

## Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 53] (system OR apparatus OR device) AND stormwater AND subsurface

Results in EPODOC 12

[SS 54] ..li



1/12 © EPODOC / EPO

PN - [WO2020069134](#) A1 20200402  
PR - US201862736868P  
20180926; US201962905870P  
20190925  
AP - [WO2019US53161](#) 20190926  
DT - \*; Rep  
CT - [US2019US53161](#) 20190926  
[GB2202722](#) A 19881005 [A]  
(VELMAC)  
[A] 1-111  
\*; entire document \*;  
[US4308688](#) A 19820105 [A]  
(REVANE THOMAS L)  
[A] 1-111  
\*; entire document \*;  
[US2018228094](#) A1 20180816 [A]  
(IORIO PAUL ANTHONY [US])  
[A] 1-111  
\*; entire document \*;  
[US6378247](#) B1 20020430 [A]  
(TAKAHASHI SATORU [JP])  
[A] 1-111  
\*; entire document \*;  
[US2018179748](#) A1 20180628 [A]  
(IORIO PAUL ANTHONY [US])  
[A] 1-111  
\*; entire document \*;  
[US8333885](#) B1 20121218 [A] (IORIO  
PAUL ANTHONY [US])  
[A] 1-111

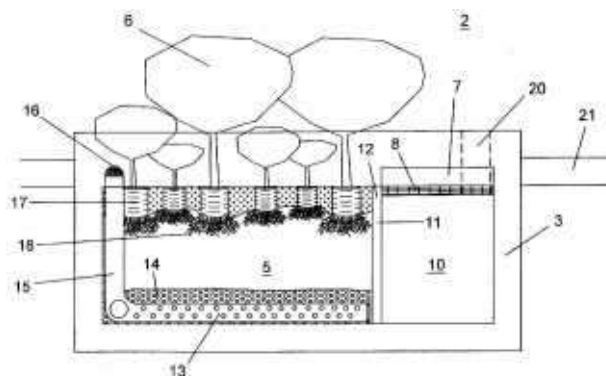


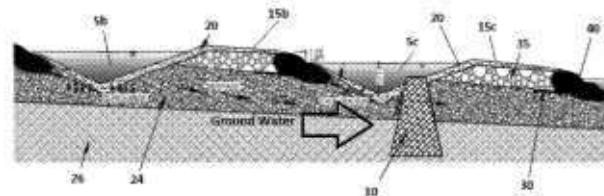
FIG. 1

\* ; entire document \*

- CCI - [A01G9/02](#) ; [A01G27/00](#)
- CCA - [A01G9/047](#)
- CI - A01G9/02 (EP)  
- A01G27/00 (EP)
- CA - A01G9/047 (EP)
- PA - MMT INC DBA STORMTREE [US]
- TI - **STORMWATER PLANTER SYSTEM**
- AB - A **stormwater** planter **system** containing plant material being comprised of a container fabricated of concrete, metal, plastic, or the like, that captures surface rainwater runoff or roof rainwater runoff whereby debris, sands, sediment, pollutants within the water are separated, treated and/or attenuated via multiple processes within a predetermined organic and/or non-organic aggregate material layer. The water is then discharged from the container either through internal pipe, or by direct infiltration into the **subsurface** environment. More particularly, the **system** incorporates features and structures to enable ease of maintenance, and healthier plant growth without competition from weeds and other non-desirable plant material.

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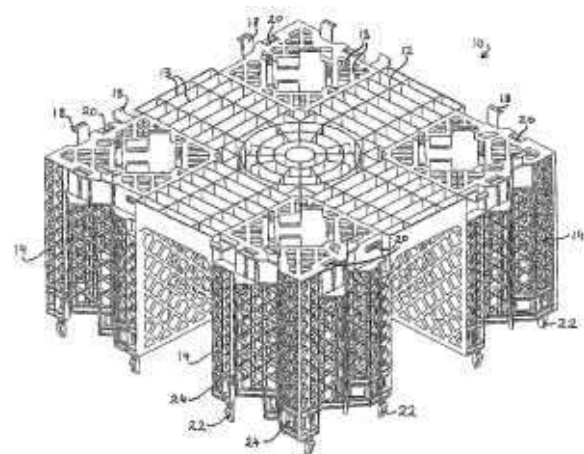
- PN - [US2019032321](#) A1 20190131
- PR - US201816047551  
20180727; US201762537750P  
20170727
- AP - [US201816047551](#) 20180727
- DT - \*; Rep
- CCI - [E02B3/10](#) ; [E02B13/00](#) ; [E02D3/10](#) ;  
[E03F1/002](#)
- CI - E02B3/00 (US)  
- E02B3/10 (EP)  
- E02B7/18 (US)  
- E02B13/00 (EP)  
- E02D3/10 (EP)



