16L3/26 F16L9/12
CPC: E02B11/005
European class: E02B11/00B
US class: 138/106 138/121 138/177 405/36 405/43 405/44 405/45 405/49
[Classification Explorer](#)
Cited documents: US970383 A, US5839477 A, US5832960 A, US5799703 A, US5120038 A, US4950103 A, US4930936 A, US4650367 A, US4624603 A, US3693664 A, US2230306 A, GB2016639 A1,
Forward Citations: WO12162773, USD499166, US7628566, US7451784, US7249431, US7207747, US7134456, US6854925, US6527477, US2015136255, US2010176216, US2008017729, US2006289075, US2006162799, US2005000583, US2004035166, KR100862167, KR100862166,

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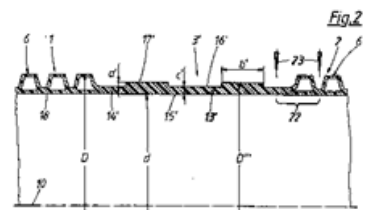
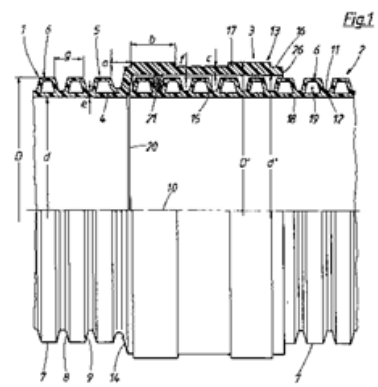
An underdrain pipe has a pipe wall in which wall portions rectangular in section and wall portions circular in section are disposed alternately in a longitudinal direction of the pipe, in which a number of water collecting small holes are formed in portions of the pipe wall, and in which the whole of the pipe wall is formed of material of synthetic resin or rubber.



Title:	Composite pipe with a socket and method for its manufacture																																							
Priority:	DE19961004311 19960207 CA19972196713 19970204		DE19961004311U 19960207 DE19975002650 19970129																																					
Family:	<table><tr><th>Publication number</th><th>Publication date</th><th>Application number</th><th>Application date</th></tr><tr><td>CA2196713 AA</td><td>19970807</td><td>CA19972196713</td><td>19970204</td></tr><tr><td>CA2196713 C</td><td>20041116</td><td>CA19972196713</td><td>19970204</td></tr><tr><td>DE19604311 A1</td><td>19970814</td><td>DE19961004311</td><td>19960207</td></tr><tr><td>DE59702650 D1</td><td>20001228</td><td>DE19975002650</td><td>19970129</td></tr><tr><td>EP0789176 A1</td><td>19970813</td><td>EP19970101310</td><td>19970129</td></tr><tr><td>EP0789176 B1</td><td>20001122</td><td>EP19970101310</td><td>19970129</td></tr><tr><td>JP9226016 A2</td><td>19970902</td><td>JP19970022901</td><td>19970205</td></tr><tr><td>US5996635 A</td><td>19991207</td><td>US19970797457</td><td>19970206</td></tr></table>				Publication number	Publication date	Application number	Application date	CA2196713 AA	19970807	CA19972196713	19970204	CA2196713 C	20041116	CA19972196713	19970204	DE19604311 A1	19970814	DE19961004311	19960207	DE59702650 D1	20001228	DE19975002650	19970129	EP0789176 A1	19970813	EP19970101310	19970129	EP0789176 B1	20001122	EP19970101310	19970129	JP9226016 A2	19970902	JP19970022901	19970205	US5996635 A	19991207	US19970797457	19970206
Publication number	Publication date	Application number	Application date																																					
CA2196713 AA	19970807	CA19972196713	19970204																																					
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Probable Assignee:	HEGLER RALF PETER																																							
Assignee(s):(std):	HEGLER RALF PETER ; HEGLER RALPH PETER ; HEGLER RALPH PETER DR ING																																							
Assignee(s):	HEGLER RALPH PETER DR ING 97688 BAD KISSINGEN DE ; RARUFU PEETAA HEEGURAA																																							
Inventor(s):(std):	HEGLER RALPH PETER ; HEGLER RALPH PETER DR ING ; RARUFU PEETAA HEEGURAA																																							
Inventor(s):	HEGLER RALPH PETER DR ING 97688 BAD KISSINGEN DE																																							
Agent(s):	MARKS AND CLERK																																							
Designated states:	DE FR GB IT																																							
International class (IPC 8-9):	B29C47/06 B29C57/04 B29D23/00 B29D23/18 F16L11/11 F16L21/02 F16L25/00 F16L9/12 F16L9/133 (Advanced/Invention); B29K23/00 (Advanced/Non-invention); B29C47/06 B29C57/00 B29D23/00 F16L11/11 F16L21/02 F16L25/00 F16L9/00 (Core/Invention)																																							
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European class:	B29C47/00J10 B29C47/12D B29C57/04 F16L11/11 F16L25/00K L29L16/00 L29L23/18C																																							
US class:	138/109 138/121 138/137																																							
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Cited documents:	WO8800005 A1, US5678610 A, US5653265 A, US5619878 A, US5472659 A, US5460416 A, US5320797 A, US5284184 A, US5097871 A, US5071173 A, US4779651 A, US4131407 A, FR2657943 A1, EP0563575 B1, EP0440566 A1, EP0385465 A2, EP0135634 A2, DE4325021 C1, DE4325021 A1, DE4240268 A1, DE4210482 A1, DE3701822 C2, DE3603481 A1, DE19504501 A1, DE1909468 U, DE1909468 A1,																																							
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Abstract:

A composite pipe comprises and internal pipe and a corrugated external pipe and a socket formed in one piece with the internal pipe and the external pipe. This socket has a connecting section of substantially cylindrical shape and at least one reinforcing rib formed on the outside of the connecting section, $a \leq 2b$ applying to the length b of the reinforcing rib in the direction of the central longitudinal axis in relation to its thickness $+E$, $uns a+EE$ radial to the central longitudinal axis 10.

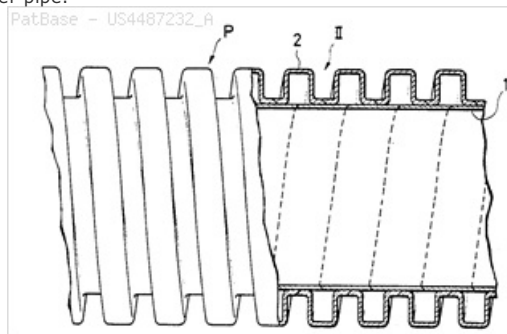


Title: Doubled-walled corrugated synthetic resin pipe**Priority:** JP19810139647U 19810918

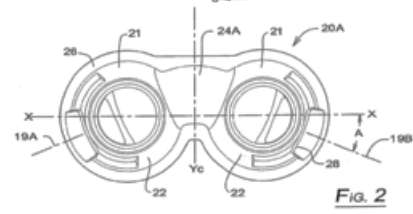
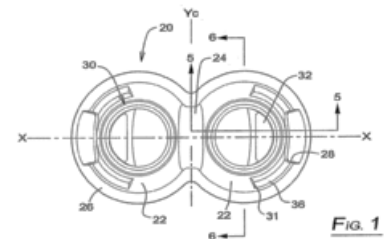
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	GB2108623 A1	19830518	GB19820013754	19820510
	GB2108623 B2	19850530	GB19820013754	19820510
	JP58044583 U1	19830325	JP19810139647U	19810918
	JP64005175 Y2	19890209	JP19810139647U	19810918
	US4487232 A	19841211	US19820390607	19820621

Probable Assignee: KANAO SHIGEKI**Assignee(s):(std):** KANAO SHIRO**Assignee(s):** SHIRO KANAO ; KANAO CHIZUKO ; KANAO SHIGEKI**Inventor(s):(std):** KANAO SHIRO**Inventor(s):** SHIRO KANAO**International class (IPC 8-9):** F16L11/11 F16L11/118 F16L11/16 (Advanced/Invention); F16L11/00 F16L11/11 (Core/Invention)**International class (IPC 1-7):** F16L11/11 F16L9/12 F16L9/14 F16L9/16 F16L9/18**CPC:** F16L11/118 F16L11/16**European class:** F16L11/118 F16L11/16**US class:** 138/122 138/150 138/154 138/173[Classification Explorer](#)**Cited documents:** US4303104 A, US4129152 A, US3538209 A, US3477891 A, US3330303 A, US3204666 A, US2898941 A, US2890723 A, US1287945 A, DE2637995 A1, DE2613386 A1, DE2263368 A1, DE2141281 A1, DE1909468 U, AT237395 B,**Forward Citations:** WO8705376, WO14088430, WO10086819, WO06111536, WO0229298, WO0229298, USD728825, US9885171, US9637907, US9556576, US9255394, US8820364, US8672583, US7896748, US7490632, US7214135, US7156128, US7089965, US7064276, US7063108, US7004202, US6905286, US6840285, US6817632, US6644357, US6186182, US5580186, US5573038, US5558464, US5478171, US5385174, US5358358, US5316047, US5284185, US5259418, US5222288, US5124109, US5099888, US5060696, US5007462, US4998563, US4867203, US4862924, US4800928, US4779651, US4754781, US4714508, US4624603, US2008039217, US2007256751, US2007181203, US2006283515, US2006022468, US2005103392, US2005098342, US2005092383, US2005049054, US2005039810, US2004129328, US2004094222, US2002124899, JP63104783, JP62098883, JP62030081, GB2340197, GB2186943, FR2547766, EP2928533, EP1953297, EP1582796, EP1170843, EP0405163, EP0322508, EP0273095, EP0269338, EP0246360, EP0231446, EP0213674, DE3603481, DE102008007226, CN105972330, CN104315327, CN103542189, CN103453240, CN103453240, CN102620068, CN101788088, BE1018636,**Abstract:**

A double-walled corrugated synthetic resin pipe comprises a straight inner pipe, and a corrugated outer pipe surrounding the inner pipe, and joined integrally thereto. The inner pipe is formed by a spirally wound flat strip of a synthetic resin having adjoining turns joined to each other along their adjoining edges, and has a generally even outer surface. The outer pipe is formed by a spirally wound corrugated synthetic resin strip also having adjoining turns thereof joined to each other along their adjoining edges. The outer pipe has a corrugation defined by a ridge portion, a groove portion, and an intermediate portion, and the groove portion has an inner surface joined to the outer surface of the inner pipe.



