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Search PN=(es2358715) (Results 1)
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Search [SP]: 1. a system to assist in the planting and growth of floating macrophyte plant species in water purification comprising: a floating assembler structure a flat gridded structure, and a basket or cone, the floating assembler structure has an irregular hexagonal polygonal shape, with each side fitted with two joining elements, the floating assembler structure has at least three consecutive sides with female connections and another three with male connections, at least one of vertices (m), the floating assembler structure has two female connections and two male connections at the opposite vertex (a) and is also fitted with two interior and central coupling bars that extend to the a-m vertex, thus allowing the division of the hexagonal structure into two halves, the floating assembler structure comprises a plurality of coupling bars joined to the polygonal structure and flexible arcs that join the coupling bars together or with the floating structure edge. 2. the system in accordance with claim 1, wherein the floating assembler structure houses and secures a variable number of flat gridded structures to a surface thereof, which have at least one circular central housing and anchor elements that join each flat gridded structure to the floating assembler structure, the anchor elements in the form of a clamp with an aperture or mouth located in a different place according to the function to be performed. 3. a system to assist in the planting and growth of floating macrophyte plant species in water purification, in accordance with claim 1, the central circular housing of the flat gridded structure is configured to house a basket or cone that comprises a truncated cone having a proportional diminishing diameter between the upper part or mouth and the lower part or base, the latter being closed along the inside perimeter by a cover, the upper part or mouth comprises a closed ring with two parallel lateral columns located on either side thereof, the two lateral columns are interrupted by other smaller diameter interleaved rings, located at equal distances from each other. 4. the system in accordance with claim 2, at least one anchor element is a separation anchor, the separation anchor having apertures in a central part thereof. 5. the system in accordance with claim 2, at least one anchor element is a joining anchor, the joining anchor having apertures in a lower section thereof. 6. the system in accordance with claim 2, the central housing having a plurality of mechanical securing elements arranged in a discontinuous manner along an inside edge of the central housing and the other housings are delimited on the inside edge of the floating assembler structure. 7. the system in accordance with claim 3, the interleaved rings being not completely closed. 8. the system in accordance with claim 3, the interleaved rings being cuts or sections located parallel in the opposite ring part occupied by the lateral column. (Results 22)

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Search Floating and support and vegetation (Results 79)
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Title: SUPER-ENHANCED, ADJUSTABLY BUOYANT **FLOATING** ISLAND

Abstract: Source: US2009139927A A **floating** island comprising one or more layers of nonwoven mesh material and optional buoyant nodules. The mesh material is optionally coated with a spray-on elastomer or inoculated with nutrients or microorganisms. The island can include buoyant growth medium, **floats**, buoyant blocks, a prefabricated seed blanket, a dunking feature, capillary tubes, wicking units and/or bell flotation units. A larger embodiment is comprised of nonwoven mesh material, buoyant nodules, supplemental flotation units, stepping pads and optional load distribution members. Other optional features include a stepping stone flotation assembly, a stepping stone/vertical buoyant member flotation assembly, and a **floating** log assembly. The buoyancy of the island can be adjusted with a rigid framework of horizontal members, vertical members that can be moved vertically within the island, and/or a framework of prefabricated flotation tubes and cross members. The present invention also covers a **floating** island with a boat docking location.

Classifications:

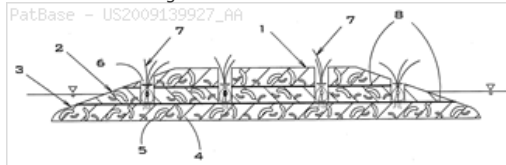
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International (IPC 1-7): A01G31/00 A01G31/04 A01G31/06 A01G9/02

CPC: Y02W10/33 Y02W10/37 A01G31/00 Y02P60/642

European: A01G31/00

US: 114/264 114/264S 210/242.1 210/242.100S 210/602 264/131 264/131S 264/160 264/160S 264/248 264/248S 47/59.00RP 47/59.00S 47/59.00SP 47/59R 47/59S 47/65.7



Family:

Publication number	Publication date	Application number	Application date
AU2005247308 AA	20051208	AU20050247308	20050420
AU2005247308 BB	20101104	AU20050247308	20050420
CA2568044 AA	20061123	CA20052568044	20050420
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EP2468088 A1	20120627	EP20120160610	20050420
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WO05115129 A3	20060309	WO2005US13373	20050420

Priority:

EP20050736920	20050420	EP20120160610	20050420	US20050569491	20050420
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RUSSELL F COLE ; RUSSELL F SMITH ; CUNNINGHAM ALFRED BOZEMAN ; FRANK M STEWART ; BRUCE G KANIA

Agent(s): PHILLIPS ORMONDE FITZPATRICK; CLARK WILSON LLP; PATENT AND RECHTSANWAELTE BAUER WAGNER PRIESMEYER; COOKSON BARBARA ELIZABETH; HUTCHINSON THOMAS OWEN; ANTOINETTE M TEASE; ANTOINETTE M TEASE PLLC; ANTOINETTE M

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2005247308 AA	20051208	LSPB	+	published / reissued	
AU2005247308 AA	20110303	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
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EP2468088 A1	20140731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : GB PAYMENT DATE : 20140403 YEAR OF FEE PAYMENT : 10
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EP2468088 A1	20160429	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
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EP2468088 A1	20160729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : HU DESCRIPTION : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO EFFECTIVE DATE : 20050420
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EP2468088 B1	20130724	LSGT	+	granted / extensions (spc, cpc, pte)	
JP2008500062 T2	20080110	LSPB	+	published / reissued	
JP2008500062 T2	20080418	LSRE	A521	WRITTEN	DESCRIPTION : JAPANESE

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JP2008500062 T2	20080418	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20080417
JP2008500062 T2	20110511	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110510
JP2008500062 T2	20111005	LSRE	A521	WRITTEN AMENDMENT	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111004
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NZ551345 A	20100326	LSGT	+PSEA	PATENT SEALED	
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US2011005132 AA	20110113	LSPB	+	published / reissued	
US2011005132 AA	20100925	LSAS	AS	ASSIGNMENT	OWNER NAME : FOUNTAINHEAD, LLC, MONTANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KANIA, BRUCE G.; STEWART, FRANK M.; SMITH, RUSSELL F.; AND OTHERS; SIGNING DATES FROM 20061215 TO 20070130;

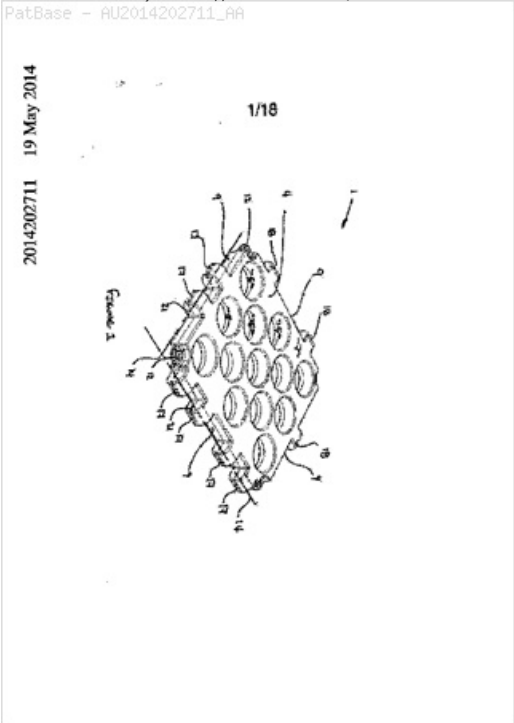
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US2011005134 AA	20110113	LSPB	+	published / reissued	
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US2011005444 AA	20110113	LSPB	+	published / reissued	
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US2011005447 AA	20110113	LSPB	+	published / reissued	
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US2011146559 AA	20110623	LSPB	+	published / reissued	
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US8327579 BB	20160531	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
WO05115129 A2	20051208	LSPB	+	published / reissued	
WO05115129 A3	20061114	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007527235 COUNTRY OF REF DOCUMENT : JP
WO05115129 A3	20061114	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2005247308 COUNTRY OF REF DOCUMENT : AU
WO05115129 A3	20061116	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 551345 COUNTRY OF REF DOCUMENT : NZ
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WO05115129 A3	20061124	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200580016707.0 COUNTRY OF REF DOCUMENT : CN
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WO05115129 A3	20061207	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2005247308 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT :

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WO05115129 A3	20061212	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2005736920 COUNTRY OF REF DOCUMENT : EP
WO05115129 A3	20070328	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2005736920 COUNTRY OF REF DOCUMENT : EP

Title: IMPROVEMENTS IN, OR RELATING TO, **VEGETATION SUPPORT**

Abstract: Source: AU2014202711A A **vegetation support** element (1) able to **support vegetation** in a **floating** position on or above a fluid medium, comprising, a body portion (4) which is substantially hollow, which body portion (4) has at least one aperture (6) therethrough from an upper surface (7), to a lower surface (8), the at least one aperture (6) to allow contact of the **vegetation** with the fluid medium, and at least one edge portion (9), peripheral to the body portion (4), the edge portion (9) adapted to allow engagement (1) of the element with a neighbouring element, wherein the element (1) can **support** the **vegetation** on or above the fluid medium to allow the **vegetation** to contact the fluid medium and form a **floating** wetland. p / ~ I 60 kI - 21 4 1/.>1 \ 0 1' ~.1 I> 'N N / ss '3? '#~ N5 K d IN) N 'U 4;; 'N -'1 -. N tf /N N>7 2< ft I-
Classifications:
International (IPC 8-9): A01G9/02 A01G9/12 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
AU2014202711 AA	20141204	AU20140202711	20140519

Priority:

NZ20130610738 20130517 NZ20130611068 20130524

Probable Assignee: NATIVEAWA LTD

Assignee(s): (std): NATIVEAWA LTD

Inventor(s): (std): SHEARER ROBERT STANLEY

Agent(s): BALDWINS INTELLECTUAL PROPERTY

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2014202711 AA	20141204	LSPB	+	published / reissued	

Title: Artificial island, artificial island **support** and method for building an artificial island

Abstract: Source: US6520720B The proposed artificial island is made in the style of a landscape of mountain volcanic islands covered with natural growth, for arranging in it the oil/gas producing and refining equipment, with simultaneously restoring the sea biologic resources, is intended for creating a closed producing/refining complex having a social infrastructure, and providing for complete processing of industrial and domestic waste. At the place for building the artificial island, a leveling of sea bottom is performed, a **support** is installed in the form of **support** piles (5) and outlining envelope. The latter is made yielding the internal bay by installing main pontoons which are coupled by means of a banking ring.

Floating piles (6) are driven down opposite to the main pontoons along the external perimeter of the banking ring and fixed to the said pontoons. The **support** piles are driven down to hard carrier rocks (13) of the sea bottom along the internal perimeter of the banking ring, excluding places intended for navigable canals which can be blocked. Then, the step of forming at least one navigable canal which can be blocked, is performed for coupling the internal bay with an open sea. And a dome is built on the **support** piles above the internal bay for arranging an oil/gas producing (21) and refining (22) equipment, as well as a power-generating unit (23), production areas (24) and living rooms (25).

Classifications:

International (IPC 8-9): B63B35/44 E02B17/00

E21B15/02 (Advanced/Invention);

E02B17/00 (Advanced/Non-invention);

B63B35/44 E02B17/00 E21B15/00 (Core/Invention)

International (IPC 1-7): E02B17/00 E02D29/09 E21B15/02

CPC: B63B35/44 E02B17/00

European: B63B35/44 E02B17/00

US: 405/195.1 405/228

PatBase - US6520720_B1

U.S. Patent Feb. 18, 2003 Sheet 1 of 13 US 6,520,720 B1

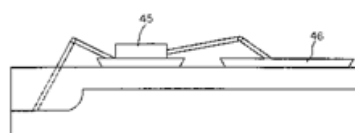


FIG.1

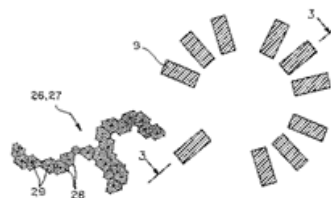


FIG.2

Family:

Publication number	Publication date	Application number	Application date
AR041774 AA	20050601	AR2001P102273	20010514
AU200068817 A5	20011126	AU20000068817D	20000816
CA2352180 AA	20011115	CA20002352180	20000816
CN1360654 A	20020724	CN20008001949	20000816
EA002779 B1	20020829	EA20010000211	20000816
EA200100211 A1	20011224	EA20010000211	20000816
EP1283306 A1	20030212	EP20000957161	20000816
JP2004522012 T2	20040722	JP20010584654T	20000816
KR20020033595 A	20020507	KR20017005910	20010510
RU2159320 C1	20001120	RU20000111846	20000515
TH60311 A	20040109	TH20011001845	20010514
TW493024 B	20020701	TW20010111778	20010515
US6520720 BA	20030218	US20010831811	20010514
WO0188278 A1	20011122	WO2000RU00333	20000816

Priority:

RU20000111846 20000515 WO2000RU00333 20000816

Probable Assignee: BOLDYREV VLADIMIR SANDZHIEVICH

Assignee(s): (std): BOLDYREV VLADIMIR SANDZHIEVICH ; SANDZHIEVICH BOLDYREV VLADIMIR ; VLADIMIR SANDZHIEVICH BOLDYREV

Assignee(s): BOLDUREV VLADIMIR SANDZHIEVICH

Inventor(s): (std): BOLDUREV VLADIMIR SANDZHIEVICH ; BOLDYREV V S ; BOLDYREV VLADIMIR SANDZHIEVICH ; BOLDYREV VS ; SANDZHIEVICH BOLDYREV VLADIMIR

Inventor(s): VLADIMIR SANDZHIEVICH BOLDYREV

Agent(s): ASPEN PHARMA PTY LTD; SPRUSON AND FERGUSON

Designated states: AM AT AU AZ BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY DE DK DZ ES FI FR GA GB GH GM GN GR GW ID IE IL IN IS IT JP KE KG KR KZ LI LK LS LU MC MD MG ML MR MW MX MZ NE NL NO NZ PT RU SD SE SG SL SN SZ TD TG TJ TM TR TZ UA UG US VN YU ZA ZW