- E03F1/002 (EP, US)
- PA - UNDERWOOD KEITH [US]
- TI - IRRIGATION CURTAIN AND  
EROSION CONTROL METHOD FOR  
REGENERATIVE **STORMWATER**  
CONVEYANCE
- AB - In a Regenerative **Stormwater**  
Conveyance (RSC) **system**, rather  
than increase base flow by  
putting a horizontal layer of clay  
and silts in the entire  
streambed, constructing vertical  
irrigation curtains with clay rich  
soil to interrupt the groundwater  
flow at certain intervals will  
increase surface water base  
flows and improve habitat and  
water quality while also  
improving the interactions  
between the hyporheic zones  
and the channel. Also, by  
initially providing a **subsurface**  
flow channel through which  
water can flow, for example,  
using a perforated pipe, and  
building an access road over that  
channel during construction,  
erosion in the RSC project area  
can be significantly reduced or  
eliminated.

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- PN - [EA200701621](#) A1 20080228
- PNFP - EA011474 B1 20090428
- PR - EP20050100810  
20050204; WO2006EP01062  
20060206
- AP - [EA20070001621](#) 20060206
- DT - I
- CT - // STSE (B1)  
[US3280569](#) A 00000000 [ ];  
[EP1036638](#) A1 00000000 [ ];  
DE29924050U U1 00000000 [ ]
- CCI - [E03F1/005](#)
- CI - E03F1/005 (EP)
- PA - (B1)  
CUBECO SYSTEMS LTD [IE]
- TI - (B1)  
**SUBSURFACE STORMWATER**



## SYSTEM

AB

- (B1)

1A cubic modular **subsurface stormwater** unit has equal top and bottom surfaces spaced apart by a set of four pillars, each of which runs from a corner of the top surface to a corresponding corner of the bottom surface. The pillars define a void having a generally cruciform cross section, the void opening onto each of the four side faces defined between the roof and the base. A line of units connected together in series side to side will have a long throughway formed by the respective voids in each unit, and a regular matrix of X- and Y-axis throughways will be formed as units are connected laterally on all sides. The unit is formed of identical halves which can be connected together in any orientation due to the square configuration and to a mating connection which has mating parts symmetrically disposed about a diagonal corner-to-corner line.

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PN

- [MX2007009327](#) A 20071114

PR

- EP20050100810  
20050204; WO2006EP01062  
20060206

AP

- [MX20070009327](#) 20060206

DT

- I

CCI

- [E03F1/005](#)

CI

- E03F1/005 (EP)

PA

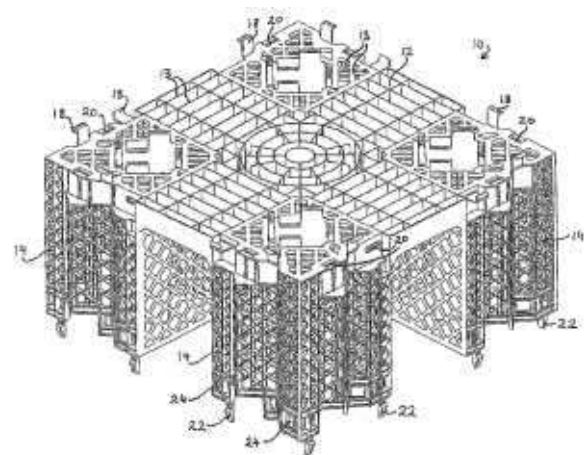
- CUBECO SYSTEMS LTD [IE]