Title:	LEACHING CHAMBERS JOINED TOGETHER WITH SWIVEL CONNECTIONS																																																	
Priority:	US20020382144P 20020520		US20030442810 20030520		US20040018148 20041220																																													
	US20040018201 20041220		US20080012396 20080131																																															
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Publication number	Publication date	Application number	Application date																																															
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US7611306 BA	20091103	US20040018201	20041220																																															
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WO03100180 A2	20031204	WO2003US15677	20030520																																															
WO03100180 A3	20041125	WO2003US15677	20030520																																															
Probable Assignee:	INFILTRATOR WATER TECHNOLOGIES LLC																																																	
Assignee(s):(std):	BROCHU RONALD ; BROCHU RONALD P ; BURNES JAMES J ; COPPES BRYAN A ; CRESCENZI DONALD ; AMBROSINO MICHAEL J ; INFILTRATOR SYSTEMS INC ; INFILTRATOR SYSTEMS																																																	
Assignee(s):	GE BUSINESS FINANCIAL SERVICES INC ; GE BUSINESS FINANCIAL SERVICES INC WAS MERRILL LYNCH ; GENERAL ELECTRIC CAPITAL CORP ; INFILTRATOR SYSTEMS INC WAS KNOWN AS WATER SYSTEMS ACQUISITION CORP. ; MERRILL LYNCH CAPITAL A DIVISION OF MERRILL LYNCH BUSINESS FINANCIAL SERVICES INC ADMINISTRATIVE AGENT AS ; ISI POLYETHYLENE SOLUTIONS LLC ; GE BUSINESS FINANCIAL SERVICES INC WAS MERRILL LYNCH BUSINESS FINANCIAL SERVICES INC AS ADMINISTRATIVE AGENT. ; EZFLOW LP WAS KNOWN AS RING INDUSTRIAL GROUP LP. ; INFILTRATOR WATER TECHNOLOGIES LLC ; MERRILL LYNCH CAPITAL A DIVISION OF MERRILL LYNCH ; AMERICAN CAPITAL FINANCIAL SERVICES INC ; DEUTSCHE BANK NEW YORK BRANCH AG ; EZFLOW LP																																																	
Inventor(s):(std):	BROCHU RONALD P ; BURNES JAMES ; HALLAHAN DENNIS F ; CRESCENZI DONALD ; COPPES BRYAN A ; BURNES JAMES J ; BROCHU RONALD ; AMBROSINO MICHAEL J																																																	
Agent(s):	LAW OFFICES OF STEVEN MCHUGH LLC; NESSLER C; MCHUGH S; C; S; NESSLER C G; C G; STEVEN; CHARLES; STEVEN M																																																	
Designated states:	AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR																																																	
International class (IPC 8-9):	E02B11/00 E03F1/00 (Advanced/Invention); E02B11/00 (Core/Invention)																																																	
International class (IPC 1-7):	B65F5/00 E02B11/00 E02B13/00 E03F																																																	
CPC:	E03F1/003 E02B11/005																																																	
European class:	E02B11/00B E03F1/00B2																																																	
US class:	405/129.85 405/129.850S 405/39 405/39P 405/46 405/47 405/47S 405/48 405/48P 405/49																																																	
Classification Explorer																																																		
Cited documents:	USD477381 S1, USD329684 S1, US980442 A, US6698975 BA, US6679653 BA, US6602023 BB, US6592293 BA, US6375388 BA, US6270287 BA, US6129482 A, US6076993 A, US5890838 A, US5669733 A, US5588778 A, US5511903 A, US5441363 A, US5419838 A, US5401116 A, US5394046 A, US5087151 A, US5017041 A, US4848046 A, US4759661 A, US4655013 A, US4245924 A, US3999337 A, US3955328 A, US3802133 A, US3365855 A, US3154888 A, US3054342 A, US2153789 A, US2004101369 AA, US2002044833 AA,																																																	
Forward Citations:	WO11002500, WO10090755, WO10090755, USD739614, USD728825, US9957987, US9885171, US9637907, US9580899, US9556576, US9273456, US9255394, US9045873, US8801326, US8672583, US8491224, US8425148, US8322948, US8297880, US8147688, US8002497, US7914230, US7887256, US7806627, US7517172, US7500805, US7311467, US7217063, US2015016874, US2011293371, US2010329789, US2010329788, US2010329787, US2010196099, US2010059430, US2009279953, US2009220302, US2009180834, US2009067929, US2008240859, US2007258770, US2006233612, US2005111915, US2005074288, EP1749943,																																																	
Abstract:	Arch shape cross-section leaching and stormwater chambers are connected together so that swiveled angling is obtained at the joint. Angling is accomplished by means of an integral or detachable dome end comprising a conical section. A like chamber with an ordinary end mates by overlapping the dome. Or a like chamber may have an opposing and overlapping end, which also comprises a dome. A coupling for connecting two ordinary end chambers is comprised of two spaced apart conical domes spaced apart by a connector. The connector between the domes is optionally straight or angled. The couplings enable chambers to be connected at diverse angles to each other, as well as to be connected parallel with offset, i.e., with ziqzaq path.																																																	



Title:	STORM WATER RESERVOIR WITH LOW DRAG			
Priority:	US20020233975 20020903		CA20032438383 20030903	
Family:	Publication number	Publication date	Application number	Application date
	CA2438383 AA	20040303	CA20032438383	20030903
	CA2438383 C	20080729	CA20032438383	20030903
	US2004101369 AA	20040527	US20020233975	20020903
	US6854925 BB	20050215	US20020233975	20020903

Probable Assignee: DITULLIO ROBERT J
Assignee(s):(std): DITULLIO ROBERT J
Inventor(s):(std): DITULLIO ROBERT J
Agent(s): SMART AND BIGGAR; ST ONGE STEWARD JOHNSTON AND REENS LLC
International class (IPC 8-9): E02B11/00 E03F1/00 E03F3/04 (Advanced/Invention); E02B11/00 E03F1/00 (Core/Invention)
International class (IPC 1-7): B32B27/32 B32B31/04 E02B11/00 E02B13/00 F16L11/15
CPC: E02B11/005 E03F1/003
European class: E02B11/00B E03F1/00B2
US class: 138/105 138/128 138/173 405/124 405/36 405/43 405/43S 405/46 405/49 405/49P

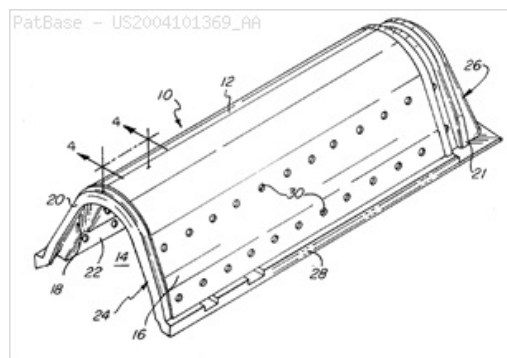
[Classification Explorer](#)

Cited documents: WO9102143 A1, US980442 A, US6461078 BA, US6322288 BA, US6129482 A, US6126209 A, US6076992 A, US5996635 A, US5921711 A, US5890837 A, US5839477 A, US5335945 A, US4950103 A, US4182581 A, US4182580 A, US3957084 A, US3926222 A, US3830373 A, US2002044833 AA, US2001013673 AA,

Forward Citations: WO10011707, USD793963, USD787649, USD773696, USD728825, USD668318, USD638095, USD638094, USD630294, USD613819, USD566852, USD537912, US9809968, US9771706, US8820800, US8636444, US8518202, US8496810, US8491224, US8337119, US8147688, US8007201, US7887256, US7798747, US7637691, US7628566, US7585130, US7517172, US7451784, US7384212, US7237981, US2010329788, US2010059430, US2010021664, US2010008727, US2009220302, US2009127852, US2009067928, US2008240859, US2008181725, US2008124177, US2007292210, US2007258770, US2007071556, US2007071555, US2006162799, US2005074286, EP2889435, DE102013225856,

Abstract:

A system using pre-molded polyethylene galleries, utilized for septic or storm water applications, to facilitate rapid and even distribution of effluent and particles across the gallery installation when utilized as a septic system, or minimizes the resistance to storm water flow when used to dissipate storm water runoff.



Title: Underdrainage pipe**Priority:** JP19770032097 19770318 JP19770032097U 19770318

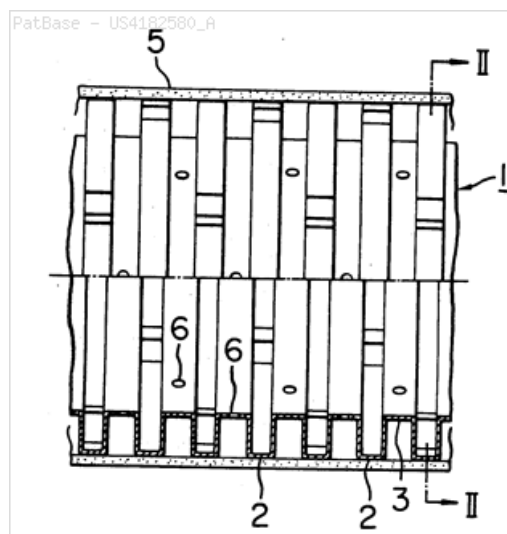
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	AU197834162 A1	19790920	AU19780034162	19780315
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	CA1073226 A1	19800311	CA19780298784	19780313
	DE2811772 A1	19781019	DE19782811772	19780317
	DE2811772 C2	19840809	DE19782811772	19780317
	FR2384193 A1	19781013	FR19780007893	19780317
	FR2384193 B1	19821112	FR19780007893	19780317
	GB1578691 A	19801105	GB19780010725	19780317
	JP53127703 U1	19781011	JP19770032097U	19770318
	JP56036984 Y2	19810831	JP19770032097U	19770318
	NL172262 B	19830301	NL19780002898	19780316
	NL172262 C	19830801	NL19780002898	19780316
	NL7802898 A	19780920	NL19780002898	19780316
	US4182580 A	19800108	US19780887746	19780317

Probable Assignee: MITSUI PETROCHEMICAL IND**Assignee(s):(std):** MITSUI PETROCHEM IND LTD ; MITSUI PETROCHEMICAL IND ; MITSUI PETROCHEMICAL IND LTD ; MITSUI PETROCHEMICAL INDUSTRIES LTD TE TOKIO**Assignee(s):** MITSUI PETROCHEMICAL INDUSTRIES LTD TOKIO TOKYO JP ; UEHARA YOSHIO ; HIEDA SHOZO ; INABA MINORU ; MITSUI PETROCHEMICAL INDUSTRIES LTD**Inventor(s):(std):** HIEDA S ; INABA M ; ISHII N ; KUSUMI Y ; Y UEHARA ; YOSHIO UEHARA ; UEHARA YOSHIO ; KUSUMI YOSHIHISA ; ISHII NORIYUKI ; INABA MINORU ; HIEDA SHOZO ; HEIDA S ; M INABA ; MINORU INABA ; S HEIDA ; SHOZO HIEDA ; UEHARA Y**Inventor(s):** UEHARA YOSHIO KASHIWA CHIBA JP ; KUSUMI YOSHIHISA URAWA SAITAMA JP ; ISHII NORIYUKI CHIBA JP ; HIEDA SHOZO OTAKE HIROSHIMA JP ; BREDA S UEHARA Y AND INABA M ; CHIBA KUSUMI**Agent(s):** SF; SPRUSON AND FERGUSON**International class** E02B11/00 F16L11/12 F16L9/06 (Advanced/Invention);**(IPC 8-9):** F16L11/12 (Advanced/Non-invention);

E02B11/00 F16L11/12 F16L9/00 (Core/Invention)

International class B32B1/08 E02B11/00 E02B13/00 E02D3/10 F16L11/11 F16L11/12 F16L9/06 F16L9/12 F16L9/14 F16L9/18**(IPC 1-7):****CPC:** E02B11/005**European class:** E02B11/00B**US class:** 138/103 138/173 405/43 405/49[Classification Explorer](#)**Cited documents:** US4061368 A, US3976578 A, US3861152 A, US3855799 A, US3747352 A, SE222259 C1, SE222259 C, FR2129456 A5, DE7526236 U, DE7329424 U, DE6935212 U, DE2633752 A1, DE1458179 A1, CH478962 A,**Forward Citations:** WO9114049, US7628566, US7351005, US6941972, US6854925, US6733209, US6527477, US6302621, US6048131, US5331694, US4950103, US4611636, US4557510, US2015136255, US2004101369, US2004016468, JP4504855, JP2006266427, GR1008995, DE29622415, CN104631600,**Abstract:**

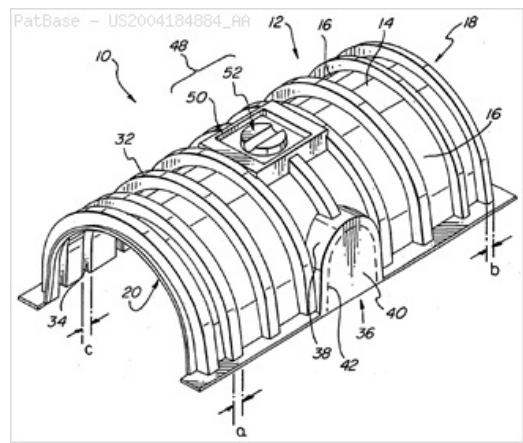
An underdrainage pipe comprises a liquid-collecting pipe, protrusions on the liquid-collecting pipe, a filter layer around the liquid-collecting pipe and a liquid-conducting way, and the protrusions having at least one recess for each and the bottom portion of the recess not reaching the surface of the liquid-collecting pipe.