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
AR041774 AA	20050601	LSPB	+	published / reissued	
AR041774 AA	20091028	LSGT	+FG	GRANT, REGISTRATION	
AU200068817 A5	20011126	LSPB	+	published / reissued	
CA2352180 AA	20011115	LSPB	+	published / reissued	
CA2352180 AA	20010514	LSNP	+AFNE	NATIONAL PHASE ENTRY	
CA2352180 AA	20031219	LSSES	+EEER	EXAMINATION REQUEST	
CA2352180 AA	20060816	LSLE	-FZDE	DEAD	
CN1360654 A	20020724	LSPB	+	published / reissued	
CN1360654 A	20020724	LSPB	+C06	PUBLICATION	
CN1360654 A	20060104	LSDW	-C20	PATENT RIGHT OR UTILITY MODEL DEEMED TO BE ABANDONED OR IS ABANDONED	
EA002779 B1	20020829	LSGT	+	granted / extensions (spc, cpc, pte)	
EA002779 B1	20040624	LSLE	-MM4A	LAPSE OF A EURASIAN PATENT DUE TO NON-PAYMENT OF RENEWAL FEES WITHIN THE TIME LIMIT IN THE FOLLOWING DESIGNATED STATE(S)	DESIGNATED STATE(S) : AM BY KG MD TJ RU
EA002779 B1	20060630	LSLE	-MM4A	LAPSE OF A EURASIAN PATENT DUE TO NON-PAYMENT OF RENEWAL FEES WITHIN THE TIME LIMIT IN THE FOLLOWING DESIGNATED STATE(S)	DESIGNATED STATE(S) : AZ KZ TM
EA200100211 A1	20011224	LSPB	+	published / reissued	
EP1283306 A1	20030212	LSPB	+	published / reissued	
EP1283306 A1	20030212	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20010514
EP1283306 A1	20061122	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20060301
JP2004522012 T2	20040722	LSPB	+	published / reissued	
KR20020033595 A	20020507	LSPB	+	published / reissued	
RU2159320 C1	20001120	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2159320 C1	20060420	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON- PAYMENT OF FEES	EFFECTIVE DATE : 20050516
RU2159320 C1	20080410	LSRE	+NF4A	REINSTATEMENT OF PATENT	EFFECTIVE DATE : 20080410
RU2159320 C1	20111227	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON- PAYMENT OF FEES	EFFECTIVE DATE : 20090516
TH60311 A	20040109	LSPB	+	published / reissued	
TW493024 B	20020701	LSGT	+	granted / extensions (spc, cpc, pte)	
TW493024 B	20021125	LSGT	+GD4A	ISSUE OF PATENT CERTIFICATE FOR GRANTED INVENTION PATENT	
TW493024 B	20060521	LSLE	-MM4A	ANNULMENT OR LAPSE OF PATENT DUE TO NON-PAYMENT OF FEES	
US6520720 BA	20030218	LSGT	+	granted / extensions (spc, cpc, pte)	
US6520720 BA	20070218	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6520720 BA	20070417	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20070218
WO0188278 A1	20011122	LSPB	+	published / reissued	
WO0188278 A1	20010511	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP REF DOCUMENT NUMBER : 2001 584654 KIND CODE OF REF DOCUMENT : A FORMAT OF REF

					DOCUMENT (F/P) : F
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WO0188278 A1	20010514	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 09831811 COUNTRY OF REF DOCUMENT : US
WO0188278 A1	20010514	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000957161 COUNTRY OF REF DOCUMENT : EP
WO0188278 A1	20010515	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 68817/00 COUNTRY OF REF DOCUMENT : AU
WO0188278 A1	20030212	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000957161 COUNTRY OF REF DOCUMENT : EP
WO0188278 A1	20060301	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000957161 COUNTRY OF REF DOCUMENT : EP

Title: Ditcher head assembly for cleaning ditches

Abstract: Source: US4459767A A ditcher head assembly adapted for mounting on a tractor which moves with the tractor along the berm of a highway so that the ditcher head assembly clears earth and debris in a propellor-like action from the side of a ditch and throws it laterally either off the highway or onto the berm. With the ditcher head assembly of this invention it is possible to control the placement of earth and debris. The ditcher head is rotated axially of the ditch so that each incremental portion of earth in a ditch is engaged by a cutting blade. The ditcher head assembly is mounted on a tractor by means of a stand and outrigger members and extends over the berm of a highway, having the capacity to elevate and depress. The tractor is of regulation road width when in traveling position. The ditch head assembly is hydraulically controlled for positioning off the highway to a reasonable ditch depth. Hydraulic protection is also provided the ditcher head should it meet with an obstruction in its path.

Classifications:

International (IPC 8-9): A01D34/64 A01D34/86 E02F3/20 E02F3/76 E02F5/08 E02F5/28 (Advanced/Invention); E02F3/18 E02F5/02 (Advanced/Non-invention); A01D34/00 E02F3/18 E02F5/00 E02F5/02 (Core/Invention); E02F3/18 E02F5/02 (Core/Non-invention)

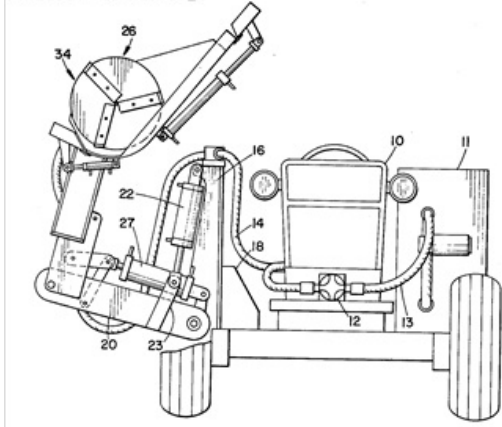
International (IPC 1-7): A01D34/64 A01D35/28 E02F3/76 E02F5/04 E02F5/08 E02F9/08

CPC: E02F5/282 A01D34/866 Y10T403/125 E02F3/20 E02F3/186

European: A01D34/86B E02F3/18G E02F3/20 E02F5/28B

US: 15/93.3 15/93B 172/108 172/260.5 172/704 172/98 37/142R 37/189 37/234 37/236 37/362 37/365 37/454 37/81 37/91 37/92 403/4 56/10.4 56/10.7 56/10.9 56/107 56/11.9 56/15.2 56/15.5 56/152 56/155 56/16.9

PatBase - US4459767_A



Family:

Publication number	Publication date	Application number	Application date
CA1196185 A1	19851105	CA19830434749	19830817
CA1200107 A1	19860204	CA19830434748	19830817
CA1201287 A1	19860304	CA19830434747	19830817
US4459767 A	19840717	US19820416579	19820910
US4502269 A	19850305	US19820416596	19820910
US4506464 A	19850326	US19840577572	19840206
US4612715 A	19860923	US19840600507	19840416
US4712320 A	19871215	US19860854195	19860421

Priority:

CA19830434747 19830817	CA19830434748 19830817	US19820416596 19820910
US19820416642 19820910	US19820416579 19820910	CA19830434749 19830817
US19840600507 19840416	US19860854195 19860421	US19840577572 19840206

Probable Assignee:

CARTNER JACK O

Assignee(s): (std):

CARTNER JACK O

Inventor(s): (std):

CARTNER JACK O

Agent(s):

RIDOUT AND MAYBEE LLP

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CA1196185 A1	19851105	LSPB	+	published / reissued	
CA1196185 A1	20021106	LSRE	+MKEC	EXPIRY (CORRECTION)	
CA1196185 A1	20030817	LSLE	-MKEX	EXPIRY	
CA1200107 A1	19860204	LSPB	+	published / reissued	
CA1200107 A1	20030817	LSLE	-MKEX	EXPIRY	
CA1201287 A1	19860304	LSPB	+	published / reissued	
CA1201287 A1	20030817	LSLE	-MKEX	EXPIRY	
US4459767 A	19840717	LSGT	+	granted / extensions (spc, cpc, pte)	
US4459767 A	19870810	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4459767 A	19911216	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4459767 A	19951220	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4502269 A	19850305	LSGT	+	granted / extensions (spc, cpc,	

				pte)		
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US4502269 A	19920729	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 8
US4502269 A	19960821	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 12
US4506464 A	19850326	LSGT	+	granted / extensions (spc, cpc, pte)		
US4506464 A	19880413	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 4
US4506464 A	19920729	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 8
US4506464 A	19960821	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 12
US4612715 A	19860923	LSGT	+	granted / extensions (spc, cpc, pte)		
US4612715 A	19900323	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 4
US4612715 A	19940224	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 8
US4612715 A	19980302	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 12
US4712320 A	19871215	LSGT	+	granted / extensions (spc, cpc, pte)		
US4712320 A	19910523	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 4
US4712320 A	19950517	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 8
US4712320 A	19990601	LSFE	+FPAY	FEE PAYMENT		YEAR OF FEE PAYMENT : 12

Title: SYSTEM FOR GROWING **VEGETATION** ON AN OPEN BODY OF WATER

Abstract: Source: US2004255513A A buoyant system for restoring aquatic **vegetation** on an open body of water is described. The buoyant system is preferably equipped with flotation apparatus and a matrix sized and configured to **support** the **vegetation**, with the matrix being connected to the flotation apparatus. Also included is water-contacting means for raising and lowering the matrix relative to the surface of the water when the system is in use, so that at least a portion of a root region of the **vegetation** is brought into and out of contact with the water, on a periodic and repetitive basis, during use of the system.

Classifications:

International (IPC 8-9): A01G31/00 A01G31/02 A01G9/00 A01G9/02 C02F3/32 (Advanced/Invention);

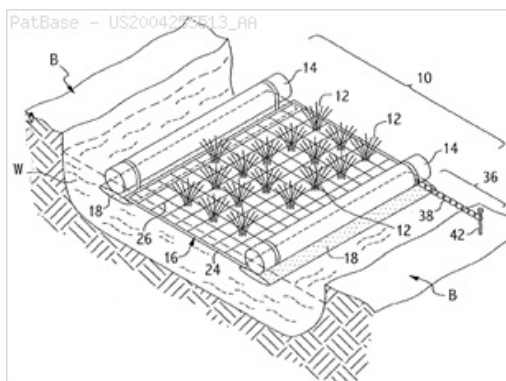
A01G31/00 A01G31/02 A01G9/00 (Core/Invention)

International (IPC 1-7): A01G31/00 A01G9/02

CPC: A01G9/00

European: A01G9/00

US: 405/224 47/59R 47/65 47/65.9 47/659



Family:

Publication number	Publication date	Application number	Application date
EP1648220 A2	20060426	EP20040754731	20040608
JP2006527984 T2	20061214	JP20060517203T	20040608
US2004255513 AA	20041223	US20030462856	20030617
US2007209278 AA	20070913	US20070743461	20070502
US2009158651 AA	20090625	US20090395002	20090227
US2010263276 AA	20101021	US20100827915	20100630
WO04112460 A2	20041229	WO2004US18208	20040608
WO04112460 A3	20051006	WO2004US18208	20040608

Priority:

US20030462856 20030617 US20070743461 20070502 US20090395002 20090227
US20100827915 20100630 WO2004US18208 20040608

Probable Assignee: BECKER DANIEL F

Assignee(s): (std): BECKER DANIEL F

Inventor(s): (std): BECKER DANIEL F

Inventor(s): BECKER DANIEL

Agent(s): SIEBERTH AND PATTY LLC; MCGLINCHY STAFFORD PLLC ATTN IP GROUP

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
EP1648220 A2	20060426	LSPB	+	published / reissued	
EP1648220 A2	20060426	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060117
EP1648220 A2	20090722	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20090106
JP2006527984 T2	20061214	LSPB	+	published / reissued	
JP2006527984 T2	20070608	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070607
JP2006527984 T2	20100127	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100126
JP2006527984 T2	20100630	LSRV	-A02	DECISION OF REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20100629

JP2006527984 T2	20100630	LSRV	-A02	DECISION OF REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20100629
US2004255513 AA	20041223	LSPB	+	published / reissued	
US2007209278 AA	20070913	LSPB	+	published / reissued	
US2009158651 AA	20090625	LSPB	+	published / reissued	
US2010263276 AA	20101021	LSPB	+	published / reissued	
WO04112460 A2	20041229	LSPB	+	published / reissued	
WO04112460 A3	20051219	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006517203 COUNTRY OF REF DOCUMENT : JP
WO04112460 A3	20060117	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004754731 COUNTRY OF REF DOCUMENT : EP
WO04112460 A3	20060426	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004754731 COUNTRY OF REF DOCUMENT : EP

Title: PROCESS FOR THE AUTOMATED GROWING OF A GROUP OF PLANTS AND CORRESPONDING INSTALLATION

Abstract: Source: US4916856A The process for the automated growing of a group of plants in an artificial medium which is solid, liquid or a mixture thereof, comprises sowing collectively seeds or planting young plants directly on a region of the artificial medium, with a small spacing therebetween, and displacing said region progressively as a function of the growth of the plants and increasing the area of said region in the longitudinal and transverse directions so that the spacing between the plants increases in these two directions in proportion to the development of the plants until they reach maturity.