TI

- **SUBSURFACE STORMWATER SYSTEM.**

AB

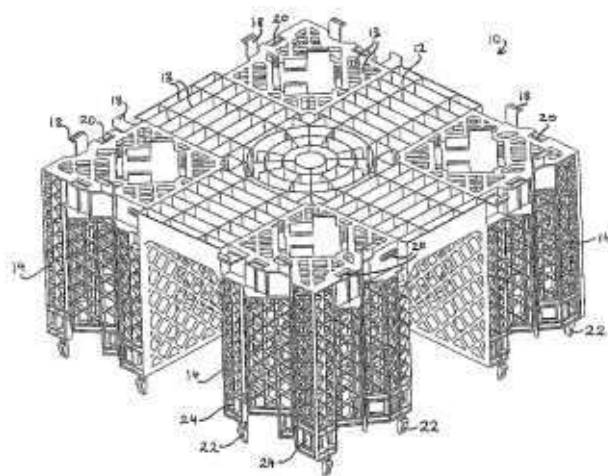
- A cubic modular **subsurface stormwater** unit has equal top and bottom surfaces spaced apart by a set of four pillars, each of which runs from a corner of the top surface to a



corresponding corner of the bottom surface. The pillars define a void having a generally cruciform cross section, the void opening onto each of the four side faces defined between the roof and the base, A line of units connected together in series side to side will have a long throughway formed by the respective voids in each unit, and a regular matrix of X- and Y-axis throughways will be formed as units are connected laterally on all sides. The unit is formed of identical halves which can be connected together in any orientation due to the square configuration and to a mating connection which has mating parts symmetrically disposed about a diagonal corner-to-corner line.

**5/12** © EPODOC / EPO

- PN - [US2008166182](#) A1 20080710
- PNFP - US7621695 B2 20091124
- PR - EP20050100810  
20050204; WO2006EP01062  
20060206
- AP - [US20060815075](#) 20060206
- DT - \*\*
- CT - || R141 (A1)  
[US4246305](#) A 19810120 [ ]  
(DELATTRE HENRI);  
[US2004091320](#) A1 20040513 [ ]  
(PARKER ALTON F [US]);  
[US6736569](#) B2 20040518 [ ] (LEE  
ALAN SIAN GHEE [SG]);  
[US7056058](#) B2 20060606 [ ]  
(URRIOLA HUMBERTO [AU], et al);  
[US7080480](#) B2 20060725 [ ] (URBAN  
JAMES [US], et al);  
[US6095718](#) A 20000801 [ ]  
(BOHNHOFF WILLIAM WALTER [US]);  
[US6428870](#) B1 20020806 [ ]  
(BOHNHOFF WILLIAM W [US]);  
[US6779946](#) B1 20040824 [ ]  
(URRIOLA HUMBERTO [AU], et al);  
[US5810510](#) A 19980922 [ ]  
(URRIOLA HUMBERTO [AU]);



[US2007217866](#) A1 20070920 [ ]  
 (OSCAR LARACH [AU]);  
[US3280569](#) A 19661025 [ ]  
 (WOSENITZ WILLIAM B) ;  
[US6648549](#) B1 20031118 [ ]  
 (URRIOLA HUMBERTO [AU])  
 - || STSE (B2)  
[US4246305](#) A 19810120 [ ]  
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[US5810510](#) A 19980922 [ ]  
 (URRIOLA HUMBERTO [AU]);  
[US6095718](#) A 20000801 [ ]  
 (BOHNHOFF WILLIAM WALTER [US]);  
[US6428870](#) B1 20020806 [ ]  
 (BOHNHOFF WILLIAM W [US]);  
[US6648549](#) B1 20031118 [ ]  
 (URRIOLA HUMBERTO [AU]);  
[US6736569](#) B2 20040518 [ ] (LEE  
 ALAN SIAN GHEE [SG]);  
[US6779946](#) B1 20040824 [ ]  
 (URRIOLA HUMBERTO [AU], et al);  
[US7056058](#) B2 20060606 [ ]  
 (URRIOLA HUMBERTO [AU], et al);  
[US7080480](#) B2 20060725 [ ] (URBAN  
 JAMES [US], et al);  
[US2004091320](#) A1 20040513 [ ]  
 (PARKER ALTON F [US]);  
[US2007217866](#) A1 20070920 [ ]  
 (OSCAR LARACH [AU]);  
[EP1416099](#) A2 20040506 [ ]  
 (POLYPIPE CIVILS LTD [GB]);  
[EP1743984](#) A1 20070117 [ ]  
 (SOGEMAP INJECTION [FR]);  
[GB2417733](#) A 20060308 [ ] (MARLEY  
 EXTRUSIONS [GB])