Title:	STORM WATER CHAMBER FOR GANGING TOGETHER MULTIPLE CHAMBERS																																																																
Priority:	US20030392581 20030320 CA20072591255 20070611		CA20032450565 20031124 US20100757510 20100409		US20060452561 20060614																																																												
Family:	<table><tr><th>Publication number</th><th>Publication date</th><th>Application number</th><th>Application date</th></tr><tr><td>AU2007202663 AA</td><td>20080110</td><td>AU20070202663</td><td>20070608</td></tr><tr><td>AU2007202663 BB</td><td>20100401</td><td>AU20070202663</td><td>20070608</td></tr><tr><td>CA2450565 AA</td><td>20040920</td><td>CA20032450565</td><td>20031124</td></tr><tr><td>CA2450565 C</td><td>20091020</td><td>CA20032450565</td><td>20031124</td></tr><tr><td>CA2591255 AA</td><td>20071214</td><td>CA20072591255</td><td>20070611</td></tr><tr><td>CA2591255 C</td><td>20090623</td><td>CA20072591255</td><td>20070611</td></tr><tr><td>EP1867794 A2</td><td>20071219</td><td>EP20070109930</td><td>20070608</td></tr><tr><td>EP1867794 A3</td><td>20090819</td><td>EP20070109930</td><td>20070608</td></tr><tr><td>US2004184884 AA</td><td>20040923</td><td>US20030392581</td><td>20030320</td></tr><tr><td>US2006233612 AA</td><td>20061019</td><td>US20060452561</td><td>20060614</td></tr><tr><td>US2010196099 AA</td><td>20100805</td><td>US20100757510</td><td>20100409</td></tr><tr><td>US7226241 BB</td><td>20070605</td><td>US20030392581</td><td>20030320</td></tr><tr><td>US7806627 BB</td><td>20101005</td><td>US20060452561</td><td>20060614</td></tr><tr><td>US8425148 BB</td><td>20130423</td><td>US20100757510</td><td>20100409</td></tr></table>					Publication number	Publication date	Application number	Application date	AU2007202663 AA	20080110	AU20070202663	20070608	AU2007202663 BB	20100401	AU20070202663	20070608	CA2450565 AA	20040920	CA20032450565	20031124	CA2450565 C	20091020	CA20032450565	20031124	CA2591255 AA	20071214	CA20072591255	20070611	CA2591255 C	20090623	CA20072591255	20070611	EP1867794 A2	20071219	EP20070109930	20070608	EP1867794 A3	20090819	EP20070109930	20070608	US2004184884 AA	20040923	US20030392581	20030320	US2006233612 AA	20061019	US20060452561	20060614	US2010196099 AA	20100805	US20100757510	20100409	US7226241 BB	20070605	US20030392581	20030320	US7806627 BB	20101005	US20060452561	20060614	US8425148 BB	20130423	US20100757510	20100409
Publication number	Publication date	Application number	Application date																																																														
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US8425148 BB	20130423	US20100757510	20100409																																																														
Probable Assignee:	CULTEC INC A CONNECTICUT CORP																																																																
Assignee(s):(std):	DITULLIO ROBERT ; DITULLIO ROBERT J ; ROBERT DITULLIO ; CULTEC INC																																																																
Assignee(s):	CULTEC INC A CONNECTICUT CORP																																																																
Inventor(s):(std):	DITULLIO ROBERT J																																																																
Inventor(s):	ROBERT J DITULLIO ; DITULLIO ROBERT																																																																
Agent(s):	SHELSTON IP PTY LTD; SHELSTON IP; SMART AND BIGGAR; HICKS INTELLECTUAL PROPERTY LAW; MURGATROYD SUSAN ELIZABETH; ST ONGE STEWARD JOHNSTON AND REENS LLC																																																																
Designated states:	AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL PL PT RO RS SE SI SK TR YU																																																																
International class (IPC 8-9):	E02B11/00 E02B13/00 E02B13/02 E03F1/00 E03F5/10 F16L9/00 (Advanced/Invention); E03F1/00 (Core/Invention)																																																																
International class (IPC 1-7):	E02B11/00 E03F1/00 F16L11/00																																																																
CPC:	E03F1/003																																																																
European class:	E03F1/00B2																																																																
US class:	138/121 138/121S 138/172 138/172S 405/43 405/43P 405/46 405/46P 405/49 405/49S 405/52 405/52P																																																																
Classification Explorer																																																																	
Cited documents:	US7517172 BB, US7025532 BB, US7008138 BB, US6692186 BA, US6612777 BB, US6361248 BA, US6322288 BA, US6129482 A, US5890838 A, US5773756 A, US5419838 A, US5156488 A, US5087151 A, US5087151, US4598277 A, US4192628 A, US3926222 A, US3897090 A, US2767801 A, US2153789 A, US2005238434 AA, US2005100410 AA, US2005074287 AA, US2004184884 AA, US2003219310 AA, US2003095838 AA, US2002044833 AA, US2002025226 AA, DE202005010090 U1 DE202005010090 U,																																																																
Forward Citations:	WO10090755, WO10090755, USD792552, USD753262, USD737927, USD728825, USD668318, USD638095, USD638094, USD613819, US9850648, US9803326, US9771706, US9765509, US9739046, US9708807, US9580899, US9580898, US9371938, US9297135, US9290924, US8858119, US8801326, US8636444, US8518202, US8496810, US8491224, US8425148, US8414222, US8366346, US8147688, US7887256, US7806627, US7744756, US7311467, US7237981, US2016348350, US2014202091, US2013008841, US2012107047, US2011308648, US2011305513, US2011135392, US2010329789, US2010329788, US2010196099, US2010059430, US2010021664, US2010006489, US2009279953, US2009232600, US2009220302, US2007258770, US2006233612, US2005074288, FR3016905, EP2902555, EP1953297, EP1867794, EP1867794, CN106149801, CN106149800, CN105714875, CN105604127, AU2007202663,																																																																

Abstract:

A liquid dispensing chamber for use with a drainage system for gathering and dispensing liquids to the ground is disclosed, which includes an elongated wall body having a generally arch-shaped cross-sectional configuration with a top wall portion and a pair of side wall portions thereby defining an enlarged enclosure therein, the elongated wall body including a first end portion and a second end portion, at least one of the end portions defining therein an axial opening to allow axial flow of liquids there-through, a plurality of circumferential reinforcing members disposed along the circumference of the elongated wall body for reinforcing structural strength thereof, and at least one side deck member disposed at least a location in the side wall portions of the elongated wall body. The at least one side deck member selectively includes a lateral opening therein for connecting a connection conduct thereto. Liquid drainage systems utilizing the liquid dispensing chambers of the invention is also disclosed.



Title:

SOLIDS RETENTION IN STORMWATER SYSTEM

Priority:

US20030459478P 20030401

US20040813887 20040331

Family:

Publication number	Publication date	Application number	Application date
US6991734 BA	20060131	US20040813887	20040331

Probable Assignee:

STORMTECH LLC

Assignee(s):(std):

INFILTRATOR SYSTEMS INC

Assignee(s):

STORMTECH LLC

Inventor(s):(std):

COPPEs BRYAN A ; SMITH JONATHAN F

Agent(s):

C

International class (IPC 8-9):

E03F1/00 (Advanced/Invention)

CPC:

E03F1/002 E03F5/125

European class:

E03F1/00B E03F5/12A

US class:

210/170 210/170.03 210/254 210/265 210/532.1 210/747 210/747.3 405/43 405/46 405/50

Classification Explorer

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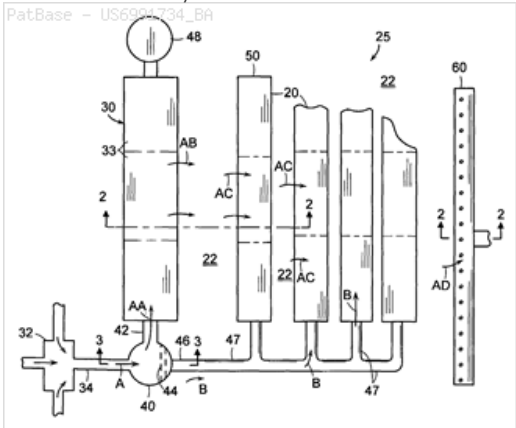
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Forward Citations:

USD728825, US9771706, US9540799, US9512606, US9506233, US9469981, US9233775, US9016979, US8911626, US8894866, US8496810, US8491224, US8287726, US8152997, US8147688, US8062531, US7988851, US7887256, US7582216, US7540954, US2014042103, US2012152827, US2012132581, US2011272351, US2011049028, US2010059430, US2009220302, US2009050583, US2008296213, US2007258770, FR2903433, EP2514870, BE1019912,

Abstract:

Apparatus for receiving and dispersing stormwater beneath the earth surface is comprised of an array of chambers, preferably having arch shape cross section, buried in crushed stone. Surface stormwater flows first through a diverter, then into a solids retention subsystem (SRS), and then into the array of chambers, which is spaced apart in the stone from the SRS. The SRS chambers are layered with geotextile or other filtering media. Solids entrained in the stormwater are retained in the SRS by a combination of settling and filtering actions. If the stormwater inflow exceeds the capacity of the SRS, the water level rises in the diverter to the point where it flows through a bypass line, directly to the chambers of the array.



Title: SYSTEM FOR THE FABRICATION OF ONE OR MORE DRAINAGE TUNNELS SYSTEME POUR LA FABRICATION D'UN OU PLUSIEURS TUNNELS DE

Priority: DE200520012192U 20050803 EP20060015996 20060801

Family:

Publication number	Publication date	Application number	Application date
DE202005012192 U1	20051110	DE200520012192U	20050803
DE502006014200 D1	20150409	DE200650014200T	20060801
EP1749943 A2	20070207	EP20060015996	20060801
EP1749943 A3	20101124	EP20060015996	20060801
EP1749943 B1	20150225	EP20060015996	20060801

Probable Assignee: HAURATON BETONWAREN

Assignee(s):(std): HAURATON BETONWAREN ; HAURATON GMBH AND CO KG

Assignee(s): HAURATON BETONWARENFABRIK GMBH AND CO KG

Inventor(s):(std): WERNER KLAUS

Agent(s): PATENTANWAELTE GEITZ TRUCKENMUELLER LUCHT; GEITZ HOLGER

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO RS SE SI SK TR YU

International class (IPC 8-9): E02B11/00 E03F1/00 E21D11/14 (Advanced/Invention); E02B11/00 E03F1/00 E21D11/14 (Core/Invention)

International class (IPC 1-7): E02B11/00 E03F1/00 E21D11/14

CPC: E03F1/003

European class: E03F1/00B2

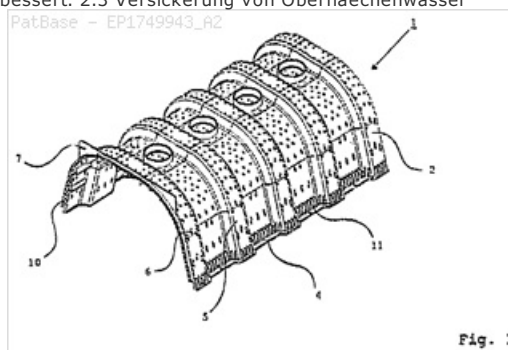
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Cited documents: WO03100180 A2, US4523613 A, US2003161685 AA, US2002044833 AA, FR2801914 A1, EP1416099 A2, EP0705946 B1, EP0705946 A2,