Classifications:

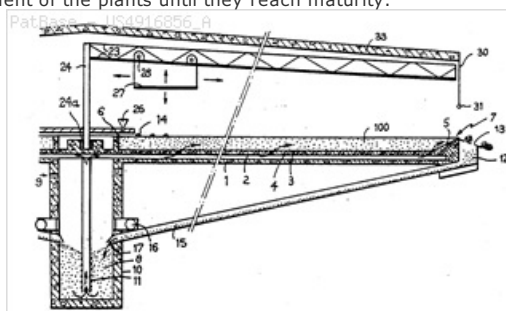
International (IPC 8-9): A01G31/00 A01G31/02 A01G31/04
A01G31/06 (Advanced/Invention);
A01G31/00 A01G31/02 (Core/Invention)

International (IPC 1-7): A01G31/00 A01G31/02 A01G9/00

CPC: A01G31/047 A01G31/042 Y02P60/216 A01G31/04

European: A01G31/04

US: 47/62 47/62R 47/63 47/65 47/650



Family:

Publication number	Publication date	Application number	Application date
AT38609 E	19881215	AT19850430004T	19850304
DE0156749 T1	19860227	DE19850430004T	19850304
DE3566211 D1	19881222	DE19853566211	19850304
DK487585 A	19851024	DK19850004875	19851024
DK487585 A0	19851024	DK19850004875	19851024
EP0156749 A1	19851002	EP19850430004	19850304
EP0156749 B1	19881117	EP19850430004	19850304
ES541646 A1	19861116	ES19850541646	19850306
ES8700898 A1	19870216	ES19850541646	19850306
FR2560740 A1	19850913	FR19840004313	19840307
FR2560740 B1	19870703	FR19840004313	19840307
FR2577752 A2	19860829	FR19850003245	19850227
FR2577752 B2	19870904	FR19850003245	19850227
FR2590443 A2	19870529	FR19850017625	19851122
FR2590443 B2	19880115	FR19850017625	19851122
FR2632814 A2	19891222	FR19880008558	19880620
FR2632814 B2	19910816	FR19880008558	19880620
JP61501676 T2	19860814	JP19850501073T	19850304
NO854241 A	19851030	NO19850004241	19851024
SU1540646 A3	19900130	SU19853979038	19851106
US4916856 A	19900417	US19870130583	19871209
WO8503843 A1	19850912	WO1985FR00039	19850304

Priority:

EP19850430004	19850304	FR19840004313	19840307	US19850800121	19851029
FR19880008558	19880620	FR19850017625	19851122	FR19850003245	19850227
WO1985FR00039	19850304	US19870130583	19871209		

Probable Assignee: BOURGOGNE PIERRE

Assignee(s): (std): BOURGOGNE MARCEL PIERRE ; BOURGOGNE PIERRE ; BOURGOGNE PIERRE M ; BOURGOGNE PIERRE MARCEL ; MARSEL BURGON

Assignee(s): PER MARSEL BURGON FR ; BOURGOGNE PIERRE MARCEL NIZZA NICE FR

Inventor(s): (std): BOURGOGNE MARCEL PIERRE ; PIERRE BOURGOGNE MARCEL ; BURGON PER MARSEL ; BOURGOGNE PIERRE MARCEL ; BOURGOGNE PIERRE M

Inventor(s): BOURGOGNE PIERRE MARCEL NIZZA NICE FR ; PER MARSEL BURGON FR

Designated states: AT BE CH DE DK GB IT JP LI LU NL NO SE SU US

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT38609 E	19881215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT38609 E	19890715	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT38609 E	19921215	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
DE0156749 T1	19860227	LSPB	+	published / reissued	
DE3566211 D1	19891207	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3566211 D1	19940310	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	

DK487585 A	19851024	LSPB	+	published / reissued	
DK487585 A	19891113	LSWD	-AHB	APPLICATION SHELVED DUE TO NON-PAYMENT	
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EP0156749 A1	19860430	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19860220
EP0156749 A1	19870513	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19870325
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EP0156749 A1	19900329	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : LU PAYMENT DATE : 19900329 YEAR OF FEE PAYMENT : 06
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EP0156749 A1	19930930	LSLE	-BERE	BE: LAPSED	OWNER NAME : BOURGOGNE PIERRE MARCEL EFFECTIVE DATE : 19930331
EP0156749 A1	19931001	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : NL EFFECTIVE DATE : 19931001
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ES541646 A1	19960616	LSLE	-MM4A	PATENT LAPSED	EFFECTIVE DATE : 19960506
ES8700898 A1	19870216	LSPB	+	published / reissued	
FR2560740 A1	19850913	LSPB	+	published / reissued	
FR2560740 A1	19960322	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2560740 B1	19870703	LSGT	+	granted / extensions (spc, cpc, pte)	
JP61501676 T2	19860814	LSPB	+	published / reissued	
NO854241 A	19851030	LSPB	+	published / reissued	
SU1540646 A3	19900130	LSGT	+	granted / extensions (spc, cpc, pte)	
US4916856 A	19900417	LSGT	+	granted / extensions (spc, cpc, pte)	
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US4916856 A	19940628	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19940628
WO8503843 A1	19850912	LSPB	+	published / reissued	

Title: DEVICE TOTRASFER AND STORE FRESHWATER, COLLECT RAINFALL AND GROW **VEGETATION**

Abstract: Source: US2010319248A A device, system, and method of transfer and store fresh water on the sea surface, to collect rain fall occurring on the sea, and to grow **vegetation** on the sea through discharged fresh water from rivers and above collected rain water are disclosed. In one embodiment, a device includes a **floating** channel to transfer fresh water is made of flexible plastic film separator surrounded by a leak detection chambers with sensing electrodes, a rain water collecting film held up by **floats** to collect rain water falling on the sea is coupled to the **floating** channel, a flexible film separator held by **floats** having storage of fresh water is used to grow **vegetation** to absorb carbon dioxide from the atmosphere, and a towing system to ensure a correct designated position of the **floating** channel giving dynamic stabilization controlled through a triangulation technique based on a radio transmitter's location on a coast.

Classifications:

International (IPC 8-9): A01G25/00 C02F11/04 C02F3/28

E03B3/04 (Advanced/Invention);

C02F11/04 C02F3/28 E03B3/00 (Core/Invention)

CPC: B63B35/44 E03B3/03 E03B3/04 Y02W10/37 C02F3/28

C02F2103/08 C02F2203/006 C02F2209/05 C02F2303/02

C02F2307/08 C12M21/04 C12M23/00 C12M23/26 C12M23/36

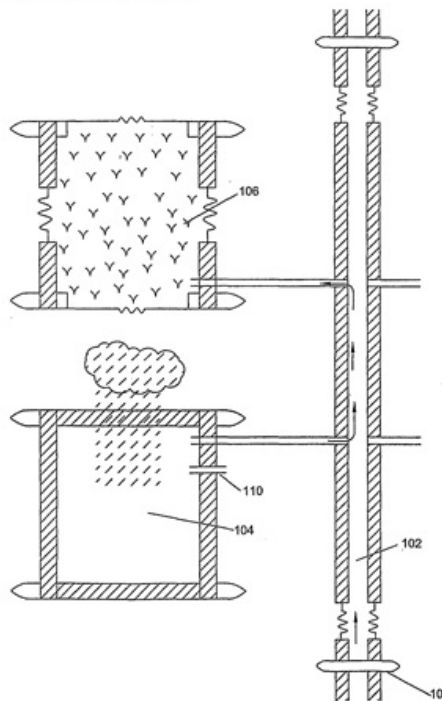
C12M23/56 Y02E50/343 Y02W10/12

European: B63B35/44 C02F3/28 C12M21/04 C12M23/00

C12M23/26 C12M23/36 C12M23/56 E03B3/03 E03B3/04

US: 47/48.5 47/48.500P

PatBase - US2010319248_AA



Family:

Publication number	Publication date	Application number	Application date
US2010319248 AA	20101223	US20090735599	20090130
WO09098718 A2	20090813	WO2009IN00068	20090130
WO09098718 A3	20091015	WO2009IN00068	20090130
WO09128090 A2	20091022	WO2009IN00103	20090212
WO09128090 A3	20100429	WO2009IN00103	20090212

Priority:

IN2008CH00289	20080201	IN2008CH00286	20080201	IN2008CH00288	20080201
IN2008CH00287	20080201	IN2008CH00369	20080214	IN2008CH00368	20080214
WO2009IN00068	20090130	IN2008CH00370	20080214		

Probable Assignee: REVANKAR KRISHNA PRASAD PANDUR

Assignee(s): (std): REVANKAR KRISHNA PRASAD PANDUR ; REYANKAR KRISHNA PRASAD PANDURNENA

Assignee(s): REVANKAR KRISHNA PRASAD PANDURANGA

Inventor(s): (std): REVANKAR KRISHNA PRASAD PANDURANGA ; REYANKAR KRISHNA PRASAD PANDURNENA

Agent(s): C O MR MADHVESH; MADHU SONA KARUNA

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 ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2010319248 AA	20101223	LSPB	+	published / reissued	
WO09098718 A2	20090813	LSPB	+	published / reissued	
WO09098718 A2	20100802	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2010546444 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A

WO09098718 A3	20100730	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12735599 COUNTRY OF REF DOCUMENT : US
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WO09098718 A3	20110114	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO09128090 A2	20091022	LSPB	+	published / reissued	
WO09128090 A2	20100816	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2010548249 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A
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WO09128090 A3	20100816	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010548249 COUNTRY OF REF DOCUMENT : JP
WO09128090 A3	20100817	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO09128090 A3	20110420	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 09733536 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2

Title: SHORT TURN IMPLEMENT OR VEHICLE

Abstract: Source: US4914894A A "short turn" powered vehicle having a transverse structural mower housing or implement that is used to also vertically stabilize the unit. One embodiment uses a self powered mower housing with lateral **support** wheels which also give lateral **support**, as do the choice of implements, by means of a vertically restricting hinge in relation to a powered drive wheel; thus the drive wheel is in a **floating** mode as it gives thrust to the housing or implement, so as to always have traction on uneven ground. On each of the embodiments steering is done by, either a generally centrally located steered front **support** wheel steered from a rearward operator's seat on the vehicle, or steering being from an operator's seat rearward on the vehicle, by breaking of either of the housing's or implement's lateral **support** wheels and there being at least one castor type front **support** wheel or lateral front **support** wheels located close to the rear **support** wheels. Or by hand mower type handles mounted on the rear of the vehicle drive wheel frame, without the operators seat, but with at least one front castor type **support** wheel. In each of the steering modes, except the one, steering is done by the thrust of the rear drive wheel around one of the lateral housing or implement's **support** wheels. The vehicle is vertically stabilized by the vertically restricted pivoting hinge with a rear drive wheel that is in a **floating** mode in relation to the housing or implement.

Classifications:

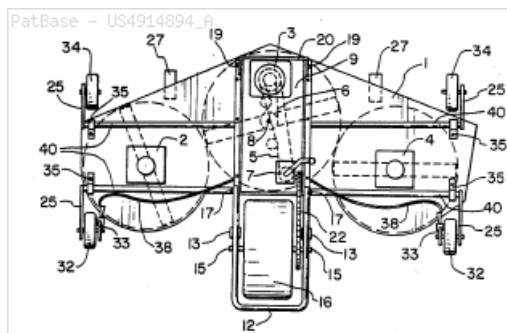
International (IPC 8-9): A01D34/63 A01D34/64 (Advanced/Invention);
A01D34/63 (Core/Invention)

International (IPC 1-7): A01D34/66

CPC: Y10S56/22 A01D34/64 A01D34/63 A01D2101/00

European: A01D34/63 A01D34/64 K01D101/00

US: 180/19.1 180/219 56/14.7 56/17.5 56/6 56/DIG.22



Family:

Publication number	Publication date	Application number	Application date
US4914894 A	19900410	US19870028340	19870220

Priority:

US19870028340 19870220 US19870771242 19870219

Probable Assignee:

GEIGER ERVIN D

Assignee(s): (std):

GEIGER ERVIN D

Inventor(s): (std):

GEIGER ERVIN D

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US4914894 A	19900410	LSGT	+	granted / extensions (spc, cpc, pte)	
US4914894 A	19940314	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4914894 A	19940410	LSRE	+REIN	REINSTATEMENT AFTER MAINTENANCE FEE PAYMENT CONFIRMED	
US4914894 A	19940621	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19940410

Title: TOBACCO CUTTER AND SPUDDER

Abstract: Source: US3178873A (Claim 1) 1. A row crop harvesting machine mounted on a tractor having steering mechanism, said machine including a pair of rotary cutters lying substantially parallel to the ground and in close proximity thereto, frame means supporting the cutters, support means supporting said frame means upon said tractor and permitting sidewise movement of said frame means and the cutters, a pair of horn-like guide members attached to said frame means and projecting in front of the cutters, there being one horn-like member in front of each cutter, said horn-like guide members engaging the sides of the row crop to be cut and guiding the rotary cutters into alignment with the row to be cut, and means responsive to the sidewise movement of the horn-like guide members, said responsive means being connected to the steering mechanism for steering the tractor along, adjacent portions of the row.

Classifications:

International (IPC 8-9): A01D45/16 (Advanced/Invention);
A01D45/00 (Core/Invention)

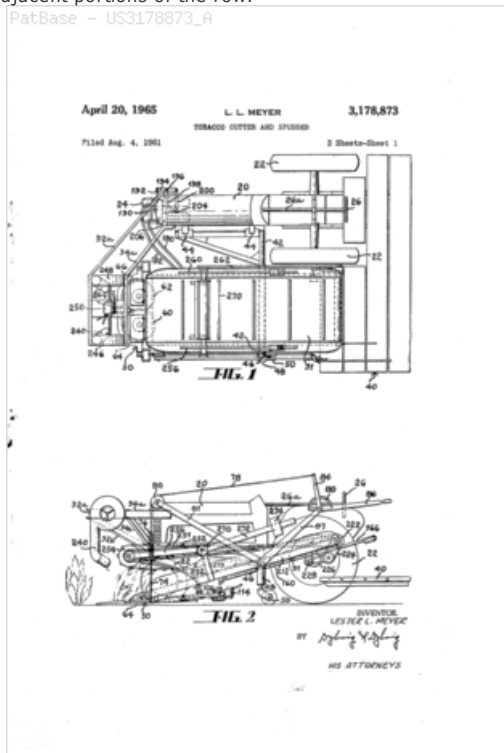
International (IPC 1-7): A01D45/16

CPC: Y10S56/08 A01D45/16

European: A01D45/16

US: 56/1 56/27.5 56/DIG.8

PatBase - US3178873_A

**Family:**

Publication number	Publication date	Application number	Application date
US3178873 A	19650420	US19610129268	19610804

Priority:

US19610129268 19610804

Probable Assignee:

MEYER LESTER L

Assignee(s): (std):

MEYER LESTER L

Inventor(s): (std):

MEYER LESTER L

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US3178873 A	19650420	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Device; especially for clearing of land mines

Abstract: Source: US6619177B An apparatus, especially for clearing landmines, wherein there is arranged on a carrier machine (1) a flail unit (11) connected to an engine to power a flail rotor (12) equipped with chains and weights, which unit (11) comprises two flail arms (13) which at a first end **support** the flail rotor (12) and at a second end are made in the form of a frame (14), where the arms (13) are pivotally **supported** at a pivot point (17), so that when the flail rotor (12) is in operation the unit (11) will be maintained in a **floating** position relative to the surface of the terrain, which apparatus is equipped with a protective shield (15) between the flail rotor (12) and the carrier machine (1). The impacts of the chains and weights against the ground provide an uplift equal to the weight of the flail rotor (12), including the flail arms (13) up to the **support** point (17), and the protective shield (15) is arranged on the flail unit (11), preferably on the flail frame (14), so that it **floats** therewith and is thus capable of bending backwards when the unit (11) is raised or lowered as a consequence of, e.g., a detonation.