- CCI - [E03F1/005](#)
- CI - E03F1/005 (EP)
- TI - (A1)  
**Subsurface Stormwater System**  
 - (B2)  
**Subsurface stormwater system**
- AB - (A1)  
 A cubic modular **subsurface stormwater** unit has equal top and bottom surfaces spaced apart by a set of four pillars, each of which runs from a corner of the top surface to a corresponding corner of the bottom surface. The pillars define a void having a generally

cruciform cross section, the void opening onto each of the four side faces defined between the roof and the base. A line of units connected together in series side to side will have a long throughway formed by the respective voids in each unit, and a regular matrix of X- and Y-axis throughways will be formed as units are connected laterally on all sides. The unit is formed of identical halves which can be connected together in any orientation due to the square configuration and to a mating connection which has mating parts symmetrically disposed about a diagonal corner-to-corner line.

- (B2)

A cubic modular **subsurface stormwater** unit has equal top and bottom surfaces spaced apart by a set of four pillars, each of which runs from a corner of the top surface to a corresponding corner of the bottom surface. The pillars define a void having a generally cruciform cross section, the void opening onto each of the four side faces defined between the roof and the base. A line of units connected together in series side to side will have a long throughway formed by the respective voids in each unit, and a regular matrix of X- and Y-axis throughways will be formed as units are connected laterally on all sides. The unit is formed of identical halves which can be connected together in any orientation due to the square configuration and to a mating connection which has mating parts symmetrically disposed about a diagonal corner-to-corner line.

PN - [US5702593](#) A 19971230

PR - US19960645515  
19960514; US19950387476  
19950213; US19940195447 19940214

AP - [US19960645515](#) 19960514

DT - \*\*

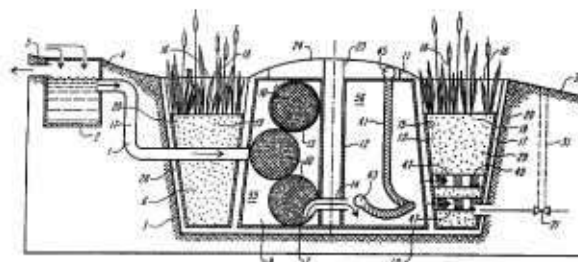
CT - || STSE (A)  
[US732208](#) A 19030630 [ ] (MITCHELL  
GARRY T D [US]);  
[US1573929](#) A 19260223 [ ] (GALL  
WILLIAM F);  
[US1902171](#) A 19330321 [ ] (KOPP  
CHARLES A);  
[US3770623](#) A 19731106 [ ] (SEIDEL  
K);  
[US3817864](#) A 19740618 [ ]  
(CARLSON H, et al);  
[US4132645](#) A 19790102 [ ]  
(BOTTOMLEY JAMES C, et al);  
[US4162976](#) A 19790731 [ ]  
(MONSON ARNOLD A [US]);  
[US4293421](#) A 19811006 [ ] (GREEN  
ALVIN W);  
[US4824572](#) A 19890425 [ ] (SCOTT  
RICHARD E [US]);  
[US4839051](#) A 19890613 [ ] (HIGA  
TERUO [JP]);  
[US4995969](#) A 19910226 [ ] (LAVIGNE  
RONALD L [US]);  
[US4997568](#) A 19910305 [ ]  
(VANDERVELDE DON M [US], et al);  
[US5073257](#) A 19911217 [ ] (HIGA  
TERUO [JP]);  
[US5137565](#) A 19920811 [ ] (THELIN  
ANDERS G [SE], et al);  
[US5174897](#) A 19921229 [ ]  
(WENGRZYNEK ROBERT J [US]);  
JPS5870890 A 19830427 [ ] (TOA  
HARBOR WORKS CO LTD)

CCI - [C02F3/046](#) ; [C02F3/327](#) ; [E03F1/00](#) ;  
[E03F1/002](#)

CCA - [E03F2201/10](#) ; [Y02A10/00](#) ;  
[Y02W10/10](#)

CI - C02F3/046 (EP, US)  
- C02F3/327 (EP, US)  
- E03F1/00 (EP, US)  
- E03F1/002 (EP, US)