Forward Citations: USD728825, US8414222, GB2481499, GB2481499, EP1953297, DE102013225856,

Abstract:

Source: EP1749943A3 [DE] 2.1 Aufgrund der Hochwasserproblematik an vielen Fluessen gewinnt die Thematik der lokalen Versickerung von Regenwasser an Bedeutung. Bekannte Versickerungsanlagen weisen jedoch bei groesseren Abmessungen zu Schwaechen in der Stabilitaet. Der Erfindung liegt daher die Aufgabe zugrunde, ohne Einbussen an Stabilitaet die Kapazitaet von Versickerungsanlagen zu erhoeihen. 2.2 Die Loesung dieser Aufgabe gelingt durch ein Gewoelbemodul, das durch einen Stuetzrand gegen den Boden abgestuetzt ist, wobei ein Abknicken des Stuetzrands mittels einer Reihe von Versteifungsfingern vermieden ist. Dadurch wird die Stabilitaet des Sickertunnels deutlich verbessert. 2.3 Versickerung von Oberflaechenwasser



Title: Corrugated drainage tube
Priority: US19890380482 19890717

Family:	Publication number	Publication date	Application number	Application date
	US4950103 A	19900821	US19890380482	19890717

Probable Assignee: SMA TECHNOLOGY GROUP INC
Assignee(s):(std): JUSTICE DONALD R
Assignee(s): PROGRESS TECHNOLOGIES CORP ; SMA TECHNOLOGY GROUP INC
Inventor(s):(std): JUSTICE DONALD R
International class (IPC 8-9): E02B11/00 F16L11/15 (Advanced/Invention);
E02B11/00 F16L11/00 (Core/Invention)
International class (IPC 1-7): F16L31/00
CPC: E02B11/005 F16L11/15
European class: E02B11/00B F16L11/15
US class: 138/177 405/36 405/43 405/45 405/49

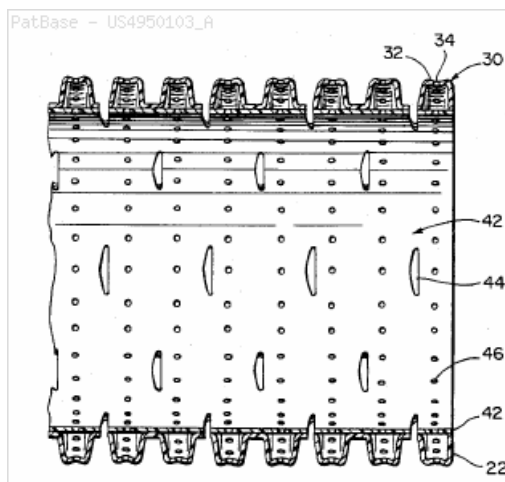
[Classification Explorer](#)

Cited documents: US955847 A, US4624603 A, US4523613 A, US4360042 A, US4288321 A, US4182580 A, US4175882 A, US3958425 A, US3830373 A, US3699684 A, US3455584 A, US3440822 A, US3374634 A, US3330303 A, US3327865 A, US2787442 A, US2365888 A, US1055674 A, SU1388511 T, GB2016639 A1, EP0029713 A1, DE2262994 A1,

Forward Citations: WO15077137, USD499166, US9885171, US9637907, US9556576, US9255394, US8999153, US8672583, US8646217, US8501006, US8240950, US7862713, US7661903, US7640950, US7637691, US7632408, US7628566, US7080667, US6941972, US6926037, US6854925, US6679653, US6527477, US6461078, US6302621, US6270287, US6167914, US6076993, US6076992, US5960590, US5954451, US5921711, US5896894, US5720575, US5706864, US5520481, US5516229, US5511903, US5439035, US2015136255, US2011135391, US2010243547, US2010008727, US2009290937, US2008017729, US2005161102, US2004112452, US2004074551, US2004016468, RU176680, GB2300684, GB2300684, EP0985867, DE4226157,

Abstract:

A drainage tube includes alternating annular peaks and annular valleys on an exterior wall of the tube. An interior wall of the tube is smooth and continuous along its length. The combined exterior wall and interior wall form an elongated tube. In alternating, selected valleys of the exterior wall of the tube are arranged a plurality of slots extending transverse to a longitudinal axis of the tube so that water can drain into the tube through the slots. These plurality of openings extend through the smooth interior wall of the tube to the interior space of the tube. In addition, each of the annular peaks on the exterior wall of the tube includes a recessed groove. At the base of each of these grooves are located a plurality of circular openings having a smaller diameter on the exterior of the tube, increasing in diameter towards the interior of the tube. Corresponding openings are located on the smooth interior wall of the tube so that water can drain into the tube through these additional openings located spaced from the openings in the grooves of the annular peaks of the exterior wall.



Title: SUBSURFACE FLUID DISTRIBUTION APPARATUS

Priority: US20070908933P 20070329 US20080058528 20080328 WO2008US58773 20080328

Family:

Publication number	Publication date	Application number	Application date
CA2719949 AA	20100929	CA20082719949	20080328
CA2719949 C	20150526	CA20082719949	20080328
US2008240859 AA	20081002	US20080058528	20080328
US7517172 BB	20090414	US20080058528	20080328
WO08121890 A1	20081009	WO2008US58773	20080328

Probable Assignee: EPIC GREEN HOLDINGS

Assignee(s):(std): REHBEIN ENVIRONMENTAL SOLUTION ; REHBEIN ENVIRONMENTAL SOLUTIONS INC ; SIPAILA JONAS Z

Assignee(s): REHBEIN ENVIRONMENTAL SOLUTIONS INC8651 NAPLES STREET, NEMINNEAPOLISMN55449-6724US ; EPIC GREEN HOLDINGS ; EPIC GREEN HOLDINGSP.O. BOX 309C/O MAPLES CORPORATE SERVICES LIMITEDKY1-1104UGLAND HOUSEGRAND CAYMANKY

Inventor(s):(std): SIPAILA JONAS Z

Inventor(s): SIPAILA JONAS ZUS

Agent(s): BORDEN LADNER GERVAIS LLP; KENEHAN AND LAMBERTSEN LTD JOHN C LAMBERTSEN; LAMBERTSEN JOHN C; KENEHAN AND LAMBERTSEN LTD; JOHN C

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 LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class
(IPC 8-9): E01C11/22 E02B11/00 (Advanced/Invention);
E01C11/00 E02B11/00 (Core/Invention)

CPC: E03F1/003

European class: E03F1/00B2

US class: 405/36 405/43 405/45 405/46 405/46P 405/49 405/49S

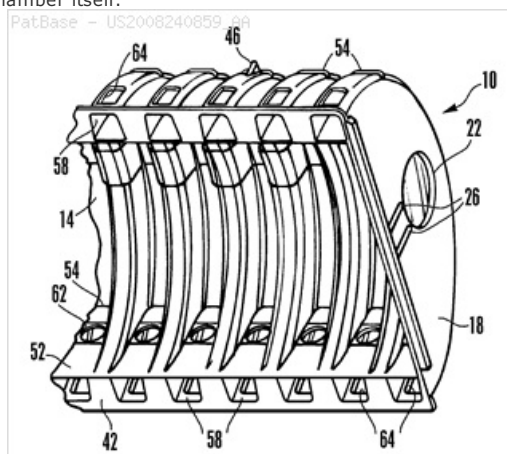
[Classification Explorer](#)

Cited documents: USD538882 S1, USD538388 S1, USD477381 S1, USD403047 S1, US980442 A, US7364384 BA, US7273330 BA, US7237981 BA, US7189027 BB, US7134808 BB, US7118306 BB, US7052209 BA, US6994355 BB, US6854925 BB, US6719490 BB, US6698975 BA, US6592293 BA, US6375388 BA, US6361248 BA, US6270287 BA, US6076993 A, US5921711 A, US5669733 A, US5588778 A, US5511903 A, US5401116 A, US5399050 A, US5336017 A, US5156488 A, US5087151 A, US5017041 A, US4759661 A, US4360042 A, US4245924 A, US3220194 A, US2240411 A, US2007172314 AA, US2007154261 AA, US2005238434 AA, US2005111915 AA, US2005074288 AA, US2005074287 AA, US2004101369 AA, US2004042855 AA, US2004013469 AA, US2003219310 AA, US2002139736 AA, US2002025226 AA, US1608889 A,

Forward Citations: WO11002500, USD816193, USD668318, USD638095, USD638094, USD613819, US9885171, US9637907, US9593783, US9556576, US9273456, US9255394, US9206574, US9139971, US8672583, US8425148, US8414222, US8322948, US7914230, US7806627, US7628566, US2014294508, US2011305513, US2011293371, US2010329787, US2010196099, US2008181725, US2006233612,

Abstract:

A leaching chamber having an arch-shaped cross-section, a pair of contiguously molded, opposing end walls, and alternating peak and valley corrugations along its length, is provided interior chambers and fluid communication openings along the base on each extending side of the chamber. Formed within the chamber at locations corresponding to each peak corrugation, an inner wall is attached to an interior surface and extends substantially within the peak corrugation to the base of the chamber. An aperture is formed in both the inner wall and in the opposing outer wall of the chamber, enabling fluid communication through the interior chamber-and thus into and out from the interior of the leaching chamber itself.



Title: STORMWATER CHAMBER DETENTION SYSTEM

Priority: US20080096144P 20080911 US20090556728 20090910

Family:

Publication number	Publication date	Application number	Application date
US2010059430 AA	20100311	US20090556728	20090910
US8147688 BB	20120403	US20090556728	20090910

Probable Assignee: CONTECH CONSTRUCTION PRODUCTS INC

Assignee(s):(std): ABERLE DANIEL W ; ADAMS DAVID R ; COBB DANIEL P ; BYRNE GREGORY W ; CONTECH ENGINEERED SOLUTIONS LLC

Assignee(s): WELLS FARGO CAPITAL FINANCE LLC ; GOLDMAN SACHS LENDING PARTNERS LLC ; CONTECH TECHNOLOGIES INC ; WELLS FARGO BANK NATIONAL ASSOCIATION AGENT AS ; CONTECH CONSTRUCTION PRODUCTS INC

Inventor(s):(std): ABERLE DANIEL W ; ADAMS DAVID R ; COBB DANIEL P ; BYRNE GREGORY W

Agent(s): THOMPSON HINE LLP INTELLECTUAL PROPERTY GROUP; THOMPSON HINE LLP

International class (IPC 8-9): C02F1/00 E03F1/00 (Advanced/Invention); C02F1/00 (Core/Invention)

CPC: E03F1/002

European class: E03F1/00B

US class: 210/170.03 210/170.030P 210/170.08 210/254 210/299 210/532.1 405/40 405/46 405/49 405/51

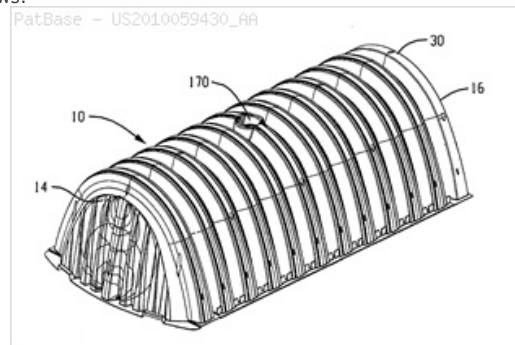
[Classification Explorer](#)

Cited documents: USD469187 S1, USD465545 S1, US7727388 BA, US7632408 BA, US7300226 BA, US7273330 BA, US7237981 BA, US7226241 BB, US7217063 BB, US7207747 BA, US7189027 BB, US7118306 BB, US7052209 BA, US7008138 BB, US7004221 BB, US6994490 BB, US6994355 BB, US6991734 BA, US6854925 BB, US6719490 BB, US6680011 BB, US6679653 BA, US6612777 BB, US6602023 BB, US6361248 BA, US6322288 BA, US6129482 A, US5890838 A, US5839844 A, US5773756 A, US5716163 A, US5588778 A, US5511903 A, US5419838 A, US5401459 A, US5401116 A, US5336017 A, US5156488 A, US5087151 A, US5017041 A, US4759661 A, US3770623 A, US2007258770 AA, US2007231071 AA, US2007173214 AA, US2007172314 AA, US2007154261 AA, US2007077122 AA, US2006233612 AA, US2006138706 AA, US2006076714 AA, US2005238434 AA, US2005074288 AA, US2005074286 AA, US2003219310 AA,

Forward Citations: USD728825, US9885171, US9739046, US9708807, US9637907, US9556576, US9540799, US9371938, US9352978, US9255394, US8894866, US8672583, US8414222, US8287726, US8062531, US2014042103, US2013008841, US2012132581, US2011305513, US2010329788, CN105780849, CN105714925, CN105604175, CN105604127,

Abstract:

A stormwater detention system includes a containment row for removing and collecting solids from stormwater. The containment row may be surrounded by a water-impermeable membrane, and designed to receive incoming water before other rows of the detention system. The containment row collects solids from the stormwater before the water is redirected into one or more additional rows, which are water permeable and buried in water permeable media. Filter structure may be associated with a flow system that delivers water from the containment row to the additional rows.