Classifications:

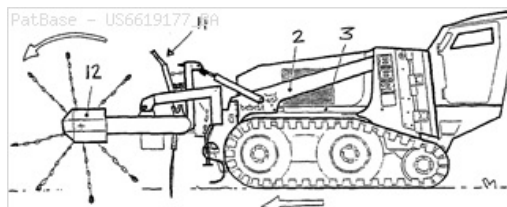
International (IPC 8-9): F41H11/12 F41H11/16
F41H11/18 (Advanced/Invention)

International (IPC 1-7): F41H11/12 F41H11/16

CPC: F41H11/18

European: F41H11/18

US: 89/1.11 89/1.13



Family:

Publication number	Publication date	Application number	Application date
AT300722 E	20050815	AT20000959040T	20000829
AU200070429 A5	20010326	AU20000070429D	20000829
CA2383903 AA	20020227	CA20002383903	20000829
DE60021584 D1	20050901	DE20006021584	20000829
EP1208346 A1	20020529	EP20000959040	20000829
EP1208346 B1	20050727	EP20000959040	20000829
NO311194 B1	20011022	NO19990004232	19990901
NO994232 A	20010302	NO19990004232	19990901
NO994232 A0	19990901	NO19990004232	19990901
TR200200555 T2	20020722	TR20020000555T	20000829
US6619177 BA	20030916	US20020069924	20020613
WO0116549 A1	20010308	WO2000NO00281	20000829
ZA200201551 A	20030430	ZA20020001551	20020225

Priority:

NO19990004232 19990901 WO2000NO00281 20000829

Probable Assignee: NORWEGIAN DEMINING CONSORTIUM AS

Assignee(s): (std): ASPLI DAG ; HANSEN TORMOD ; MIDDLEMASS BARRY ; NORWEGIAN DEMINING CONSORTIUM ; NORWEGIAN DEMINING CONSORTIUM AS

Assignee(s): NORWEGIAN DEMINING CONSORTIUM AS FOSSEVEIEN ; NORWEGIAN DEMINING CONSORTIUM AS TISTEDAL

Inventor(s): (std): ASPLI DAG ; BARRY MIDDLEMASS ; DAG ASPLI ; HANSEN TORMOD ; MIDDLEMASS BARRY ; MIDDLEMASS BARRY ; TORMOD HANSEN

Agent(s): BERESKIN AND PARR; BERESKIN AND PARR LLP SENCRL SRL

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT300722 E	20050815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT300722 E	20060115	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AU200070429 A5	20010326	LSPB	+	published / reissued	
AU200070429 A5	20020516	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
CA2383903 AA	20020227	LSPB	+	published / reissued	
CA2383903 AA	20020227	LSNP	+AFNE	NATIONAL PHASE ENTRY	

CA2383903 AA	20060829	LSLE	-FZDE	DEAD		
DE60021584 D1	20060614	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE		
EP1208346 A1	20020529	LSPB	+	published / reissued		
EP1208346 A1	20020529	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020226	
EP1208346 A1	20040211	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20031229	
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EP1208346 A1	20050824	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D	
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EP1208346 A1	20060301	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : DE DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 20060301
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EP1208346 A1	20060922	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : FR DESCRIPTION : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT EFFECTIVE DATE : 20060922
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US6619177 BA	20030916	LSGT	+	granted / extensions (spc, cpc, pte)	
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US6619177 BA	20111108	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110916
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WO0116549 A1	20020814	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0116549 A1	20040602	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO0116549 A1	20050727	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000959040 COUNTRY OF REF DOCUMENT : EP
ZA200201551 A	20030430	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: METHOD AND APPARATUS FOR COASTLINE REMEDIATION, ENERGY GENERATION, AND **VEGETATION SUPPORT**

Abstract: Source: US2012195685A A biomechanical structure for coastline remediation includes one or more structural assemblies. The structural assemblies include a distribution of one or more members; one or more anchors connected to each of one or more members; and one or more connection members. The anchors employed by the biomechanical structure may be fixed, **floating**, or a combination of fixed and **floating** anchors. The structural assemblies may be staggered, inline, or semi-random in configuration. The biomechanical structure may include metals, composites, polymers, biodegradable materials, or combinations thereof in its components. The biomechanical structures may incorporate one or more components for mechanical or material power generation. The biomechanical structures may include one or more seed capture devices, such as baskets or mesh. A biomechanical system for coastline remediation includes one or more biomechanical structures. A method for coastline remediation includes the step of incorporating a biomechanical system into the existing coastline morphology.

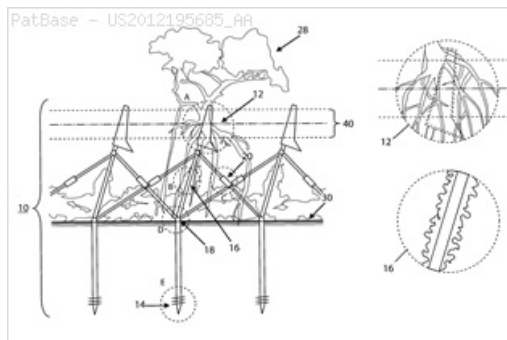
Classifications:

International (IPC 8-9): E02B3/04 E02B3/12 (Advanced/Invention)

CPC: Y02E10/28 E02B3/04 E02B9/08

European: E02B3/04 E02B9/08

US: 405/15 405/15P 405/21 405/28 405/35 405/76



Family:

Publication number	Publication date	Application number	Application date
US2012195685 AA	20120802	US20110307414	20111130
US8511936 BB	20130820	US20110307414	20111130
WO12075065 A2	20120607	WO2011US62512	20111130
WO12075065 A3	20120802	WO2011US62512	20111130
WO12075065 A9	20120913	WO2011US62512	20111130

Priority:

US20100418938P 20101202 US20110307414 20111130

Probable Assignee: RENSSELAER POLYTECHNIC INST

Assignee(s): (std): DYSON ANNA ; RENSSELAER POLYTECH INST ; VAN DE RIET KEITH ; VOLLEN JASON

Assignee(s): RENSSELAER POLYTECHNIC INST ; RENSSELAER POLYTECHNIC INSTITUTE

Inventor(s): (std): DYSON ANNA ; VAN DE RIET KEITH ; VOLLEN JASON

Agent(s): RATNERPRESTIA; ETKOWICZ JACQUES L

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2012195685 AA	20120802	LSPB	+	published / reissued	
US8511936 BB	20130820	LSGT	+	granted / extensions (spc, cpc, pte)	
US8511936 BB	20120413	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RENSSELAER POLYTECHNIC INSTITUTE, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:VAN DE RIET, KEITH; VOLLEN, JASON; DYSON, ANNA; REEL/FRAME:028042/0914 EFFECTIVE DATE : 20120406
US8511936 BB	20170220	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
WO12075065 A2	20120607	LSPB	+	published / reissued	
WO12075065 A3	20130603	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO12075065 A3	20131225	LSNE	-122	EP: PCT APPLICATION NON-ENTRY	REF DOCUMENT NUMBER : 11845217 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2

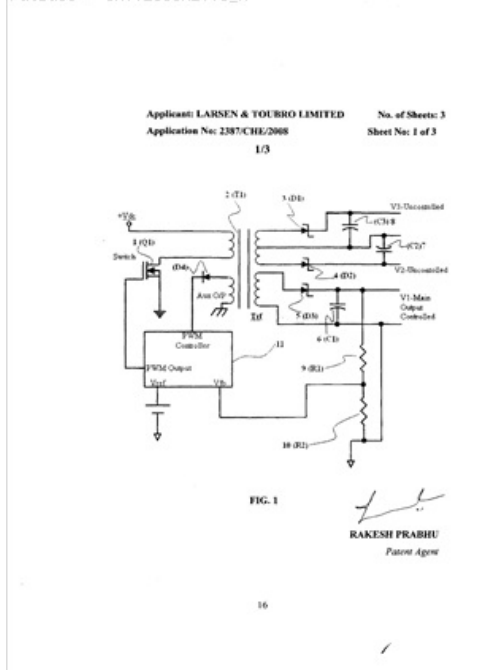
Title: A DEVICE TO TRANSFER AND STORE FRESH WATER ON THE SEA SURFACE TO COLLECT RAIN FALL OCCURRING ON THE SEA, AND TO GROW **VEGETATION** ON THE SEA BY THE FRESH WATER DISCHARGED FROM RIVERS AND ABOVE COLLECTED RAIN WATER

Abstract: Source: IN00286CH2008A A device, system, and method of transfer and store fresh water on the sea surface, to collect rain fall occurring on the sea, and to grow **vegetation** on the sea through discharged fresh water from rivers and above collected rain water are disclosed. In one embodiment, a device includes a **floating** channel to transfer fresh water is made of flexible plastic film separator surrounded by a leak detection chambers with sensing electrodes, a rain water collecting film held up by **floats** to collect rain water falling on the sea is coupled to the **floating** channel, a flexible film separator held by **floats** having storage of fresh water is used to grow **vegetation** to absorb carbon dioxide from the atmosphere, and a towing system to ensure a correct designated position of the **floating** channel giving dynamic stabilization controlled through a triangulation technique based on a radio transmitter's location on a coast.

Classifications:

International (IPC 8-9): B65P (Advanced/Invention)

PatBase - IN00286CH2008_A



Family:

Publication number	Publication date	Application number	Application date
IN00286CH2008 A	20090220	IN2008CH00286	20080201
IN276976 B	20161111	IN2008CH00286	20080201

Priority:

IN2008CH00286 20080201

Probable Assignee: PANDURANGA REVANKAR KRISHNA PRASAD

Assignee(s): P R KRISHNA PRASAD ; PANDURANGA REVANKAR KRISHNA PRASAD

Inventor(s): P R KRISHNA PRASAD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
IN00286CH2008 A	20090220	LSPB	+	published / reissued	
IN276976 B	20161111	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Dredge cutter head with shock absorber

Abstract: Source: US4765071A An improved cutter head for a **floating** dredge of the type having a lowerable boom with cutter head on the lowerable end thereof. The cutter head includes a rotatable open axis cage of cutter bars mounted adjacent to and along a rectangular suction inlet so that material to be shredded and sludge material are drawn into and through the rotating cage for shredding. Teeth are mounted on the cage bars for digging and breaking dredge material encountered by the teeth. The cage is connected to a drive plate having shock absorbing grommets which absorb axial, tangential and radial shocks received by the rotating cage.

Classifications:

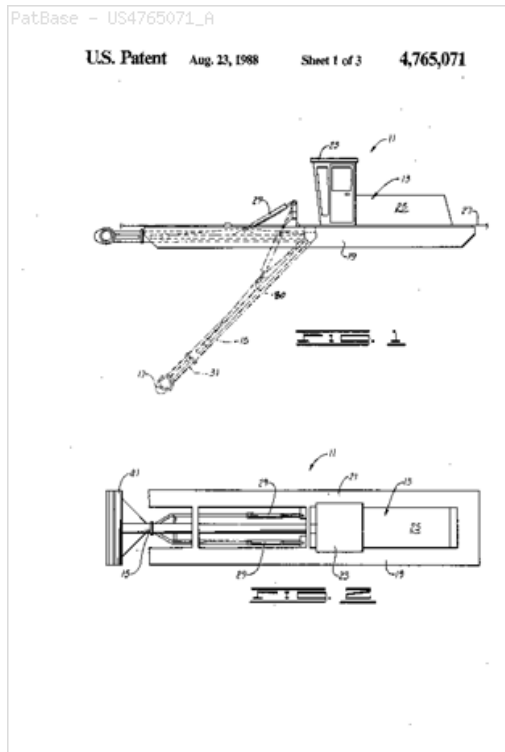
International (IPC 8-9): E02F3/92 (Advanced/Invention); E02F3/88 (Core/Invention)

International (IPC 1-7): E02F3/88 E02F3/92

CPC: E02F3/92 E02F3/9237 E02F9/2858

European: E02F3/92 E02F3/92M4T E02F9/28A6

US: 37/318 37/325 37/327 37/329 464/89



Family:

Publication number	Publication date	Application number	Application date
CA1248977 A1	19890117	CA19860507974	19860430
US4765071 A	19880823	US19860843655	19860325
US4819346 A	19890411	US19880152309	19880204

Priority:

CA19860507974 19860430 US19860843655 19860325 US19880152309 19880204

Probable Assignee: VMI INC

Assignee(s): (std): VMI INC

Assignee(s): VMI INC A CORP OF OK ; MAITLEN C GENE

Inventor(s): (std): MAITLEN C GENE

Agent(s): RIDOUT AND MAYBEE LLP

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CA1248977 A1	19890117	LSPB	+	published / reissued	
CA1248977 A1	20060430	LSLE	-MKEX	EXPIRY	
US4765071 A	19880823	LSGT	+	granted / extensions (spc, cpc, pte)	
US4765071 A	19860325	LSAS	AS	ASSIGNMENT	OWNER NAME : VMI, INCORPORATED, 4310 N. MARTIN STREET, BETHANY, DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:MAITLEN, C. GENE; REEL/FRAME:004533/0001 EFFECTIVE DATE : 19860317
US4765071 A	19911024	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4765071 A	19960125	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4765071 A	20000125	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12

US4819346 A	19890411	LSGT	+	granted / extensions (spc, cpc, pte)	
US4819346 A	19891121	LSRE	CC	CERTIFICATE OF CORRECTION	
US4819346 A	19920929	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4819346 A	19960923	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4819346 A	20010408	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4819346 A	20010612	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20010411

Title: Retrieval of lobsters and other objects

Abstract: Source: US4434572A Method and apparatus for retrieving lobsters or similar objects from the floor of a lobster pound or other shallow water body are described. An upward flow of water is established in a flexible conduit or passageway of size sufficient to accommodate the objects to be lifted. This is accomplished by a low pressure air lift particularly suited for non-traumatic handling of lobsters. Objects to be lifted are drawn into the upward flow as the flexible conduit is moved over the bottom. As objects rise to the surface they are guided or diverted by a transfer guide chamber or coupling onto a conveyor which carries the objects onto a deck or **support platform floating** above the water surface. The transfer chamber and conveyor shed water away from the lobsters or other objects. The transfer guide chamber, conveyor and a pivotable boom for **supporting** the flexible conduit in an "S" configuration are attached to a deck or **support platform floating** above the surface. The entire rig moves throughout the area of the lobster pound or other water body for recovering lobsters at any location.