CA - E03F2201/10 (EP, US)  
- Y02A10/00 (EP, US)

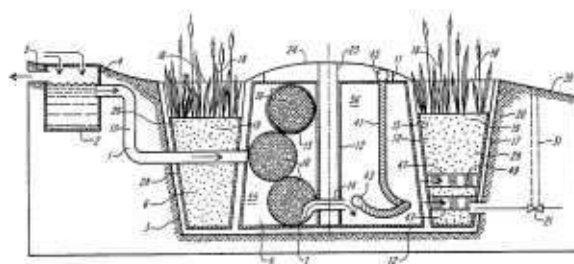


|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | - Y02W10/10 (EP, US)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| PA | - STORMTREAT SYSTEMS INC [US]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| TI | - <b>Stormwater</b><br>treatment <b>system/apparatus</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| AB | - A method and <b>apparatus</b> for<br>treating<br>contaminated <b>stormwater</b> runoff<br>from roads and adjacent lands. A<br>multi-stage and self-contained<br>integrated module is designed<br>to collect the first flush<br>of <b>stormwater</b> runoff (which<br>contains the majority of<br>pollutants) and to treat the<br>pollutants using sedimentation,<br>filtration and constructed<br>wetlands. The <b>apparatus</b> is mass-<br>produced to provide<br>standardized hydrologic controls,<br>important to the reliability of the<br>constructed wetland component<br>of the <b>apparatus</b> . Raw <b>stormwater</b><br>enters the central sedimentation<br>chamber of the <b>apparatus</b> which is<br>divided into multiple segments<br>designed to provide a series of<br>sedimentation/filtration<br>chambers. At least one chamber<br>is provided with a removable<br>filter bulkhead. Effluent from the<br>final sedimentation chamber is<br>discharged to the constructed<br>wetland <b>system</b> which surrounds<br>the central sedimentation tank.<br>Water flows through the<br>perimeter wetland <b>system</b><br>in <b>subsurface</b> /saturated<br>conditions and contacts the root<br>zone of the constructed wetland<br>where biochemical interactions<br>attenuate pollutants. A skimmer<br>tube may be positioned in at<br>least one chamber to pass water<br>from near the surface through an<br>adjacent bulkhead to the lower<br>part of the next chamber. A<br>hydrologic control valve in<br>the <b>apparatus</b> regulates the flow<br>of water from the central<br>sedimentation tank to the<br>wetland and the effluent |

discharge rate out of the wetland. This control and the standardization of the construction allows for precise hydrologic controls designed to provide a 5-10 day holding time within the **apparatus**.

7/12 © EPODOC / EPO

- PN - [US5549817](#) A 19960827
- PR - US19950387476  
19950213; US19940195447 19940214
- AP - [US19950387476](#) 19950213
- DT - \*\*
- CT - || STSE (A)  
[US732208](#) A 19030630 [ ] (MITCHELL GARRY T D [US]);  
[US1573929](#) A 19260223 [ ] (GALL WILLIAM F);  
[US1902171](#) A 19330321 [ ] (KOPP CHARLES A);  
[US3770623](#) A 19731106 [ ] (SEIDEL K);  
[US3817864](#) A 19740618 [ ] (CARLSON H, et al);  
[US4132645](#) A 19790102 [ ] (BOTTOMLEY JAMES C, et al);  
[US4162976](#) A 19790731 [ ] (MONSON ARNOLD A [US]);  
[US4293421](#) A 19811006 [ ] (GREEN ALVIN W);  
[US4824572](#) A 19890425 [ ] (SCOTT RICHARD E [US]);  
[US4839051](#) A 19890613 [ ] (HIGA TERUO [JP]);  
[US4995969](#) A 19910226 [ ] (LAVIGNE RONALD L [US]);  
[US4997568](#) A 19910305 [ ] (VANDERVELDE DON M [US], et al);  
[US5073257](#) A 19911217 [ ] (HIGA TERUO [JP]);  
[US5137565](#) A 19920811 [ ] (THELIN ANDERS G [SE], et al);  
[US5174897](#) A 19921229 [ ] (WENGRZYNEK ROBERT J [US]);  
JPS5870890 A 19830427 [ ] (TOA HARBOR WORKS CO LTD)
- CTNP - || STSE (A)  
[ ] - Constructed Wetlands for Wastewater Treatment, (Lewis Publishers, 1989)Hammer. (book)