Title: CORRUGATED LEACHING CHAMBER WITH HOLLOW PILLAR SUPPORTS

Priority: US20090269880P 20090629 US20100396524P 20100528 US20100823896 20100625
US20100824162 20100626 US20110070905 20110324 US20110073953 20110328

Family:

Publication number	Publication date	Application number	Application date
US2010329787 AA	20101230	US20100823896	20100625
US2010329788 AA	20101230	US20100824162	20100626
US2011293370 AA	20111201	US20110070905	20110324
US2011293371 AA	20111201	US20110073953	20110328
US7914230 BB	20110329	US20100823896	20100625
US8322948 BB	20121204	US20110073953	20110328

Probable Assignee: INFILTRATOR WATER TECHNOLOGIES LLC

Assignee(s):(std): CARDILLO CHRISTOPHER ; CARDILLO CHRISTOPHER R ; COPPES BRYAN A ; COPPES BRYAN J ; INFILTRATOR SYSTEMS INC ; HALLAHAN DENNIS F ; HALLAHAN DENNIS ; MOORE JR ROY ; MOORE JR ROY E

Assignee(s): ISI POLYETHYLENE SOLUTIONS LLC ; EZFLOW LP ; INFILTRATOR WATER TECHNOLOGIES LLC ; DEUTSCHE BANK NEW YORK BRANCH AG ; GENERAL ELECTRIC CAPITAL CORP

Inventor(s):(std): CARDILLO CHRISTOPHER R ; COPPES BRYAN A ; HALLAHAN DENNIS F ; MOORE JR ROY ; MOORE JR ROY E ; HALLAHAN DENNIS ; COPPES BRYAN J ; CARDILLO CHRISTOPHER

Agent(s): CHARLES G NESSLER; C; C G

International class (IPC 8-9): E02B11/00 (Advanced/Invention)

CPC: E03F1/003

European class: E03F1/00B2

US class: 405/43 405/43P 405/43S 405/45 405/46 405/49 405/49P

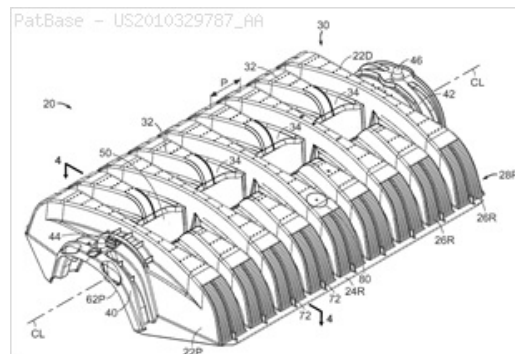
[Classification Explorer](#)

Cited documents: WO11002500 A1, USD592077 S1, USD592076 S1, USD538387 S1, USD537912 S1, USD514452 S1, USD462901 S1, US980442 A, US8147688 BB, US7914230 BB, US7611306 BA, US7500805 BA, US7473053 BA, US7465122 BB, US7419332 BA, US7396188 BB, US7351006 BB, US7351005 BB, US7306400 BA, US7306399 BA, US7189027 BB, US6705800 BB, US6679653 BA, US6649060 BB, US6443652 BA, US6375388 BA, US6361248 BA, US6129482 A, US6076993 A, US5916104 A, US5890838 A, US5716163 A, US5588778 A, US5556231 A, US5511903 A, US5498104 A, US5456379 A, US5441363 A, US5087151 A, US5017041 A, US4759661 A, US4697954 A, US4245924 A, US2366522 A, US2011020065 AA, US2010329789 AA, US2010329788 AA, US2009067929 AA, US2008240859 AA, US2008128339 AA, US2007258770 AA, US2007231071 AA, US2007172314 AA, US2007154261 AA, US2007081860 AA, US2007077122 AA, US2006233612 AA, US2006034662 AA, US2005238434 AA, US2005189256 AA, US2005111915 AA, US2005074288 AA, US2005074287 AA, US2004184884 AA, US2004101369 AA, US2004011786 AA, US2003240859 AA, US2003219310 AA, US2003095838 AA, US2002067952 AA, US2002044833 AA, US2002025226 AA,

Forward Citations: WO14055838, US9850150, US9670660, US8740005, US8491224, US8322948, US7914230, US2016097175, US2009220302,

Abstract:

A plastic leaching chamber has an arch shape cross section, corrugations, and one or more hollow pillars extending downwardly within the interior of the chamber, to support the top of the chamber when the chamber is under load during use. Chambers nest within one another to form a stack of chambers for transport or storage. Chambers have peak corrugations which are substantially wider than the intervening valley corrugations. Chambers having different widths and profiles have common size connectors.



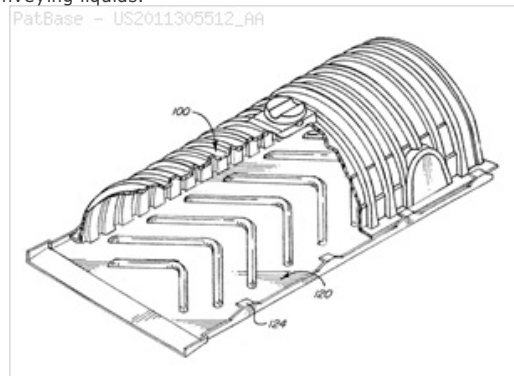
Title: STORM WATER CHAMBER WITH FLOOR LINER
Priority: US20100814128 20100611 CA20112743193 20110610
Family:

Publication number	Publication date	Application number	Application date
CA2743193 AA	20111211	CA20112743193	20110610
CA2743193 C	20131001	CA20112743193	20110610
FR2961222 A1	20111216	FR20110055143	20110610
FR2961222 B1	20140725	FR20110055143	20110610
GB201109710 A0	20110727	GB20110009710	20110610
GB2481498 A1	20111228	GB20110009710	20110610
GB2481498 B2	20130116	GB20110009710	20110610
ITUD20110088 A1	20111212	IT2011UD00088	20110611
US2011305512 AA	20111215	US20100814128	20100611
US8366346 BB	20130205	US20100814128	20100611

Probable Assignee: DITULLIO ROBERT J
Assignee(s):(std): DITULLIO ROBERT J
Assignee(s): ROBERT J DITULLIO
Inventor(s):(std): DITULLIO ROBERT J
Inventor(s): ROBERT J DITULLIO
Agent(s): HICKS INTELLECTUAL PROPERTY LAW; STRATO IP; ST ONGE STEWARD JOHNSTON AND REENS LLC
International class (IPC 8-9): E02B11/00 E02B13/00 E03F1/00 (Advanced/Invention)
CPC: E03F1/003 E03F1/00
European class: E03F1/00B2
US class: 405/43 405/43P
[Classification Explorer](#)
Cited documents: US980442 A, US7226241 BB, US6612777 BB, US6361248 BA, US6322288 BA, US6129482 A, US5890838 A, US5773756 A, US5419838 A, US5156488 A, US5087151 A, US4360042 A, US4245924 A, US3926222 A, US3897090 A, US2767801 A, US2433300 A, US2153789 A, US2009097921 AA, US2008181725 AA, US2007258770 AA, US2002025226 AA, US1071185 A, US1040442 A, EP0009835 A1, DE2114490 A1,
Forward Citations: USD806827, USD792552, USD791272, USD746979, USD737927, US2011225726, CN105604175,

Abstract:

A drainage system includes a storm water chamber and floor liner assembly for storing and conveying liquids. The storm water chamber comprises a generally elongated arch shape with an arch top and bottom side walls, thereby defining an enclosure, the enclosure having a plurality of liquid intake openings. The floor liner comprises two generally parallel sides each having a plurality of retaining members for connecting the storm water chamber. When the storm water chamber and floor liner are connected with each other, the system provides a substantially enclosed assembly for conveying liquids.



Title: RISER ASSEMBLY FOR WATER STORAGE CHAMBERS
Priority: US20100814211 20100611 CA20112747590 20110610
Family:

Publication number	Publication date	Application number	Application date
CA2747590 AA	20111211	CA20112747590	20110610
CA2747590 C	20140211	CA20112747590	20110610
FR2961223 A1	20111216	FR20110055144	20110610
FR2961223 B1	20131004	FR20110055144	20110610
GB201109712 A0	20110727	GB20110009712	20110610
GB2481499 A1	20111228	GB20110009712	20110610
GB2481499 B2	20120425	GB20110009712	20110610
ITUD20110087 A1	20111212	IT2011UD00087	20110610
US2011305513 AA	20111215	US20100814211	20100611
US8414222 BB	20130409	US20100814211	20100611

Probable Assignee: DITULLIO ROBERT J
Assignee(s):(std): DITULLIO ROBERT J
Assignee(s): ROBERT J DITULLIO
Inventor(s):(std): DITULLIO ROBERT J
Inventor(s): ROBERT J DITULLIO
Agent(s): HICKS INTELLECTUAL PROPERTY LAW; STRATO IP; ST ONGE STEWARD JOHNSTON AND REENS LLC
International class
(IPC 8-9): E02B13/00 E03F1/00 (Advanced/Invention)
CPC: E03F1/003 E03F1/00
European class: E03F1/00B2
US class: 405/104 405/104S 405/46 405/46P

[Classification Explorer](#)

Cited documents: USD638095 S1, USD613819 S1, US8147688 BB, US8007016 BB, US8002497 BB, US7637691 BA, US7473053 BA, US7425261 BB, US7226241 BB, US7118306 BB, US7052209 BA, US7004677 BA, US7004221 BB, US6837652 BA, US6612777 BB, US6361248 BA, US6322288 BA, US6129482 A, US5890838 A, US5773756 A, US5617679 A, US5419838 A, US5156488 A, US5087151 A, US3926222 A, US3897090 A, US2767801 A, US2153789 A, US2009279953 AA, US2008240859 AA, US2008226394 AA, US2007258770 AA, US2007077122 AA, US2006233612 AA, US2006182497 AA, US2005238434 AA, US2005111915 AA, US2005100410 AA, US2005077301 AA, US2005074288 AA, US2003145527 AA, US2002154951 AA, US2002025226 AA, GB2475551 A1,

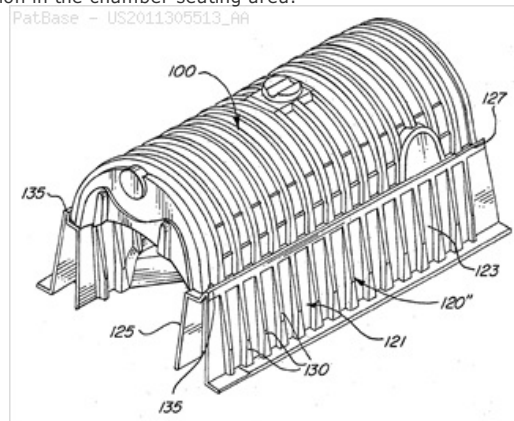
DE202005012192 U1

DE10143985 C1,

Forward Citations: WO17095737, USD737927, USD725739,

Abstract:

A drainage system includes a storm water chamber and riser assembly for gathering and dispensing liquids. The storm water chamber comprises a generally elongated arch shape with an arch top and bottom side walls, thereby defining an enclosure. The riser assembly has two generally parallel base assemblies, which each have an outer wall and an inner wall and a top wall connecting the outer wall and the inner wall. The top wall has a chamber seating area for receiving the base area of the chamber and a retaining element for retaining the base area of a chamber in position in the chamber seating area.