Classifications:

International (IPC 8-9): A01K79/00 A01K97/00 (Advanced/Invention); F02B1/04 (Advanced/Non-invention);

A01K79/00 (Core/Invention);

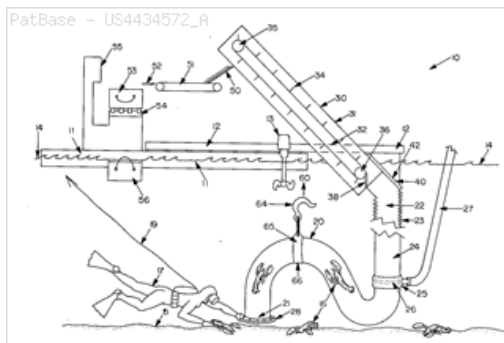
F02B1/00 (Core/Non-invention)

International (IPC 1-7): A01K80/00 A01K97/00

CPC: A01K79/00 F02B1/04

European: A01K79/00 R02B1/04

US: 114/255 43/26.1 43/4.5 43/6.5 56/9



Family:

Publication number	Publication date	Application number	Application date
CA1168865 A1	19840612	CA19820398916	19820319
US4434572 A	19840306	US19810246599	19810323
US4551938 A	19851112	US19840580811	19840216

Priority:

CA19820398916 19820319 US19810246599 19810323 US19840580811 19840216

Probable Assignee: SHELDON WILLIAM W

Assignee(s): (std): SHELDON WILLIAM W

Assignee(s): AXFORD THEODORE G

Inventor(s): (std): AXFORD THEODORE G ; SHELDON WILLIAM W

Agent(s): MEREDITH AND FINLAYSON

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CA1168865 A1	19840612	LSPB	+	published / reissued	
CA1168865 A1	20010612	LSLE	-MKEX	EXPIRY	
US4434572 A	19840306	LSGT	+	granted / extensions (spc, cpc, pte)	
US4434572 A	19810323	LSAS	AS	ASSIGNMENT	OWNER NAME : SHELDON, WILLIAM W. DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:AXFORD, THEODORE G.; REEL/FRAME:003874/0102 EFFECTIVE DATE : 19810320
US4434572 A	19870323	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4434572 A	19911010	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4434572 A	19960303	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4434572 A	19960514	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19960306
US4551938 A	19851112	LSGT	+	granted / extensions (spc, cpc, pte)	
US4551938 A	19860819	LSRE	CC	CERTIFICATE OF CORRECTION	
US4551938 A	19890410	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4

US4551938 A	19930430	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4551938 A	19971109	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4551938 A	19980120	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19971112

Title: FLAME CULTIVATION OF PLANTS

Abstract: Source: US2369154A I claim: 1. In a flame ,cultvator for eradicating weeds from row crops by the name method, the combine_ tion of a wheeled vehicle adapted 'ou travel along a plant row, fuel supply means on said vehicle for supplying, liquid fuel under pressures of approximately 40 pounds per square inch, air supply means on said vehicle for supplying compressed air under pressures of approximately 60 pounds per square inch, ' a plurality of high pressure atomizing burners propelled by said vehicle and having a fuel nozzle connected to receive liquid fuel under pressure from said fuel supply means and having an air nozzle connected to receive compressed air from said air supply means, said air nozzle exerting an atomizing action on the fuel from the fuel nozzle in each burner and also creating a long flame. said burners being arranged to project relatively long flames upon the ground on opposite sides of the plant row and directed generally crosswise of the plant row whereby said long flames pass through and beyond the plant row for destroying weeds directly in the plant row, and regulating means cooperating with one of said supply means for controlling the intensity of flame or length of flame projected from each burner. 'I 2. In a cultivator adapted to cultivate row crops by the flame method, the combination of a tractor having a front wheel traveling between adjacent rows and rear wheels spanning adjacent rows, a fuel reservoir on said tractor. a" compressed air reservoir on said tractor, means driven by the tractor engine for maintaining pressures in both of said reservoirs, a-plurality of high pressure atomizing burners connected with the forward portion of the tractor and receiving fuel and air under pressure from said reservoir, said burners being arranged to project relatively long flames upon the ground 'On opposite sides of adjacent plant rows straddled by the tractor and directed generally toward the plants in the two plant rows, and regulating means cooperating with one of said reservoirs for controlling the length or intensity of flame projected from each burner. 3. Apparatus' lor eradicating weeds from row crops by the flame method comprising a vehicle adapted to travel along the plant row, a plurality of burners propelled by said vehicle and disposed on each side of said row in position to project flames substantially crosswise of the plant row, and means carried by said vehicle for supplying liquid fuel and air to separate fuel and air nozzles in said burners under pressures of approximately 40 pounds for the fuel and 60 pounds for the air whereby to atomize the liquid fuel at each burner and to cause each burner to project a relatively long flame which is directed substantially crosswise of the plant row to pass through and beyond the plant row at a level below the lower leaves of the crop plants for flaming the ground immediately around the bases of the crop plants 'without injuring the upper foliage of the plant. ' 8 , ~ V 2,889,154 A ` ,4: In a cultivator adapted to cultivate row crops by the flame »method, the combination of a wheeled vehicle, a burner disposed angularly with respect to the plant row projecting a long flame crosswise of the plant row whereby said long flame passes through and beyond the plant row to act on weeds in the row in the travel of said vehicle, means on said wheeled vehicle for supplying fuel to said burner, and a wheeled **support** for said burner coupled' to said wheeled vehicle whereby said burner is propelled by said vehicle but can rise and fall relatively thereto in the travel of its wheeled **support** over the ground. 5. In a cultivator adapted to cultivate row crops by the flame method, the combination of a tractor having B. front wheel traveling between adjacent rows and rear wheelspanning adjacent rows, a plurality of burners positioned between said adjacent rows and on the outer sides of said adjacent rows and projecting flames upon the ground or adjacent to the bases of the plants in said rows, means on said tractor for supplying fuel to said burners, separate **supporting** wheels for each of said burners, and means coupling said separate **supporting** wheels with said tractor whereby each burner and its separate **supporting** wheel can rise and fall relatively to said tractor and to the other burners in the travel of the cultivator over uneven ground. 6.111 apparatus of the class described, the combination of a wheeled vehicle, a burner propelled by said vehicle adapted to project a flame in predetermined relation to the crop in the travel of said vehicle, means on the vehicle for supplying fuel to, said burner, and a separate wheeled **support** for said burner comprising an arm having endwise slidable connection with said wheeled vehicle, a separate **supporting** wheel at the lower end of said arm, and spring means acting on said arm normally thrusting said separate **supporting** wheel against the ground. 7. In apparatus of the class described, the combination of a Wheeled vehicle, a plurality of burners propelled by said vehicle adapted to project flames in predetermined relation to the crop in the travel of the vehicle, means on the vehicle for supplying fuel to said burners, and separate wheeled **supports** for said burners each comprising an arm pivotally mounted on said wheeled vehicle for up and down swinging movement, and a ground wheel at the lower end of each arm capable of rising and falling relatively to the wheeled vehicle and to the other burners, whereby each burner is maintained at a substantially fixed height above the ground during the travel of the vehicle over uneven ground. 8. In a cultivator adapted to cultivate row crops by the name method, the combination of a wheeled vehicle adapted to travel along the plant rows, and a pair of burners propelled by said vehicle and adapted to project flames substantially crosswise of the row in the travel of the vehicle along the row, said burners being in staggered relation whereby the flame from one burner acts on the plants or ground area of the row in advance of the flame from the other burner. 9.' In a cultivator adapted to cultivate row crops by the name method, the combination of a tractor having a front wheel traveling between adjacent rows and rear wheels straddling adjacent rows, a pair of outer burners _on said tractor positioned to travel along _the outer sides of said adjacent rows, and a pair of inner burners on said tractor positioned to travel along the inner sides of said adjacent rows. said burners 10 15 zo projecting their flames substantially crosswise of said rows and the burners acting on each row being offset with respect to each other whereby their flames act in series on the plants in each FDW. _ 10. In an implement adapted to cultivate crops by the flame method, the combination of a wheeled vehicle, and a burner propelled by said vehicle and operative to project a flame- in predetermined relation to the crop, said burner being constructed and arranged to project a flame of relatively wide horizontal dimension so as to cover a considerable area of ground, and of relatively small vertical dimension so as to minimize the likelihood of injuriously burning the upper foliage of the crop. 11. In a cultivator adapted to cultivate row crops by the flame method, the combination of a tractor adapted to travel along the plant row, fuel supply means of the pressure type propelled by said tractor along opposite sides of the plant row for :Gaming the ground around the plants in said row, and means on the tractor for supplying fuel to said burners, said burners being constructed and arranged to project a fan-shaped flame over the ground of relatively wide horizontal 'dimension and of relatively small vertical dimension. _ 12. In a cultivator adapted to cultivate row crops by the flame method, the combination of a wheeled vehicle, a burner propelled by the vehicle projecting a relatively long ,unobstructed flame substantially crosswise of the plant row and entirely through and beyond the plant row for direct impingement against weeds in the plant row, and means carried by said vehicle for lifting the lower leaves of the crop plants substantially out of the path of said flame during the cultivating operation. I » ~ ' 13. In a cultivator adapted to cultivate row crops by the name method, the combination of a tractor having a front wheel traveling between adjacent rows and rear wheels spanning adjacent rows, a plurality of fluid fuel burners propelled by said tractor and disposed at the outer and inner sides of said adjacent rows for projecting flames around the bases of the crop plants in said rows, and leaf lifting detectors carried by said tractor on the outer and inner sides of said plant rows for lifting the lower leaves of the crop plants in said rows substantially out of the path of the flames from said burners as the cultivator travels along said rows, 14. In apparatus of the class described, the combination of a wheeled vehicle adapted to travel along plant rows, means carried by said vehicle for shaking the plants to cause insects and other parasites to fall from the plants down to the ground, and a burner propelled by the vehicle operative to thereafter project a-relatively long unobstructed flame substantially crosswise of the plant row to pass' through the plant row for impingement against the ground directly under the plants to destroy such insects and other parasites. 15. The method of destroying or inhibiting insects and other parasites in row crop plants, which comprises shaking the crop plants so as to cause the insects and other parasites to fall from the plants down upon the ground, projecting a relatively long unobstructed flame substantially crosswise of the plant row to pass through and beyond said row whereby said long flame impinges directly against the ground substantially under the plants to destroy or inhibit insects or other parasites on the ground under the plants, and moving the flame along the row at a rate which will destroy or inhibit such insects or other parasites without causing substantial injury to the crop plants. 18. In a cultivator adapted to cultivate row crops by the name method, the combination of a tractor having A front wheel traveling between adjacent rows and rear wheels straddling adjacent rows. Q plurality of burners propelled by said tractor positioned ' between said adjacent rows and on the outer sides of said adjacent rows and projecting flames substantially crosswise of said rows, and burners positioned by said tractor and positioned to project flames along the middle areas between said rows. 17. In a cultivator adapted to cultivate row crops by the flame method, the combination of a tractor having a front wheel traveling between adjacent rows and rear wheels straddling adjacent rows, B. plurality of burners propelled by the tractor and adapted to project flames from the inner and outer sides of said plant rows around the bases of the plants in said rows, and adjustable mounting clamp; connecting said burners with said tractor whereby said burners can be inclined to different vertical- angles and can be swiveled to different horizontal angles. 18. In a cultivator adapted to cultivate row crops by the H3136 method; the combination of a tractor having a front wheel traveling between adjacent rows and rear wheels straddling adjacent rows, a plurality of burners

