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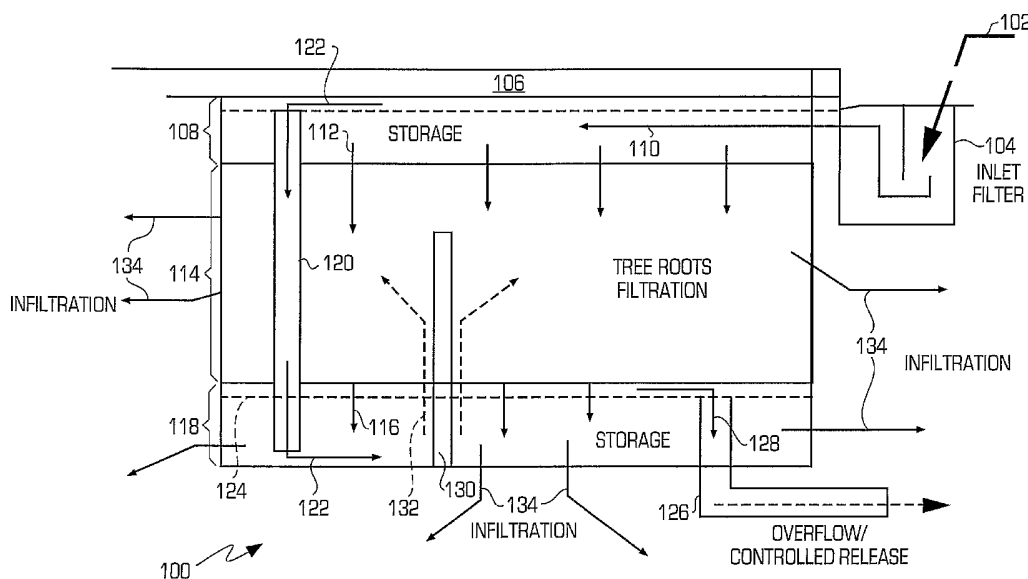
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(54) Title: INTEGRATED TREE ROOT AND STORM WATER SYSTEM



(57) Abstract: A structural cell system (100) is disclosed for supporting hardscape (106) areas in a way that enables tree root growth and accommodates filtering, retention, storage and infiltration of storm water while preventing hardscape damage. The system (100) includes a plurality of structural cells (210) capable of being positioned below a hardscape. The structural cells are designed to have openings that are sized to accept tree roots. The system has one or more permeable barriers around the structural cells with a way for water to flow into and out of the plurality of structural cells. The structural cells may include a lid (712) that includes reinforcement members to reduce resin creep.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/01410

A. CLASSIFICATION OF SUBJECT MATTER												
IPC(7) : A01G 9/00; A47G 7/08												
US CL : 47/32.7												
According to International Patent Classification (IPC) or to both national classification and IPC												
B. FIELDS SEARCHED												
Minimum documentation searched (classification system followed by classification symbols)												
U.S. : 47/32.7, 1.01F, 1.01T, 32, 76, 32.3, 79, 32.8, 65.9, 48.5, 21.1; 405/43-46, 50, 53, 59												
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched												
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)												
C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
X --- Y	US 5,810,510 A (Urriola) 22 September 1998 (22.09.2002) entire patent	1-5, 7, 9, 11-13, 18, 19, 21-26, 31-33, 38, 39, 42, 43 ----- 6, 10, 14-17, 27-30, 34-37, 40, 41										
X --- A	US 6,248,870 B1 (Bohnhoff) 06 August 2002 (06.08.2002) entire patent	50-56 ----- 1-46										
A	US 2003/0082359 A1 (Scott) 01 May 2003 (01.05.2003) entire patent	1-56										
A	US 5,460,867 A (Magnuson et al) 24 October 1995 (24.10.1995) entire patent	1-56										
A	US 6,095,718 A (Bohnhoff) 01 August 2000 (01.08.2000) entire patent	1-56										
A	US 6,277,274 B1 (Coffman) 21 August 2001 (21.08.2001) entire patent	1-56										
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.												
* Special categories of cited documents: <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"B" earlier application or patent published on or after the international filing date</td> <td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&amp;" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"B" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention											
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art											
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family											
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## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 02-161008 A (Konosu) 20 June 1990 (20.06.1990) entire patent	1-56
A	JP 04-099411 A (Tajima et al) 31 March 1992 (31.03.1992) entire patent	1-56
X	PCT WO00/50142 (Urriola) 31 August 2000 (31.08.2001) entire patent	1-5, 7-9, 11-13, 18-26, 31-33, 38, 39, 42-46
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Y		6, 10, 14-17, 20, 27-30, 34-37, 40, 41