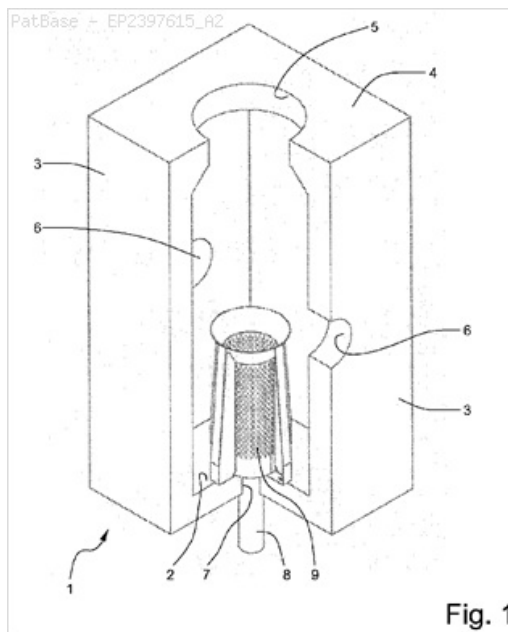


Title: INFILTRATION AND TRANSPORT SEWER**Priority:** NL20102004892 20100615**Family:**

Publication number	Publication date	Application number	Application date
EP2397615 A2	20111221	EP20110169057	20110608
EP2397615 A3	20120404	EP20110169057	20110608
NL2004892 C	20111219	NL20102004892	20100615

Probable Assignee: B B A PARTICIPATIES BV**Assignee(s):(std):** B B A PARTICIPATIES B V ; B B A PARTICIPATIES BV ; HENK VAN TONGEREN BRONBEMALING B V ; HENK VAN TONGEREN BRONBEMALING BV**Assignee(s):** BBA PARTICIPATIES BV**Inventor(s):(std):** BRUIN JOHANNES ; TONGEREN GERRIT HAROLD BERNO ; VAN TONGEREN GERRIT HAROLD BERNO**Agent(s):** DOKTER HENDRIK DANIEL**Designated states:** AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR**International class**
(IPC 8-9): E03F1/00 (Advanced/Invention);
E02B11/00 E03F5/02 (Advanced/Non-invention)**CPC:** Y02A10/33 Y02A20/408 E03F1/002**European class:** E03F1/00B[Classification Explorer](#)**Cited documents:** WO08142879 A1, WO06042293 A2, EP1953297 A2, DE29508211 U1, AT347864 B,**Abstract:**

Infiltration and transport sewer, comprising at least one horizontal conduit part provided with perforations for transporting water and infiltrating a first ground layer with at least a first part of the water transported through this conduit part, and at least one vertical conduit part (8) for the purpose of infiltrating a second ground layer located lower than the first ground layer with at least a second part of the water transported through the horizontal part.



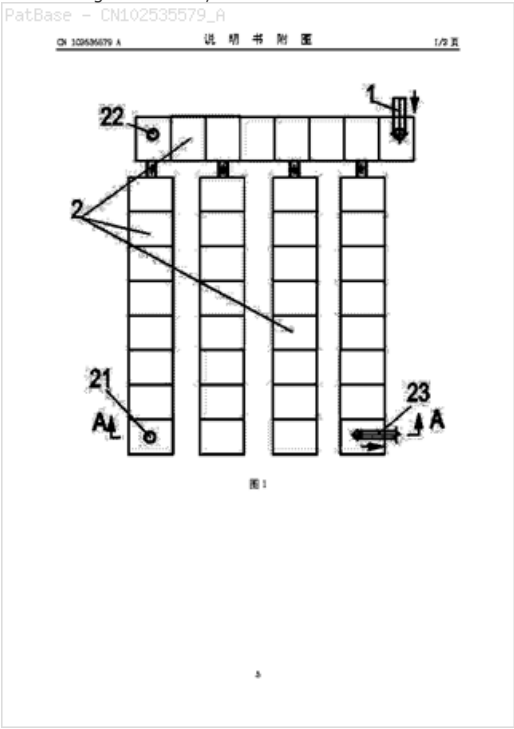
Title:	ECOLOGICAL STORING SYSTEM FOR ROAD RAINWATER			
Priority:	CN201210048888	20120229	CN201220072467U	20120229
Family:	Publication number	Publication date	Application number	Application date
	CN102535579 A	20120704	CN201210048888	20120229
	CN202466679 U	20121003	CN201220072467U	20120229

Probable Assignee: SHANGHAI URBAN CONSTR DESIGN
Assignee(s):(std): SHANGHAI URBAN CONSTR DESIGN
Assignee(s): SHANGHAI URBAN CONSTRUCTION DESIGN AND RESEARCH INST ; SHANGHAI URBAN CONSTRUCTION DESIGN AND RESEARCH INSTITUTE
Inventor(s):(std): CHENGMING LOU ; JIN HUANG ; XIANZHONG ZHANG ; YONGDI YANG
Inventor(s): ZHANG XIANZHONG ; YANG YONGDI ; LOU CHENGMING ; HUANG JIN
International class (IPC 8-9): E03B3/02 (Advanced/Invention)
CPC: Y02A20/108

[Classification Explorer](#)

Cited documents: JP2011196064 A2, JP2008289496 A2, CN202466679 U, CN201850574 U, CN201738371 U, CN1529020 A, CN102162275 A, CN101260678 A,
Forward Citations: CN105780849, CN105220597, CN104631561, CN103046452, CN102535579,

Abstract:
The invention discloses an ecological storing system for road rainwater. The system is provided with a water inlet, a water intake, an overflow port and multiple rainwater ecological storing devices, wherein the rainwater ecological storing devices are communicated with each other; the ecological storing system for road rainwater is arranged in a sand filling layer; a geotextile layer is paved on the sand filling layer; and a nutritional soil layer is paved on the geotextile layer. The ecological storing system for road rainwater provided by the invention is arranged underground, occupies a small area, is combined with a greening land and is ecological and environment-friendly. The treated rainwater stored in a ecological manner has popularization and application value and can be applied to the fields of groundwater recharging, urban municipal usage, fire fighting, industry, living, greening, car washing, road cleaning, expressway emergency, water demands of regional areas, and the like.



Title:

WATER TRANSFER DEVICE FOR UNDERGROUND WATER COLLECTION AND STORAGE CHAMBERS

Priority:

US20110135581 20110709

Family:

Publication number	Publication date	Application number	Application date
US2013008841 AA	20130110	US20110135581	20110709
US9708807 BB	20170718	US20110135581	20110709

Probable Assignee:

MISKOVICH JOSEPH S

Assignee(s):(std):

MISKOVICH JOSEPH S

Inventor(s):(std):

MISKOVICH JOSEPH S

Agent(s):

YOUNG BASILE HANLON AND MACFARLANE PC

International class (IPC 8-9):

E02B11/00 E03F1/00 E03F5/14 (Advanced/Invention)

CPC:

E03F1/003

US class:

210/170.03

[Classification Explorer](#)

Cited documents:

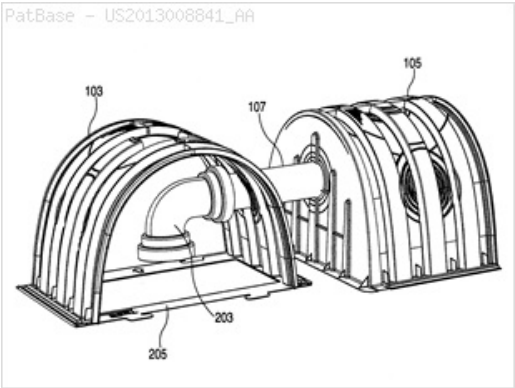
US8147688 BB, US7887256 BB, US7806627 BB, US7744756 BB, US7226241 BB, US6383372 BA, US6379541 BA, US6132139 A, US6062767 A, US5890838 A, US5445730 A, US5322387 A, US5241979 A, US5087151 A, US4919568 A, US4745801 A, US2527046 A, US2010059430 AA, US2009261036 AA, US2009180834 AA, US2008181725 AA, US2008035547 AA, US2007258770 AA, US2006233612 AA, US2006076056 AA, US2004253054 AA, US2004184884 AA, US2003070977 AA, US1529019 A,

Forward Citations:

USD728825, US9739046, US9371938,

Abstract:

An invention relating to underground water collection and storage chamber systems and more particularly, to water transfer device s such as transfer devices from a primary water collection and storage chamber to a secondary water collection and storage chamber.



Title: CORRUGATED STORMWATER CHAMBER HAVING SUB-CORRUGATIONS
Priority: US20090217905P 20090605 US20100802483 20100607 US20140175477 20140207
US20160373830 20161209

Family:	Publication number	Publication date	Application number	Application date
	US2015225916 AA	20150813	US20140175477	20140207
	US2016083921 A9	20160324	US20140175477	20140207
	US2017089054 AA	20170330	US20160373830	20161209
	US8672583 BA	20140318	US20100802483	20100607
	US9556576 BB	20170131	US20140175477	20140207
	US9885171 BB	20180206	US20160373830	20161209

Probable Assignee: STORMTECH LLC

Assignee(s):(std): GANDHI NIMESH ; GANDHI NIMISH ; MAILHOT DAVID J ; MCGRATH TIMOTHY J ; STORMTECH LLC

Inventor(s):(std): GANDHI NIMESH ; GANDHI NIMISH ; MAILHOT DAVID J ; MCGRATH TIMOTHY J

Agent(s): FINNEGAN HENDERSON FARABOW GARRETT AND DUNNER LLP

International class
(IPC 8-9): E02B11/00 E03F1/00 (Advanced/Invention)

CPC: E03F1/003 E02B11/005

US class: 405/42 405/43 405/46 405/49

[Classification Explorer](#)