propelled by the tractor and positioned on the outer and inner sides of said adjacent rows for projecting flames around the bases of the plants in said rows, and means mounting said burners on said tractor enabling said burners to be adjusted transversely of the tractor to accommodate different row spacing of different crops. 19. The method of treating a standing row of stemmed crop plants to suppress insect life on the plants which comprises agitating the plants to cause the insects to drop therefrom to the ground beneath the plants, directing relatively long unconnected blasts of hot fluid from each side of the standing row substantially crosswise of the row to pass through and beyond the standing row, said blasts batling the insects, the **vegetation**, and the stems of the standing crop plants in the hot fluid, and moving the blasts of hot fluid along the row at a rate which will continue the application of heat long enough to injure the insect life without substantial injury to the crop plants. 20. In an implement adapted to remove weeds from plant rows by the flame method, the combination of a tractor, an air compressor driven by the engine of said tractor, an air reservoir and a fuel reservoir on said tractor, means for conducting compressed air from said compressor to said reservoirs, said fuel burners under the pressure type propelled by the tractor, each of said burners comprising a fuel jet and an air jet, said air jet exerting a mechanical atomizing action on the fuel issuing from said fuel jet and also causing said burner to project a relatively long flame, said burner being disposed to project said flame substantially unobstructed in the direction crosswise of the plant row to pass through and beyond the plant row to impinge against weeds in the row in the travel of the tractor, means for supplying fuel and compressed air from said reservoirs to said fuel and air jets in said burners, and regulating apparatus for governing the action of said burner; comprising adjustable means for establishing a pressure differential between said reservoirs, and adjustable means for varying the rate of flow of fuel to said burners. 21. In an implement of the class described, the combination of a wheeled vehicle, a plurality of burners carried thereby adapted to project flames in predetermined relation to a growing crop, means on said vehicle for supplying fuel to said burners, **supporting** arms for said burners, and adjustable mounting clamps for adjustably mounting said burners on said **supporting** arms, each of said mounting clamps comprising a first clamp section embracing a **supporting** arm and shiftable to different vertical positions and to different angular positions relatively to said arm, a second clamp section embracing the burner and enabling the latter to be rotated to different angular positions in said clamp section, and means adjustably coupling said clamp sections together in different angular positions, whereby to provide a wide range of adjustment of the burner. 22. In a cultivator adapted to cultivate row crops by the flame method, the combination of a tractor having a front wheel traveling between middle rows and rear wheels straddling adjacent rows, a rock shaft extending transversely across the front portion of said tractor, means operative to rock said rock shaft, and burners carried by said rock shaft and disposed on the inner and outer sides of said adjacent rows to project flames on the bases of the plants in said rows, the rocking of said rock shaft being operative to swing said burners upwardly to nonoperating positions. 23. In a cultivator adapted to cultivate row crops by the flame method, the combination of a tractor having a front wheel traveling between adjacent rows and rear wheels straddling said adjacent rows, a plurality of burners on said tractor disposed on the outer and inner sides of said adjacent rows and projecting flames on the bases of the plants in said rows, a fuel reservoir on said tractor supplying fuel to said burners, a compressed air reservoir on said tractor supplying compressed air to said burners, and a compressor driven by said tractor for supplying pressure to said reservoirs. 24. In a cultivator adapted to cultivate row crops by the flame method, the combination of a wheeled vehicle, a burner disposed thereon projecting a relatively long flame substantially crosswise of the plant row to pass through the row, whereby said flame is caused to impinge directly against weeds in the plant row in the travel of said vehicle, means on said wheeled vehicle for supplying fuel to said burner, and a ground engaging **support** for said burner coupled to said wheeled vehicle whereby said burner is propelled by said vehicle but can rise and fall relatively thereto in the travel of its ground engaging **support** over the ground. 25. In a cultivator adapted to cultivate row crops by the flame method, the combination of a wheeled vehicle adapted to travel along the plant rows, a plurality of burners propelled by said vehicle projecting relatively wide fan-shaped flames substantially crosswise of the plant rows, means on said vehicle for supplying fuel to said burners, separate ground engaging **supports** for said burners, and means pivotally coupling said separate ground engaging **supports** with said wheeled vehicle whereby each burner and its separate ground engaging **support** can rise and fall relatively to said wheeled vehicle and to the other burners in the travel of the ground engaging **supports** over uneven ground. 26. In a cultivator adapted to cultivate row crops by the flame method, the combination of a wheeled vehicle adapted to span one or more plant rows, a plurality of burners propelled by said vehicle projecting relatively wide fan-shaped flames substantially crosswise of said plant rows from opposite sides of the row for passing through the row, means on said vehicle for supplying fuel to said burners, an individual ground engaging **support** for each of said burners, means for adjustably mounting each burner on its individual ground engaging **support** so as to enable the burner to be adjusted relatively to its **support**, coupling means for separately coupling each ground engaging **support** with said wheeled vehicle whereby each burner and its individual ground engaging **support** can rise and fall relatively to said wheeled vehicle and to the other burners in the travel of the ground engaging **supports** over uneven ground, and lifting means actuable by the operator from his driving position on said wheeled vehicle while the latter is in motion for lifting all of said burners to nonoperating positions. 27. In a cultivator adapted to cultivate row crops by the flame method, the combination of a wheeled vehicle adapted to travel along the rows, a plurality of burners propelled by said vehicle projecting flames around the bases of the plants in the plant rows, free **floating** ground engaging **supports** for said burners, and adjustable means connecting said ground engaging **supports** with said vehicle enabling said ground engaging **supports** and burners to be shifted transversely relatively to each other to different positions crosswise of said vehicle; 28. In a cultivator adapted to cultivate row crops by the flame method, the combination of a wheeled vehicle adapted to travel along adjacent rows, a plurality of burners propelled by said vehicle positioned between said adjacent rows and on the outer sides of said adjacent rows and projecting flames substantially crosswise of said rows, and burners propelled by said vehicle and positioned to project flames along the middle areas between said rows. 29. In a cultivator adapted to cultivate row crops by the flame method, the combination of a wheeled vehicle adapted to travel along adjacent rows, a plurality of burners propelled by said vehicle and adapted to project flames from the inner and outer sides of said plant rows around the bases of the plants in said rows, and adjustable mounting clamps connecting said burners with said vehicle whereby said burners can be inclined to different vertical angles and can be swiveled to different horizontal angles. 30. In a cultivator adapted to cultivate row crops by the flame method, the combination of a wheeled vehicle adapted to travel along adjacent rows, a plurality of burners propelled by said vehicle and positioned on the outer and inner sides of said adjacent rows for projecting flames around the bases of the plants in said rows, and means mounting said burners on said vehicle enabling said burners to be adjusted transversely of the vehicle to accommodate different row spacing of different crops. 31. In a cultivator adapted to cultivate row crops by the flame method, the combination of a wheeled vehicle adapted to travel along adjacent rows, a rock shaft extending transversely of said wheeled vehicle, means operative to rock said rock shaft, and burners carried by said rock shaft and disposed along the sides of said adjacent rows to project flames on the bases of the plants in said rows, the rocking of said rock shaft being operative to swing said burners upwardly to nonoperating position. 32. In a cultivator adapted to cultivate row crops by the flame method, the combination of a tractor adapted to travel along adjacent plant rows, a plurality of burners on said tractor disposed along the sides of said adjacent rows and projecting flames on the bases of the plants in said rows, a fuel reservoir on said tractor supplying fuel to said burners, a compressed air reservoir on said tractor supplying compressed air to said burners, and a compressor driven by said tractor for supplying pressure to said reservoirs

Classifications:

International (IPC 8-9): A01M15/00 (Advanced/Invention);

A01M15/00 (Core/Invention)

International (IPC 1-7): A01G9/24

CPC: A01M15/00

European: A01M15/00

US: 126/271.2R 280/160 47/1.44

Publication number	Publication date	Application number	Application date
US2369154 A	19450213	US19420442206	19420508

Probable Assignee:	CHRENLEIGH MCLEMORE PRICE
Assignee(s): (std)	CHRENLEIGH MCLEMORE PRICE
Inventor(s): (std)	CHRENLEIGH MCLEMORE PRICE
Inventor(s):	MCLEMORE PRICE CHRENLEIGH

[View legal status timeline](#)PatBase PDF Export - Page: 43 04/05/2017

Title: Mobile power driven **vegetation** trimmer and line feed control

Abstract: Source: US2002100266A A **vegetation** trimmer unit having an open generally "U"-shaped frame with a power driven string line cutter mounted thereon by a linkage mechanism that permits the cutter head to move relative to the frame against a spring biasing the cutter head in a direction outwardly away from the frame. The unit is suspendable from the free outer end of an extendible and retractable vehicle mounted boom and an actuator located on the vehicle is used to controllably dispense sequentially predetermined lengths of line from the sting line cutter.

Classifications:

International (IPC 8-9): A01D34/416 A01D34/66

A01D34/86 (Advanced/Invention)

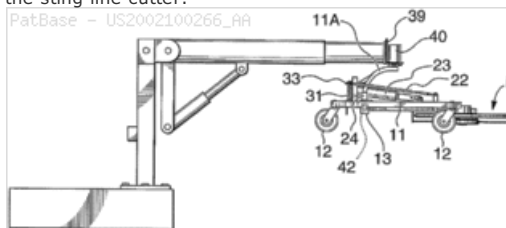
International (IPC 1-7): A01D34/66 A01D69/08

CPC: A01D34/4161 A01D34/661 A01D34/863 A01D34/866

European: A01D34/416B A01D34/66A A01D34/86A A01D34/86B

US: 56/10.7 56/11.7 56/12.7 56/12.700P 56/14.7 56/14.700S

56/15.8 56/15.800S



Family:

Publication number	Publication date	Application number	Application date
US2002100266 AA	20020801	US20010770914	20010126
US6684614 BB	20040203	US20010770914	20010126

Priority:

US20000215751P 20000630

US20010770914 20010126

Probable Assignee:

GREENWELL OWEN PATRICK

Assignee(s):

GREENWELL OWEN PATRICK

Inventor(s): (std):

GREENWELL OWEN PATRICK

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2002100266 AA	20020801	LSPB	+	published / reissued	
US6684614 BB	20040203	LSGT	+	granted / extensions (spc, cpc, pte)	
US6684614 BB	20070731	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6684614 BB	20120118	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6684614 BB	20160203	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6684614 BB	20160322	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20160203

Title: BEET TOPPER

Abstract: Source: US2458790A 1, In a topping mechanism for beets and the like, in combination, a **support**, linkage pivoted on the **support** for vertical swinging movement, a cutting disk rotatable on an upwardly extending axis carried by the linkage for severing the beet tops, a second disk rotatable on an axis generally parallel to the first-mentioned axis for receiving the beet tops discharged from the first-mentioned disk, means for driving the second disk from the first disk, including means for driving said second disk at a higher rate than said first disk, and means associated with said drive means for guiding the tops from said first disk to said second disk.

Classifications:

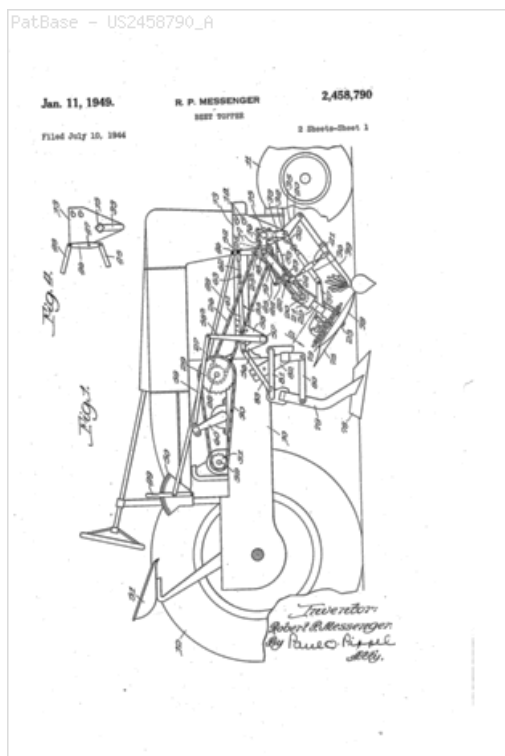
International (IPC 8-9): A01D27/02 (Advanced/Invention);
A01D27/00 (Core/Invention)

International (IPC 1-7): A01D27/04

CPC: A01D27/02

European: A01D27/02

US: 56/121.45 56/121.46



Family:

Publication number	Publication date	Application number	Application date
US2458790 A	19490111	US19440544215	19440710

Priority:

US19440544215 19440710

Probable Assignee:

INT HARVESTER CO

Assignee(s): (std):

INT HARVESTER CO

Assignee(s):

INTERNATIONAL HARVESTER COMPANY

Inventor(s): (std):

MESSENGER ROBERT P

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2458790 A	19490111	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: **FLOATING** STRUCTURE **SUPPORTING** A HABITABLE CONSTRUCTION

Abstract: According to the invention, the structure is characterised in being essentially in the form of a closed volume (1), defined by an upper platform (2) and a lower platform (3), fixed to each other by means of pillars (4) and by a lateral peripheral wall (5), connecting the circumferences of said platforms. Each platform (2, 3) is produced by the juxtaposition of triangular modules (6, 7) arranged, in the first course (A), with the apices at the centre and the bases at the periphery such as to form a surface with a polygonal circumference. The peripheral lateral wall (5) is produced by the juxtaposition of panels (8) connecting the superimposed sides of the polygonal circumferences of two superimposed platforms (2,3) and covered with a **floating** girdle (9).