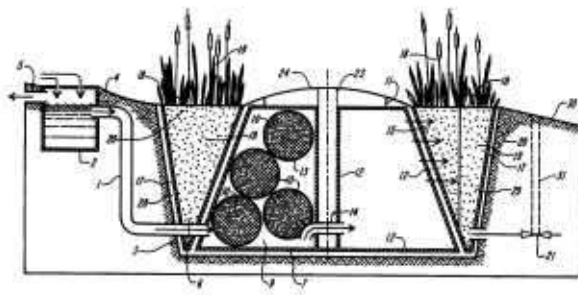
(not submitted with this communication).  
 [ ] - The Use of Wetlands for Controlling Stormwater Pollution, (The Terrine Institute, 1992)  
 Strecker et al. (book) (not submitted with this communication).  
 [ ] - Results of the Nationwide Urban Runoff Program, vol. 1 Final Report, (U.S. Environmental Protection Agency1983) (book) (not submitted with this communication).

- CCI - [C02F3/046](#) ; [C02F3/327](#) ; [E03F1/00](#) ; [E03F1/002](#)
- CCA - [E03F2201/10](#) ; [Y02A10/00](#) ; [Y02W10/10](#)
- CI - C02F3/046 (EP, US)  
 - C02F3/327 (EP, US)  
 - E03F1/00 (EP, US)  
 - E03F1/002 (EP, US)
- CA - E03F2201/10 (EP, US)  
 - Y02A10/00 (EP, US)  
 - Y02W10/10 (EP, US)
- PA - STORMTREAT SYSTEMS INC [US]
- TI - **Stormwater**  
 treatment **system/apparatus**
- AB - A method and **apparatus** for treating contaminated **stormwater** runoff from roads and adjacent lands. A multi-stage and self-contained integrated module is designed to collect the first flush of **stormwater** runoff (which contains the majority of pollutants) and to treat the pollutants using sedimentation, filtration and constructed wetlands. The **apparatus** is mass-produced to provide standardized hydrologic controls, important to the reliability of the constructed wetland component of the **apparatus**. Raw **stormwater** enters the central sedimentation chamber of the **apparatus** which is divided into multiple segments designed to provide a series of

sedimentation/filtration chambers. At least one chamber is provided with a removable filter bulkhead. Effluent from the final sedimentation chamber is discharged to the constructed wetland **system** which surrounds the central sedimentation tank. Water flows through the perimeter wetland **system** in **subsurface/saturated** conditions and contacts the root zone of the constructed wetland where biochemical interactions attenuate pollutants. A skimmer tube may be positioned in at least one chamber to pass water from near the surface through an adjacent bulkhead to the lower part of the next chamber. A hydrologic control valve in the **apparatus** regulates the flow of water from the central sedimentation tank to the wetland and the effluent discharge rate out of the wetland. This control and the standardization of the construction allows for precise hydrologic controls designed to provide a 5-10 day holding time within the **apparatus**.

8/12 © EPODOC / EPO

- PN - [US5437786](#) A 19950801
- PR - US19940195447 19940214
- AP - [US19940195447](#) 19940214
- DT - \*; Rep
- CT - || STSE (A)  
[US732208](#) A 19030630 [ ] (MITCHELL GARRY T D [US]);  
[US1573929](#) A 19260223 [ ] (GALL WILLIAM F);  
[US1902171](#) A 19330321 [ ] (KOPP CHARLES A);  
[US3770623](#) A 19731106 [ ] (SEIDEL K);  
[US3817864](#) A 19740618 [ ] (CARLSON H, et al);  
[US4162976](#) A 19790731 [ ] (MONSON ARNOLD A [US]);