Cited documents: WO09102855 A2, WO07138780 A1, WO07021715 A2, WO04061249 A1, USD613819 S1, USD566852 S1, USD498815 S1, US980442 A, US9255394 BB, US8672583 BA, US8491224 BB, US7914231 BB, US7870700 BB, US7758282 BB, US7707786 BB, US7637691 BA, US7628566 BB, US7611306 BA, US7517172 BB, US7484535 BB, US7470085 BA, US7451784 BB, US7357600 BB, US7314066 BB, US7306399 BA, US7306264 BB, US7165914 BB, US7156580 BB, US7147007 BB, US7144506 BB, US7118306 BB, US7052209 BA, US7025532 BB, US6941972 BB, US6860518 BB, US6773206 BB, US6719490 BB, US6698975 BA, US6644357 BB, US6497333 BA, US6322288 BA, US6270287 BA, US6131616 A, US6129482 A, US6126209 A, US6123113 A, US6079451 A, US5720577 A, US5716163 A, US5707088 A, US5573038 A, US5556231 A, US5498104 A, US5419838 A, US5375943 A, US5336017 A, US5326191 A, US5191916 A, US5087151 A, US5071173 A, US5060444 A, US5007462 A, US4962622 A, US4950103 A, US4932184 A, US4930936 A, US4865362 A, US4862652 A, US4776139 A, US4690174 A, US4689261 A, US4523874 A, US4523613 A, US4490072 A, US4487232 A, US4451172 A, US4382435 A, US4360042 A, US4359167 A, US4322179 A, US414767 A, US4144369 A, US4140422 A, US4113818 A, US4006599 A, US3958425 A, US3863415 A, US3855799 A, US3820340 A, US3789615 A, US3699684 A, US3658097 A, US3559692 A, US3440823 A, US3427767 A, US3363799 A, US3151947 A, US3111788 A, US3104681 A, US2876801 A, US2259335 A, US2011200391 AA, US2011150574 AA, US2010126616 AA, US2010059430 AA, US2009295153 AA, US2009232600 AA, US2009220302 AA, US2009127853 AA, US2009117302 AA, US2009067929 AA, US2008240859 AA, US2007172314 AA, US2006289075 AA, US2006162799 AA, US2005111915 AA, US2003095838 AA, US2002025226 AA, US1989950 A, US1948619 A, JP9235828 A2, JP2005213854 A2, JP2005042538 A2, JP2003176565 A2, JP2003176564 A2, JP2002302995 A2, JP2002294850 A2, JP2002294849 A2, IE20080166 A1, GB2016639 A1, EP1122481 A2, EP0320348 B1,

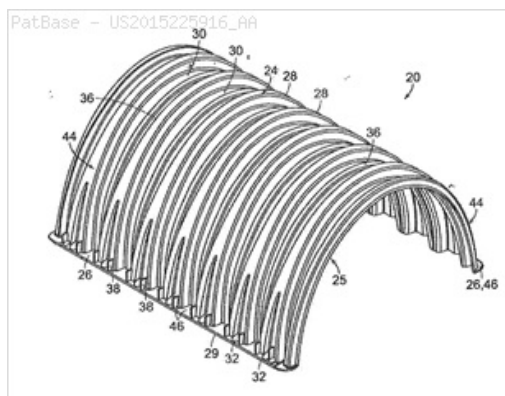
DE202005005056 U1

DE202005005056, DE1282562 B, DE10139897 C1,

Forward Citations: USD806827, USD791272, USD751216, USD745186, USD737927, US9970166, US9885171, US9850648, US9850647, US9765509, US9637907, US9580899, US9556576, US9233775, US9016979, US2017089054, US2017002557, US2015252579, US2015225916, US2014241805, EP2884015, CN105714875,

Abstract:

A chamber is disclosed. The chamber may include a base, a plurality of alternating crest corrugations and valley corrugations running transverse to a length of the chamber, wherein the crest corrugations decrease in width with elevation from the base, and the valley corrugations increase in width with elevation from the base, at least one crest sub-corrugation running along at least a portion of a crest corrugation, at least one valley sub-corrugation running along at least a portion of a valley corrugation an end crest corrugation positioned at a terminal end of the chamber, and an end crest sub-corrugation running along at least a portion of the end crest corrugation.



Title:

STORM WATER TREATMENT SYSTEM AND METHOD

Priority:

US20100455287P 20101018 US20110275236 20111017

Family:

Publication number	Publication date	Application number	Application date
US8894866 BA	20141125	US20110275236	20111017

Probable Assignee:

STORM WATER FILTERS CORP

Assignee(s):(std):

BELASCO DAVID ; STORMWATER FILTERS CORP

Assignee(s):

STORM WATER FILTERS CORP

Inventor(s):(std):

BELASCO DAVID

Agent(s):

JOHN J; CONNORS AND ASSOC PC

International class (IPC 8-9):

E03F1/00 E03F5/10 (Advanced/Invention);
C02F103/00 (Advanced/Non-invention)

CPC:

C02F2103/001 B01D2221/12 E03F5/10 E03F1/003 C02F1/004 C02F1/40 Y02A10/33 Y02A20/408

US class:

210/170.03 210/170.08 210/254 210/747.2 405/41 405/43

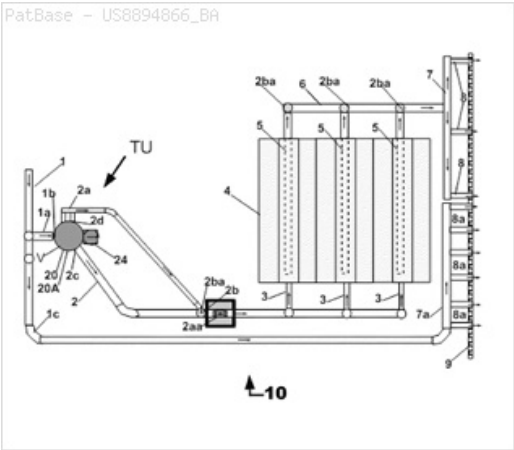
[Classification Explorer](#)

Cited documents:

US952985 A, US8147688 BB, US8062531 BA, US7988851 BB, US7805890 BB, US7584577 BB, US7475515 BB, US7441661 BB, US7300590 BB, US7258785 BB, US6991734 BA, US6976345 BB, US6953529 BB, US6911076 BB, US6901640 BB, US6783683 BB, US6705049 BB, US6606836 BB, US6562233 BA, US6524473 BB, US6510659 BB, US6493911 BA, US6344519 BA, US6202370 BA, US6099723 A, US6080307 A, US6062167 A, US6017195 A, US5960524 A, US5958226 A, US5931643 A, US5791291 A, US5744048 A, US5720574 A, US5628623 A, US5433845 A, US5297367 A, US4942702 A, US4021979 A, US2010193418 AA, US2010006487 AA, US2009050583 AA, US2007258770 AA, US2007033887 AA, US2005230317 AA,

Abstract:

A storm water treatment system accomplishes low impact development compliant treatment of storm water with filtrate discharged to an underground infiltration structure. The system has an automatic high-flow bypass under gravity flow, even on flat sites, plus automatic standing water drain-down for mosquito control and de-watering of collected solids. This system incorporates unique distributional piping schemes enabling periodic removal of suspended solids from otherwise inaccessible structures.



Title: CONSTRUCTION CONDUIT UNIT
Priority: US20140484710F 20140312

Family:	Publication number	Publication date	Application number	Application date
	CA158678 S	20150528	CA20140158678F	20140911
	USD728825 S1	20150505	US20140484710F	20140312

Probable Assignee: JOSEPH STEVE MISKOVICH
Assignee(s):(std): JOSEPH STEVE MISKOVICH ; MISKOVICH JOSEPH STEVE
Inventor(s):(std): MISKOVICH JOSEPH STEVE
Agent(s): YOUNG BASILE HANLON AND MACFARLANE PC
US class: D25/36
Locarno class: 25/02

[Classification Explorer](#)

Cited documents: USD682445 S1, USD593210 S1, USD469187 S1, USD465545 S1, USD280665 S1, USD251503 S1, USD244949 S1, USD217760 S1, USD196171 S1, US8147688 BB, US801361 A, US7887256 BB, US7806627 BB, US7744756 BB, US7351006 BB, US7226241 BB, US7160059 BB, US6994490 BB, US6991734 BA, US6854925 BB, US6719490 BB, US6612777 BB, US6383372 BA, US6379541 BA, US6361248 BA, US6132139 A, US6062767 A, US5921711 A, US5891838 A, US5890838 A, US5322387 A, US5087151 A, US4919568 A, US4745801 A, US3974600 A, US3717963 A, US2979064 A, US2938526 A, US2013008841 AA, US2010059430 AA, US2009261036 AA, US2009180834 AA, US2008181725 AA, US2008035547 AA, US2007258770 AA, US2006233612 AA, US2006076056 AA, US2005100410 AA, US2004253054 AA, US2004184884 AA, US2004101369 AA, US2003115809 AA, US1529019 A, GB2108623 A1,

DE202005012192 U1

Forward Citations: USD797235,

Abstract:
The ornamental design for a construction conduit unit, as shown and described.



Title:

STORAGE DOME FOR LIQUIDS CUVE DE STOCKAGE POUR LIQUIDES </TI_F

Priority:

DE201310225856 20131213

Family:

Publication number	Publication date	Application number	Application date
DE102013225856 A1	20150702	DE201310225856	20131213
EP2884015 A1	20150617	EP20140197498	20141211
EP2889435 A2	20150701	EP20140197497	20141211
EP2889435 A3	20150805	EP20140197497	20141211

Probable Assignee:

DOLL HOLDING GMBH DR

Assignee(s):(std):

DOLL HOLDING GMBH DR

Assignee(s):

DR DOLL HOLDING GMBH

Inventor(s):(std):

DOLL DR THEO ; DOLL THEO ; DOLL THEO DR

Agent(s):

PATENTANWALTE RUFF WILHELM BEIER DAUSTER AND PARTNER

Designated states:

AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8-9):

E02B11/00 E02B13/00 E03B3/03 E03F1/00 (Advanced/Invention)

CPC:

E03F1/003

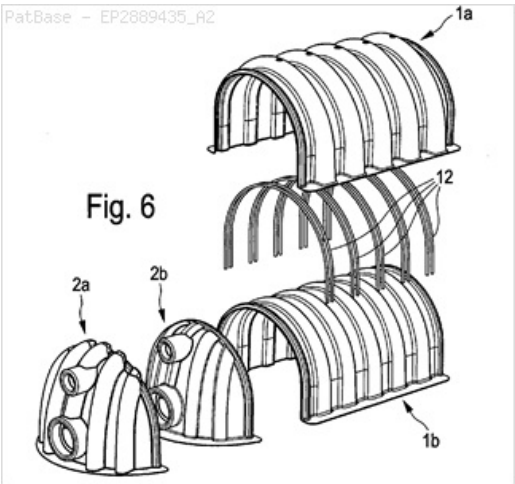
Classification Explorer

Cited documents:

WO10090755 A2, US8672583 BA, US5921711 A, US4360042 A, US2011308648 AA, US2011200391 AA, US2008226394 AA, US2008181725 AA, US2005238434 AA, US2004101369 AA, EP1953297 A2, EP1285140 B1, EP0705946 A2, DE202005012192 U1

Abstract:

Source: EP2889435A3 [DE] Die vorliegende Anmeldung betrifft ein Speichergewoelbe fuer Fluessigkeiten mit einem aus Kunststoff bestehenden Gewoelbemantel (1) sowie mit wenigstens einer aus Kunststoff bestehenden Stirnwand (2), die stirnseitig an den Gehaeusemantel anschliesst und mit dem Gehaeusemantel verbunden ist. Der Gewoelbemantel wird aus zwei miteinander verschweissten und geschlossene Hohlraeume bildenden Kunststoffschalen (1a, 1b) als Twinsheet-Einheit aufgebaut, und die wenigstens eine Stirnwand ist als separates Kunststoffteil gestaltet, das werkzeuglos durch Steckprofilierungen (4, 7) mit der Twinsheet-Einheit verbindbar ist.