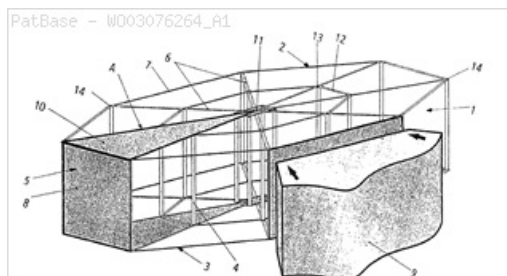
Classifications:

International (IPC 8-9): B63B35/44 (Advanced/Invention)

International (IPC 1-7): B63B35/44

CPC: B63B35/44

European: B63B35/44



Family:

Publication number	Publication date	Application number	Application date
AU2003233362 AA	20030922	AU20030233362	20030305
FR2836887 A1	20030912	FR20020003138	20020311
FR2836887 B1	20040528	FR20020003138	20020311
WO03076264 A1	20030918	WO2003FR00713	20030305

Priority:

FR20020003138 20020311 WO2003FR00713 20030305

Probable Assignee: BES CLAUDE

Assignee(s): (std): BES CLAUDE ; GILBERT JACQUES ; MANON GERARD ; QUILLEVERE PIERRE ; QUILLEVERES PIERRE

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2003233362 AA	20030922	LSPB	+	published / reissued	
AU2003233362 AA	20050113	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2) (F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
FR2836887 A1	20030912	LSPB	+	published / reissued	
FR2836887 A1	20070126	LSLE	-ST	NOTIFICATION OF LAPSE	EFFECTIVE DATE : 20061130
FR2836887 B1	20040528	LSGT	+	granted / extensions (spc, cpc, pte)	
WO03076264 A1	20030918	LSPB	+	published / reissued	
WO03076264 A1	20050420	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	
WO03076264 A1	20060622	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO03076264 A1	20060622	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : JP

Title: ARTIFICIAL **VEGETATION** ISLAND HAVING A MULTI-LAYER STRUCTURE

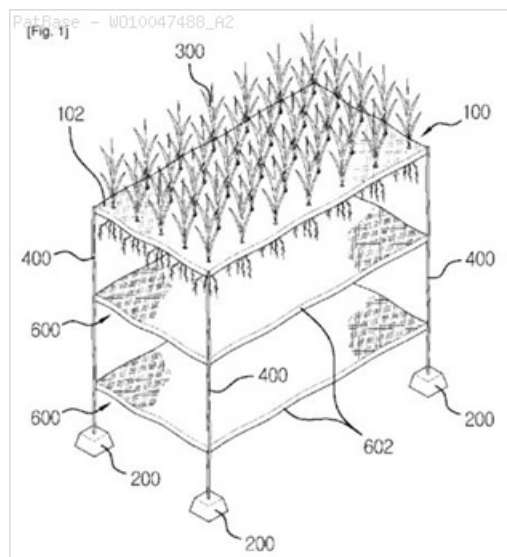
Abstract: The present invention relates to an artificial **vegetation** island having a multi-layer structure for improving the water quality of polluted rivers, streams and lakes and restoring aquatic ecosystems. In particular, the present invention relates to an artificial **vegetation** island having a multi-layer structure which allows aquatic plants to grow and at the same time creates natural lake, river and stream scenery and promotes ecosystem restoration and aesthetically pleasing designed landscapes and which, further, provides a self-cleaning action for polluted lakes, rivers and streams. In order to provide an artificial **vegetation** island having a multi-layer structure which can provide an ecosystem-restoring effect, in addition to an enhanced pollution-removing ability together with aquatic plants on the water surface, the present invention comprises at least one water-immersed, **floating** purification means made using a foam-ceramic carrier contained in plant-wrapping bandages or a synthetic resin net having a specific gravity of at least 1.1 which neither sinks in water nor **floats** towards the water surface.

Classifications:

International (IPC 8-9): C02F3/00 C02F3/10 (Advanced/Invention);
C02F3/00 C02F3/10 (Core/Invention)

CPC: Y02W10/15 C02F3/103 C02F2103/007

European: C02F3/10E M02F103/00H



Family:

Publication number	Publication date	Application number	Application date
KR100903742 B1	20090619	KR20080103772	20081022
WO10047488 A2	20100429	WO2009KR05843	20091012
WO10047488 A3	20100722	WO2009KR05843	20091012

Priority:

KR20080103772 20081022

Probable Assignee: NAVI BIOTECH CO LTD

Assignee(s): (std): KO JUNG MOON ; NAVI BIOTECH CO LTD ; YEOM SANG HYUN ; YUM SANG HYUN

Assignee(s): NAVI BIOTECH CO

Inventor(s): (std): KO JUNG MOON ; YEOM SANG HYUN ; YUM SANG HYUN

Agent(s): PARK JIN HO

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
KR100903742 B1	20090619	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100903742 B1	20081022	LSES	A201	REQUEST FOR EXAMINATION	
KR100903742 B1	20090107	LSES	A302	REQUEST FOR ACCELERATED EXAMINATION	
KR100903742 B1	20090223	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR100903742 B1	20090530	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR100903742 B1	20090611	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR100903742 B1	20130531	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20130531 YEAR OF FEE PAYMENT : 5
KR100903742 B1	20140423	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20140423

KR100903742 B1 20160405 LSFE FPAY ANNUAL FEE PAYMENT					YEAR OF FEE PAYMENT : 6
					PAYMENT DATE : 20160405 YEAR OF FEE PAYMENT : 8
WO10047488 A2	20100429	LSPB	+	published / reissued	
WO10047488 A3	20110426	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO10047488 A3	20120111	LSNE	-122	EP: PCT APPLICATION NON- ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 09822164 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2

Title: Frontal rotary wind rower.

Abstract: 1. Frontal rotary wind rower for the raking of the residues of **vegetation** such as the branches of cut vines and pruning wood, or fruit fallen to the ground, or cut grass, comprising a fixed frame (1-2, 24, 37) adapted to be installed, in removable manner, at the front of an agricultural tractor and carrying two raking devices each comprising at least one rotary raking spinner (16) and its hydraulic rotary driving motor (17) carried by an arm (10, 42-46-47-48-49-50, 43-46-47-48-49-50) characterised in that the said raking devices are coupled to a common lifting system comprising at least one jack (5, 30, 38) and in that the arms carrying the raking spinners (16) are mounted with a capability of movement in a plane perpendicular to the vertical plane, this movement being obtained by means of jacks (12; 44, 45) coupling the said arms to a **support** beam (1, 27, 41-42-43) which moreover **supports** these arms at one of their ends.

Classifications:

International (IPC 8-9): A01B19/10 A01D51/00

A01G17/00 (Advanced/Invention);

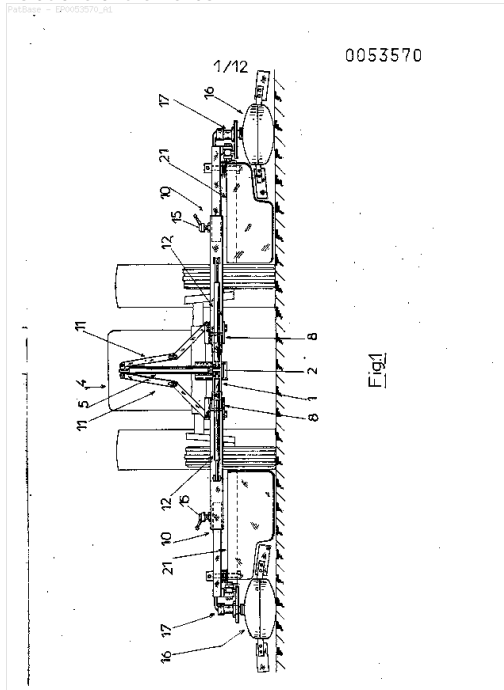
A01B19/00 A01D51/00 A01G17/00 (Core/Invention)

International (IPC 1-7): A01B19/10 A01D51/00 A01D84/00

A01G17/00 A01G17/02

CPC: A01D51/00

European: A01D51/00



Family:

Publication number	Publication date	Application number	Application date
AT14645 E	19850815	AT19810430040T	19811123
DE3171733 D1	19850912	DE19813171733	19811123
EP0053570 A1	19820609	EP19810430040	19811123
EP0053570 B1	19850807	EP19810430040	19811123
ES511142 A1	19830301	ES19820511142	19820403
ES8304401 A1	19830601	ES19820511142	19820403
FR2494549 A1	19820528	FR19800025137	19801124
FR2494549 B1	19850816	FR19800025137	19801124

Priority:

FR19800025137 19801124 EP19810430040 19811123

Probable Assignee: PELLENC AND MOTTE

Assignee(s): (std): PELLENC AND MOTTE ; ETABLISSE ENTS PELLENC AND MOTTE

Assignee(s): ETABLISSEMENTS PELLENC ET MOTTE (SOCIETE A RESPONSABILITE LIMITEE) ; ETABLISSEMENTS PELLENC ET MOTTE SOCIETE A RESPONSABILITE LIMITEE ; PELLENC ET MOTTE ETS ; PELLENC ET MOTTE SOC A RESPONS ETS ; PELLENC ET MOTTE SOCIETE A RESPONSABILITE LIMITEE ETS

Inventor(s): (std): PELLENC ROGER JOSEPH PIERRE

Inventor(s): ROGER JOSEPH PIERRE PELLENC

Designated states: AT BE CH DE FR GB IT LI NL

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT14645 E	19850815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT14645 E	19860215	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
DE3171733 D1	19860904	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3171733 D1	19871112	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0053570 A1	19820609	LSPB	+	published / reissued	

EP0053570 A1	19821103	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19820823
EP0053570 A1	19850807	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : AT EFFECTIVE DATE : 19850807
EP0053570 A1	19850807	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : NL EFFECTIVE DATE : 19850807
EP0053570 A1	19851130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : BE EFFECTIVE DATE : 19851130
EP0053570 A1	19851130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : CH EFFECTIVE DATE : 19851130
EP0053570 A1	19851130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : LI EFFECTIVE DATE : 19851130
EP0053570 A1	19860116	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	
EP0053570 A1	19860531	LSLE	-BERE	BE: LAPSED	OWNER NAME : ETS PELLENC ET MOTTE EFFECTIVE DATE : 19851130
EP0053570 A1	19860709	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	
EP0053570 A1	19860730	LSGT	+26N	NO OPPOSITION FILED	
EP0053570 A1	19860731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0053570 A1	19870801	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : DE EFFECTIVE DATE : 19870801
EP0053570 A1	19881118	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : GB EFFECTIVE DATE : 19881118
EP0053570 A1	19961128	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : FR PAYMENT DATE : 19961128 YEAR OF FEE PAYMENT : 16
EP0053570 A1	19971130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : FR DESCRIPTION: THE PATENT HAS BEEN ANNULLED BY A DECISION OF A NATIONAL AUTHORITY EFFECTIVE DATE : 19971130
EP0053570 A1	19981002	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0053570 B1	19850807	LSGT	+	granted / extensions (spc, cpc, pte)	
ES8304401 A1	19830601	LSPB	+	published / reissued	
FR2494549 A1	19820528	LSPB	+	published / reissued	
FR2494549 A1	19870918	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2494549 B1	19850816	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Arrangement of a substrate for grassing a roof and procedure for its fabrication.

Abstract: A load-bearing **support** plate has water-storage chambers which are open at the top and, according to the invention, each accommodate a filling with sponge-like absorption properties. The bottom of the water-storage chambers is perforated to allow excess water to emerge downwards from the filling into a drain zone. The fillings are preferably produced by foam-filling of the water-storage chambers, preferably by means of a metering and mixing head which is moved at a foam-filling station above the continuously fed **support** plate.

Classifications:

International (IPC 8-9): A01G9/00 E01F8/00 E04D11/00

E04D7/00 (Advanced/Invention);

A01G1/00 (Advanced/Non-invention);

A01G9/00 E01F8/00 E04D11/00 E04D7/00 (Core/Invention);

A01G1/00 (Core/Non-invention)

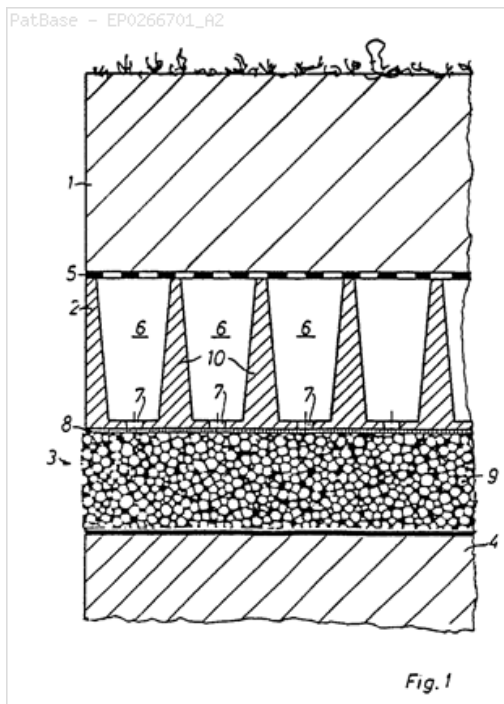
International (IPC 1-7): A01G7/00 A01G9/00 A01G9/02 B29C67/20

B32B3/24 B32B3/28 B32B5/18 C08J9/00 C08L25/06 C08L75/04

E01F8/00 E04D11/00 E04D7/00

CPC: A01G1/00 E04D11/002 Y02B80/32

European: E04D11/00B K01G1/00 Y02B80/32



Family:

Publication number	Publication date	Application number	Application date
AT77531 E	19920715	AT19870116013T	19871030
DE3637463 A1	19880511	DE19863637463	19861104
DE3637463 C2	19900510	DE19863637463	19861104
DE3779997 D1	19920730	DE19873779997	19871030
EP0266701 A2	19880511	EP19870116013	19871030
EP0266701 A3	19890726	EP19870116013	19871030
EP0266701 B1	19920624	EP19870116013	19871030
GR3005025 T3	19930524	GR19920400649T	19920625

Priority:

DE19863637463 19861104 DE19873779997 19871030 EP19870116013 19871030

Probable Assignee: KIRCHNER FRAENK ROHR

Assignee(s): (std): KIRCHNER FRAENK ROHR

Assignee(s): FRAENKISCHE ROHRWERKE GEBR KIRCHNER GMBH AND CO ; FRAENKISCHE ROHRWERKE GEBR KIRCHNER GMBH AND CO 8729 KOENIGSBERG DE ; FRAENKISCHE ROHRWERKE GEBRUEDER KIRCHNER GMBH AND ; FRAENKISCHE ROHRWERKE GEBRUEDER KIRCHNER GMBH AND CO ; FRANKISCHE ROHRWERKE GEBR KIRCHNER GMBH AND CO

Inventor(s): (std): BRAUN FRANZ JOSEF

Inventor(s): BRAUN FRANZ JOSEF W 8729 KOENIGSBERG I BAYERN DE ; BRAUN FRANZ JOSEF 8729 KOENIGSBERG DE

Designated states: AT BE CH DE ES FR GR IT LI LU NL

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT77531 E	19920715	LSGT	+	granted / extensions (spc, cpc, pte)	
AT77531 E	19940115	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
DE3637463 A1	19880511	LSPB	+	published / reissued	
DE3637463 A1	19880511	LSSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3637463 A1	19900510	LSGT	+D2	GRANT AFTER EXAMINATION	