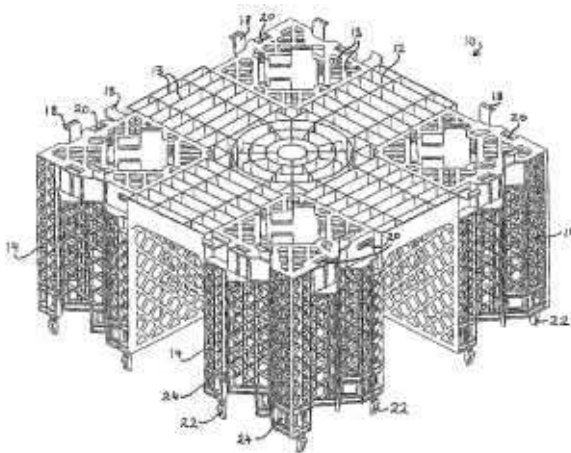
[US4293421](#) A 19811006 [ ] (GREEN ALVIN W);  
[US4824572](#) A 19890425 [ ] (SCOTT RICHARD E [US]);  
[US4995969](#) A 19910226 [ ] (LAVIGNE RONALD L [US]);  
[US4997568](#) A 19910305 [ ] (VANDERVELDE DON M [US], et al);  
[US5073257](#) A 19911217 [ ] (HIGA TERUO [JP]);  
JPS5870890 A 19830427 [ ] (TOA HARBOR WORKS CO LTD)

- CCI - [C02F3/046](#) ; [C02F3/327](#) ; [E03F1/00](#) ; [E03F1/002](#)
- CCA - [E03F2201/10](#) ; [Y02A10/00](#) ; [Y02W10/10](#)
- CI - C02F3/046 (EP, US)  
- C02F3/327 (EP, US)  
- E03F1/00 (EP, US)  
- E03F1/002 (EP, US)
- CA - E03F2201/10 (EP, US)  
- Y02A10/00 (EP, US)  
- Y02W10/10 (EP, US)
- PA - STORMTREAT SYSTEMS INC [US]
- TI - **Stormwater**  
treatment **system/apparatus**
- AB - A method and **apparatus** for treating contaminated **stormwater** runoff from roads and adjacent lands. A multi-stage and self-contained **system** designed to collect the "first flush" of **stormwater** runoff (which contains the majority of pollutants) and to treat the pollutants using sedimentation, filtration and constructed wetlands. The **apparatus** is mass-produced to provide standardized hydrologic controls, important to the reliability of the constructed wetland component of the **apparatus**. Raw **stormwater** enters the central sedimentation chamber of the **apparatus** which is divided into multiple segments designed to provide a series of sedimentation/filtration chambers. Each chamber is

divided by a removable filter bulkhead sequenced from coarse to fine sediment sizes. Effluent from the final sedimentation chamber is discharged to the constructed wetland **system** which surrounds the central sedimentation basin. Water flows through the perimeter wetland **system** in **subsurface/saturated** conditions and contacts the root zone of the constructed wetland where biochemical interactions attenuate pollutants. Hydrologic control valves in the **apparatus** regulate the flow of water from the sedimentation basin to the wetland and the effluent discharge rate out of the wetland. This control and the standardization of the construction allows for precise hydrologic controls designed to provide a 5-10 day holding time within the **apparatus**.

9/12 © EPODOC / EPO

- PN - [WO2007054130](#) A1 20070518
- PR - EP20050100810 20050204
- AP - [WO2006EP01062](#) 20060206
- DT - \*; Rep
- CT - [EP] ISR (A1)  
[US3280569](#) A 00000000 [X]  
 (WOSENITZ WILLIAM B)  
 [X] 1,7,15  
 \* column 1, line 64 - column 2, line 10 \*  
 \* column 2, lines 25-34 \*  
 \* figure 5 \*;  
[EP1036638](#) A1 00000000 [X] (RITA ENGINEERING CONSULTANTS CO., LTD)  
 [X] 1,2,6,7,12,13  
 \* column 3, lines 21-35 \*  
 \* column 7, lines 11-54 \*  
 \* figures 5-7,10 \*;  
[DE29924050U](#) U1 00000000 [A]  
 (WAVIN B.V., ZWOLLE)  
 [A] 4,8-14  
 \* page 6, lines 13-18 \*



*\* page 8, lines 12-17 \**

*\* figure - \**

- CCI - [E03F1/005](#)
- CI - E03F1/005 (EP)
- PA - CUBECO SYSTEMS LTD [IE] ; SMITH  
PADDY [IE]; SMITH KIERAN [IE]
- TI - **SUBSURFACE STORMWATER  
SYSTEM**
- AB - A cubic modular **subsurface  
stormwater** unit has equal top  
and bottom surfaces spaced  
apart by a set of four pillars,  
each of which runs from a corner  
of the top surface to a  
corresponding corner of the  
bottom surface. The pillars  
define a void having a generally  
cruciform cross section, the void  
opening onto each of the four  
side faces defined between the  
roof and the base, A line of units  
connected together in series  
side to side will have a long  
throughway formed by the  
respective voids in each unit,  
and a regular matrix of X- and Y-  
axis throughways will be formed  
as units are connected laterally  
on all sides. The unit is formed  
of identical halves which can be  
connected together in any  
orientation due to the square  
configuration and to a mating  
connection which has mating  
parts symmetrically disposed  
about a diagonal corner-to-  
corner line.