Title: CORRUGATED STORMWATER CHAMBER HAVING SUB-CORRUGATIONS
Priority: US20090217905P 20090605 US20100802483 20100607 US20140165503 20140127
US20160017509 20160205 US20170497341 20170426

Family:	Publication number	Publication date	Application number	Application date
	US2015211198 AA	20150730	US20140165503	20140127
	US2017002557 AA	20170105	US20160017509	20160205
	US2018010325 AA	20180111	US20170497341	20170426
	US9255394 BB	20160209	US20140165503	20140127
	US9637907 BB	20170502	US20160017509	20160205

Probable Assignee: STORMTECH LLC
Assignee(s):(std): GANDHI NIMISH ; MAILHOT DAVID J ; MCGRATH TIMOTHY J ; STORM TECH LLC ; STORMTECH LLC
Inventor(s):(std): GANDHI NIMISH ; MAILHOT DAVID J ; MCGRATH TIMOTHY J
Agent(s): FINNEGAN HENDERSON FARABOW GARRETT AND DUNNER LLP
International class (IPC 8-9): E02B11/00 E03F1/00 (Advanced/Invention)
CPC: E03F1/003 E02B11/00
US class: 1/1 405/49

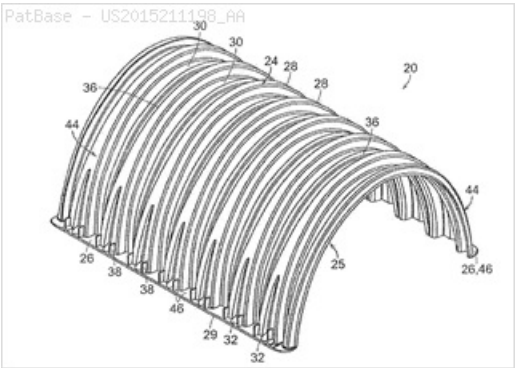
[Classification Explorer](#)

Cited documents: WO09102855 A2, WO07138780 A1, WO07021715 A2, WO04061249 A1, USD613819 S1, USD566852 S1, USD498815 S1, US980442 A, US9255394 BB, US8672583 BA, US8491224 BB, US7914231 BB, US7870700 BB, US7758282 BB, US7707786 BB, US7637691 BA, US7628566 BB, US7611306 BA, US7517172 BB, US7484535 BB, US7470085 BA, US7451784 BB, US7357600 BB, US7314066 BB, US7306399 BA, US7306264 BB, US7165914 BB, US7156580 BB, US7147007 BB, US7144506 BB, US7118306 BB, US7052209 BA, US7025532 BB, US6941972 BB, US6860518 BB, US6773206 BB, US6719490 BB, US6698975 BA, US6644357 BB, US6497333 BA, US6322288 BA, US6270287 BA, US6131616 A, US6129482 A, US6126209 A, US6123113 A, US6079451 A, US5720577 A, US5716163 A, US5707088 A, US5573038 A, US5556231 A, US5498104 A, US5419838 A, US5375943 A, US5336017 A, US5326191 A, US5191916 A, US5087151 A, US5071173 A, US5060444 A, US5007462 A, US4962622 A, US4950103 A, US4932184 A, US4930936 A, US4865362 A, US4862652 A, US4776139 A, US4759661 A, US4690174 A, US4689261 A, US4523874 A, US4523613 A, US4490072 A, US4487232 A, US4451172 A, US4382435 A, US4360042 A, US4359167 A, US4322179 A, US414767 A, US4144369 A, US4140422 A, US4113818 A, US4006599 A, US3958425 A, US3863415 A, US3855799 A, US3820340 A, US3789615 A, US3699684 A, US3658097 A, US3559692 A, US3559691 A, US3440823 A, US3427767 A, US3363799 A, US3151947 A, US3111788 A, US3104681 A, US2876801 A, US2259335 A, US2011200391 AA, US2011150574 AA, US2010126616 AA, US2010059430 AA, US2009295153 AA, US2009232600 AA, US2009220302 AA, US2009127853 AA, US2009117302 AA, US2009067929 AA, US2008240859 AA, US2006289075 AA, US2006162799 AA, US2005111915 AA, US2003095838 AA, US2002025226 AA, US1989950 A, US1949619 A, US1948619 A, JP9235828 A2, JP2005213854 A2, JP2005123854, JP2005042538 A2, JP2003176565 A2, JP2003176564 A2, JP2002302995 A2, JP2002294850 A2, JP2002294849 A2, IE20080166, GB2016639 A1, EP1122481 A2, EP0320348 B1,

DE202005005056 U1

DE202005005056, DE1282562 B, DE10139897, DE1013987 B,
Forward Citations: US9885171, US9850648, US9850647, US9765509, US9637907, US2017089054, US2017002557,

Abstract:
A plastic arch-shape cross section corrugated stormwater chamber has a multiplicity of crest corrugations and valley corrugations which run transverse to its length. Sub-corrugations run along part or all of the arch-curve lengths of either crest corrugations or valley corrugations, or along both of them. A sub-corrugations are smaller in dimension than an associated crest corrugation or valley corrugation. Sub-corrugations may taper in width and depth and may taper to nothingness. A compound convex shape end cap, useful for closing off the ends of stormwater chambers, has substantially vertical corrugations with analogous sub-corrugations.



Title: MODULAR CONSTRUCTION CONDUIT UNIT

Priority: US20140951771P 20140312 US20150643118 20150310 US20160172691 20160603
US20160577070F 20160909 US20170663990 20170731

Family:

Publication number	Publication date	Application number	Application date
CA171693 S	20170906	CA20160171693F	20161118
US2015260313 AA	20150917	US20150643118	20150310
US2016281347 AA	20160929	US20160172691	20160603
US2017328051 AA	20171116	US20170663990	20170731
US9371938 BB	20160621	US20150643118	20150310
US9739046 BB	20170822	US20160172691	20160603
WO15138427 A1	20150917	WO2015US19668	20150310
WO17210054 A1	20171207	WO2017US34199	20170524

Probable Assignee: JOSEPH STEVE MISKOVICH

Assignee(s):(std): JOSEPH STEVE MISKOVICH ; MISKOVICH JOSEPH S

Inventor(s):(std): MISKOVICH JOSEPH S

Agent(s): YOUNG BASILE HANLON AND MACFARLANE PC; GARASCIA CHRISTIAN J; GARASCIA CHRISTIAN J 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 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 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): B23P19/00 E02B11/00 E03F1/00 E03F5/10 E04B5/16 E04B5/32 E04B5/36 E04F15/024 E04F15/12 F16L1/11 F16L57/06 (Advanced/Invention); E04B5/32 E04B5/36 E04F15/12 (Advanced/Non-invention)

CPC: E02B11/005 E04B5/326 E04B5/36 E04F15/123 Y10T29/49826 E03F1/003 E03F1/002 E04B5/48 E03F1/005 E03F5/10

US class: 1/1 29/428 405/157 405/43

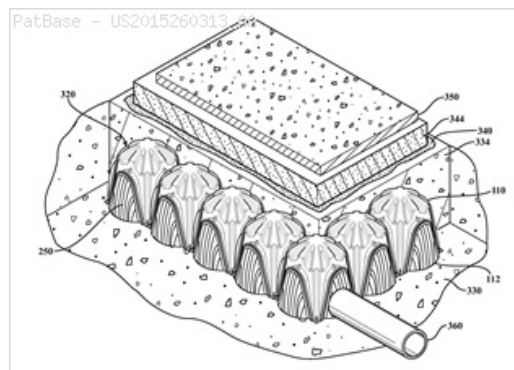
[Classification Explorer](#)

Cited documents: WO03069074 A1, US8147688 BB, US7887256 BB, US7806627 BB, US7744756 BB, US7604133 BB, US7226241 BB, US6383372 BA, US6379541 BA, US6132139 A, US6062767 A, US5890838 A, US5445730 A, US5322387 A, US5241979 A, US5087151 A, US4919568 A, US4910568 A, US4652170 A, US2013008841 AA, US201113135581, US2010059430 AA, US2009261036 AA, US2009180834 AA, US2008181725 AA, US2008035547 AA, US2007258770 AA, US2006233612 AA, US2004253054 AA, US2004184884 AA, US2004131416 AA, US2003070977 AA, US1529019 A, NL1020177 C2, EP2322733 A1, EP1953297 A2, EP1932975 A1, EP0803618 A2,

Forward Citations: WO16204801, USD797235, US9593783, US2016010762,

Abstract:

A modular conduit unit system and method for exemplary uses in routing utility lines and storage management of fluids. The modular conduit units may include independent dome-shaped structures including four orthogonally oriented openings and internal chambers. On connection of many conduit units, multiple passageways are created for routing utility lines through the modular structure. Closure panels may be selectively installed to close off the conduit units and passageways for underground storage of fluids or other materials. The modular units are capable of being encased by materials including concrete for underground and concrete floors and walls of commercial buildings.



Title: LEACHING CHAMBER HAVING SIDEWALL WITH FENCED LOUVERS

Priority: US20140043362P 20140828 US20150839460 20150828 US20170805256 20171107

Family:

Publication number	Publication date	Application number	Application date
US2018087258 AA	20180329	US20170805256	20171107
US9809968 BA	20171107	US20150839460	20150828

Probable Assignee: INFILTRATOR WATER TECHNOLOGIES LLC

Assignee(s):(std): COPPES BRYAN A ; HOLBROOK PAUL R ; INFILTRATOR WATER TECH LLC ; MOORE JR ROY E ; MOORE ROY E

Assignee(s): INFILTRATOR WATER TECHNOLOGIES LLC

Inventor(s):(std): MOORE ROY E ; MOORE JR ROY E ; HOLBROOK PAUL R ; COPPES BRYAN A

Agent(s): C

International class (IPC 8-9): E03F1/00 (Advanced/Invention)

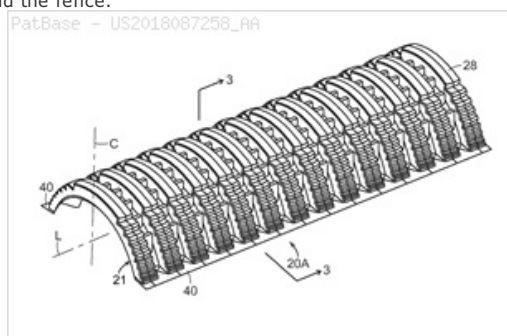
CPC: E03F1/003

[Classification Explorer](#)

Cited documents: US7207747 BA, US6854925 BB, US6443652 BA, US5511903 A, US4759661 A, US4523613 A, US2015043972 AA, US2010008727 AA, US2007258770 AA, US2007077122 AA, EP0372995 A2,

Abstract:

A corrugated thermoplastic leaching chamber has sidewall louvers that define sidewall slot openings. Each louver comprises an outward extending canopy, a cap integral with the outer end of the canopy, having a down slope greater than the slope of the canopy, and a preferably concave fence at the inner end of the canopy, for inhibiting ingress of soil. The chamber may be made by first thermoforming sheet material, preferably two-layer PET plastic sheet to the shape of the chamber, followed by mechanically cutting and deforming the sidewall, to create the opening and the fence.



Title:	Pipe for underdraining			
Priority:	US19780887608 19780317			
Family:	Publication number	Publication date	Application number	Application date
	US4182581 A	19800108	US19780887608	19780317
Probable Assignee:	MITSUI PETROCHEMICAL IND			
Assignee(s):(std):	MITSUI PETROCHEMICAL IND			
Assignee(s):	MITSUI PETROCHEMICAL INDUSTRIES LTD			
Inventor(s):(std):	UEHARA YOSHIO ; KUSUMI YOSHIHISA ; ISHII NORIYUKI ; INABA MINORU			
International class (IPC 8-9):	E02B11/00 (Advanced/Invention);			
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Abstract:
A pipe for underdrainage comprises (1) a liquid-collecting pipe; (2) a plurality of discontinuous protrusions on the outer surface of the liquid-collecting pipe; (3) a filter layer capable of passing liquid while substantially excluding solids, the filter layer being disposed around the liquid-collecting pipe and contacting the top portions of the protrusions; and (4) a liquid-conducting way composed of a space communicating both in the longitudinal direction and in the peripheral direction of the liquid collecting pipe and defined by the protrusions, the outer surface of the liquid-collecting pipe and the inner surface of the filter layer.