PN - [EP1863977](#) A1 20071212

PR - WO2006EP01062  
20060206; EP20050100810  
20050204; EP20060840904 20060206

AP - [EP20060840904](#) 20060206

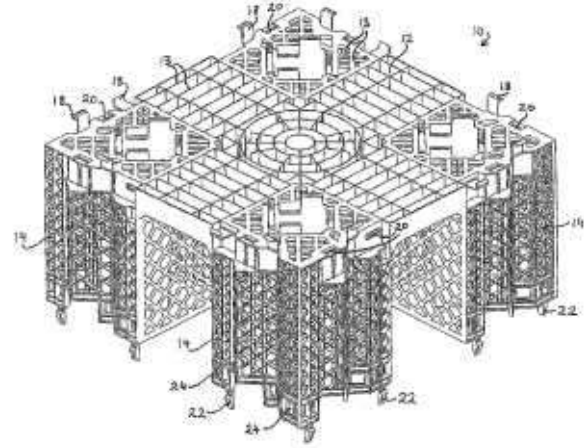
DT - I

CCI - [E03F1/005](#)

CI - E03F1/005 (EP)

PA - CUBECO SYSTEMS LTD [IE]

TI - **SUBSURFACE STORMWATER  
SYSTEM**



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PN - [CN101115888](#) A 20080130

PNFP - CN101115888B B 20100929

PR - EP20050100810  
20050204; WO2006EP01062  
20060206

AP - [CN20068003961](#) 20060206

DT - I

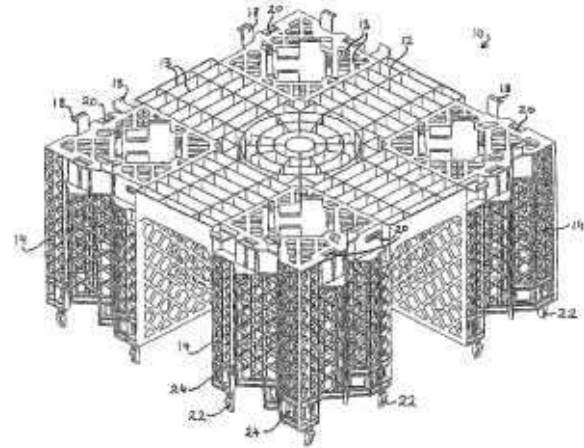
CCI - [E03F1/005](#)

CI - E03F1/005 (EP)

PA - (A)  
CUBECO SYSTEMS LTD [IE]  
(B)  
CUBECO SYSTEMS LTD

TI - (A B)  
**Subsurface stormwater system**

AB - (B)  
A cubic modular **subsurface  
stormwater** unit has equal top  
and bottom surfaces spaced  
apart by a set of four pillars,  
each of which runs from a corner  
of the top surface to a  
corresponding corner of the  
bottom surface. The pillars  
define a void having a generally  
cruciform cross section, the void  
opening onto each of the four  
side faces defined between the  
roof and the base, A line of units  
connected together in series  
side to side will have a long  
throughway formed by the  
respective voids in each unit,



and a regular matrix of X- and Y-axis throughways will be formed as units are connected laterally on all sides. The unit is formed of identical halves which can be connected together in any orientation due to the square configuration and to a mating connection which has mating parts symmetrically disposed about a diagonal corner-to-corner line.

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PN - [CA2596587](#) A1 20070518  
 PR - EP20050100810  
 20050204; WO2006EP01062  
 20060206  
 AP - [CA20062596587](#) 20060206  
 DT - I  
 CCI - [E03F1/005](#)  
 CI - E03F1/005 (EP)  
 PA - CUBECO SYSTEMS LTD [IE]  
 TI - **SUBSURFACE STORMWATER  
 SYSTEM**