DE3637463 A1	19901108	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3637463 A1	19941110	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE3637463 C2	19900510	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3779997 D1	19930722	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3779997 D1	19951005	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0266701 A2	19880511	LSPB	+	published / reissued	
EP0266701 A2	19900307	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19900110
EP0266701 A2	19910529	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19910411
EP0266701 A2	19920129	LSAS	RAP1	TRANSFER OF RIGHTS OF AN EP PUBLISHED APPLICATION	OWNER NAME : FRAENKISCHE ROHRWERKE, GEBR. KIRCHNER GMBH AND CO.
EP0266701 A2	19920624	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : GR DESCRIPTION : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT EFFECTIVE DATE : 19920624
EP0266701 A2	19921005	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : ES DESCRIPTION : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT EFFECTIVE DATE : 19921005
EP0266701 A2	19921030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : AT EFFECTIVE DATE : 19921030
EP0266701 A2	19921031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : LU DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19921031
EP0266701 A2	19921031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : LI EFFECTIVE DATE : 19921031
EP0266701 A2	19921031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : CH EFFECTIVE DATE : 19921031
EP0266701 A2	19921031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : BE EFFECTIVE DATE : 19921031
EP0266701 A2	19930430	LSLE	-BERE	BE: LAPSED	OWNER NAME : FRANKISCHE ROHRWERKE GEBR. KIRCHNER G.M.B.H. AND CO EFFECTIVE DATE : 19921031
EP0266701 A2	19930501	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : NL EFFECTIVE DATE : 19930501
EP0266701 A2	19930616	LSGT	+26N	NO OPPOSITION FILED	
EP0266701 A2	19930616	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	

EP0266701 A2	19930630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : FR EFFECTIVE DATE : 19930630
EP0266701 A2	19930630	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0266701 A2	19930827	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0266701 A2	19931129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : DE PAYMENT DATE : 19931129 YEAR OF FEE PAYMENT : 07
EP0266701 A2	19941230	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : MM2A DESCRIPTION : 3005025
EP0266701 A2	19950701	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : DE EFFECTIVE DATE : 19950701
EP0266701 A2	20051030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : IT DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 20051030
EP0266701 B1	19920624	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3005025 T3	19930524	LSGT	+	granted / extensions (spc, cpc, pte)	

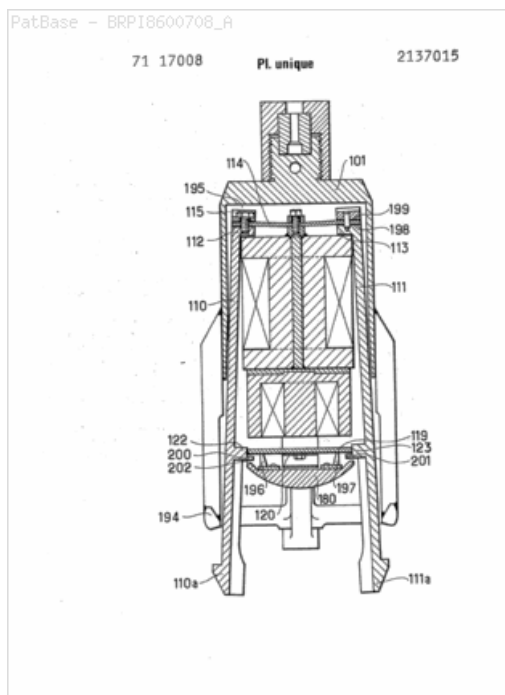
Title: APARELHO E PROCESSO PARA A APLICACAO DIRETA DE LIQUIDO DE TRATAMENTO EM VEGETACAO EM DESENVOLVIMENTO NUM CAMPO OU SIMILAR APPARATUS AND PROCESS FOR THE DIRECT APPLICATION OF LIQUID TREATMENT IN **VEGETATION** IN DEVELOPMENT IN A FIELD OR SIMILAR (Machine translation)

Abstract: Source: BRPI8600708A RESUMO Patente de Invencao: 11 APARELHO E PROCESSO PARA A APLICACAO DIRETA DE LIQUIDO DE TRATAMENTO EM VEGETACAO EM DESENVOLVIMENTO NUM CAMPO OU SIMILAR". Uma unidade de aplicacao e deslocada atraves de um campo de vegetacao em desenvolvimento, por exemplo, como um acessorio montado transversalmente na frente de um trator de fazenda. A unidade inclui uma tubulacao de distribuicao de saida horizontal estendida lateralmente, 10 posicionada acima de uma tubulacao de distribuicao de entrada arranjada de maneira semelhante. Entre cada tubulacao de distribuicao e montada uma pluralidade de membranas de hastes do tipo joelho, convexas para a frente. Quando em uso, um liquido de tratamento a ser aplicado 15 diretamente a vegetacao e arranjado para escapar da tubulacao de distribuicao de saida num lencol superficial ao longo da superficie de cada haste. Quando a vegetacao e roçada pelas hastes, parte do liquido de tratamento varre a vegetacao. Todo liquido de tratamento que nao e varrido sobre a vegetacao desse modo e coletado das extremidades inferiores das hastes para a tubulacao de distribuicao de entrada e bombeado de volta para um reservatorio, do qual flui para a tubulacao de distribuicao de 20 --> • ss • saida. De preferencia, cada haste do tipo joelho fica localizada num angulo de inclinacao segundo visto em ele vagao frontal, a fim de diminuir a chance de uma planta alta fina poder ficar sem ser tratada entre duas fileiras adjacentes. E provido um sistema de valvulas, para impedir a entrada de ar no lado de entrada da bomba. SUMMARY of Invention Patent: 11 device and PROCESS for the DIRECT LIQUID-CAO TREATMENT in **VEGETATION** IN DEVELOPMENT in a FIELD or SIMILAR. " A unit of application and moved through **vegetation** in field development January 5, for example, as an accessory mounted transversely in front of a farm tractor. The unit includes a tubulacao of distribution of horizontal output extended laterally positioned above a 10 tubulacao of distribution of input arranged in a similar manner. Between each tubulacao distribution and assembled a plurality of knee-type rods, convex forward. When in use, a treatment liquid to be applied 15 directly to **vegetation** and arranged to escape the tubulacao output distribution in a shallow sheet along the surface of each stem. When the **vegetation** and roçada by rods, part of the liquid treatment varre **vegetation**. All treatment liquid not swept on the **vegetation** in this way and collected of the lower ends of the stems to the tubulacao of distribuicao input and pumped back to a recently torio, which flows into the tubulacao of distribuicao of 20 --> • ss • exit. Preferably, each stem of knee type is located in a inclinacao second angle seen in the front wagon in order to decrease the chance of a high thin plant could stay without being treated between two adjacent grabbed 5-ras. And provided a system of valves, to prevent air from entering the pump intake.

Classifications:

International (IPC 8-9): B05B1/20 (Advanced/Invention); B05B1/14 (Core/Invention)

International (IPC 1-7): B05B1/20



Family:

Publication number	Publication date	Application number	Application date
BRPI8600708 A	19870908	BR1986PI00708	19860219

Priority:

BR1986PI00708 19860219

Probable Assignee: JOHN SHERMAN RICHARDSON

Assignee(s): (std): JOHN SHERMAN RICHARDSON ; JOHN WILSON RICHARDSON

Inventor(s): (std): RICHARDSON JOHN SHERMAN ; RICHARDSON JOHN WILSON

Inventor(s): JOHN SHERMAN RICHARDSON ; JOHN WILSON RICHARDSON

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
BRPI8600708 A	19870908	LSPB	+	published / reissued	
BRPI8600708 A	19961231	LSLE	-MM	LAPSE DUE TO NON-PAYMENT OF FEES (ART. 50)	

Title: Shoreline erosion-preventing bank installation

Abstract: Source: US5951202A The instant shoreline erosion-preventing bank installation comprises a **vegetation supporting** strengthened skin having negatively-buoyant bottom and side drop-skirts, which skirts each include an extendable reservoir of skin folded on itself accordion-like, and which skirts each include at least one weight. The side and bottom negatively-buoyant drop-skirts of the **vegetation supporting** strengthened skin fall as the bank is eroded by wave action, conforming the skin to the bank as it erodes in a storm, thereby preventing wash-away of the installation. Energy absorbing and flow control weighted ballasts are attached to the skin; which, among other things, control wave and wind action in a storm so as to prevent wash-off to, and erosion of, adjacent property that may be unprotected. In time, the installation of the invention is completely overgrown with **vegetation**, permitting the use and enjoyment of the bank protected thereby, provides long term protection from erosion and provides a wildlife habitat.

Classifications:

International (IPC 8-9): E02B3/04 E02B3/12 (Advanced/Invention);

E02D17/20 (Advanced/Non-invention);

E02B3/04 E02B3/12 (Core/Invention);

E02D17/20 (Core/Non-invention)

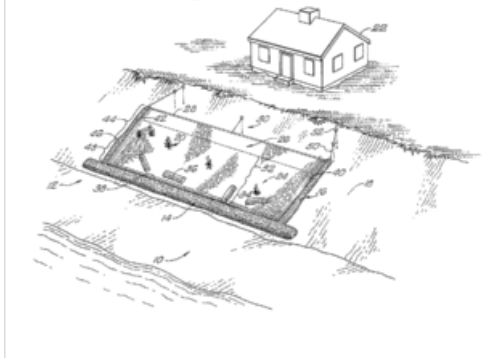
International (IPC 1-7): E02D17/20

CPC: E02B3/04 E02B3/122 E02D17/202

European: E02B3/04 E02B3/12C P02D17/20B

US: 405/19 405/258 405/302.6

PatBase - US5951202_A



Family:

Publication number	Publication date	Application number	Application date
US5951202 A	19990914	US19970851378	19970505

Priority:

US19970851378 19970505

Probable Assignee:

BROWN GREGORY BENN

Assignee(s): (std):

BROWN GREGORY BENN

Inventor(s): (std):

BROWN GREGORY BENN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US5951202 A	19990914	LSGT	+	granted / extensions (spc, cpc, pte)	
US5951202 A	20030314	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5951202 A	20070313	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5951202 A	20110914	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5951202 A	20111101	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110914

Title: Aquatic **vegetation** separator

Abstract: Source: US5475970A An Aquatic **vegetation** cutter adaptable to the bow of small work boats having rotatable, cultivator type disks on converging angles disposed along each side of the bow, extending partially below the water line, positioned in a manner whereby forward movement of the boat tends to rotate the disks thereby cutting and parting the **vegetation** allowing the boat to pass unobstructed, without drawing the cut **vegetation** into the propulsion unit intake. A second embodiment provides a method of power driving the disks in a forward or reverse direction.

Classifications:

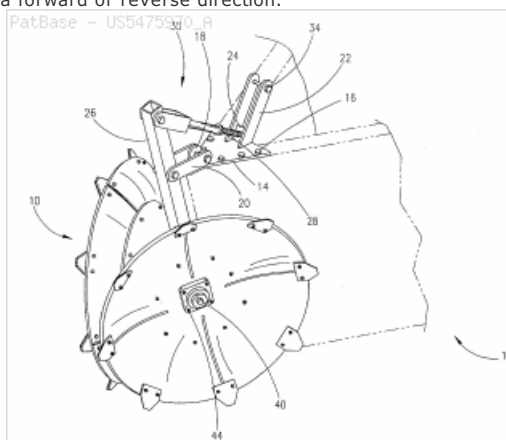
International (IPC 8-9): A01D44/00 (Advanced/Invention);
A01D44/00 (Core/Invention)

International (IPC 1-7): A01D44/00

CPC: A01D44/00

European: A01D44/00

US: 56/8



Family:

Publication number	Publication date	Application number	Application date
US5475970 A	19951219	US19940336182	19941108

Priority:

US19940336182 19941108

Probable Assignee: LANDRY JR STEPHEN

Assignee(s): (std): LANDRY JR STEPHEN

Inventor(s): (std): LANDRY JR STEPHEN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US5475970 A	19951219	LSGT	+	granted / extensions (spc, cpc, pte)	
US5475970 A	19990128	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5475970 A	20030124	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5475970 A	20070529	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12

Title: ARTIFICIAL **FLOATING** ISLAND

Abstract: Source: JP2010213578A PROBLEM TO BE SOLVED: To provide an artificial **floating** island effectively suppressing proliferation of phytoplankton to increase a water quality-purifying function, even if the artificial **floating** island area ratio to a water area is small. SOLUTION: This artificial **floating** island 1 includes a **vegetation** base 10, and **support** means 20 and 30 **supporting** in a condition of **floating** the **vegetation** base 10 in water. Emerging plants 40 which emit an allelopathic agent suppressing proliferation of phytoplankton are planted on the **vegetation** base 10. The artificial **floating** island 1 suppresses proliferation of phytoplankton to purify water quality by the artificial **floating** island of an about 5 percent area to a water area, by, in addition to a shading function, a function effectively suppressing proliferation of Microcystis of blue-green algae as a cause of generation of water-bloom by allelopathic agent emitted from the root stems 41 of the emerging plants 40 planted on the **vegetation** base 10 of the artificial **floating** island 1, an adhesion, contact sedimentation function of phytoplankton and suspended solid to the porous **vegetation** base of a large specific surface area, and a purifying function multiple with a predation function of phytoplankton through an increase in zooplankton.

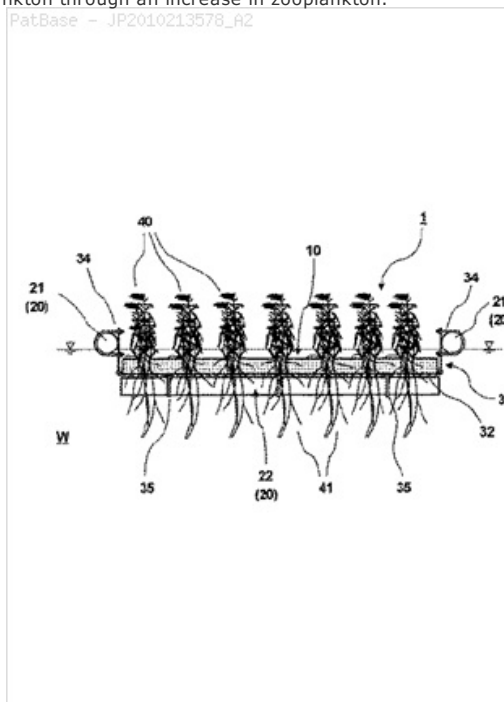
Classifications:

International (IPC 8-9): A01G31/00 (Advanced/Invention);

A01G31/00 (Core/Invention)

CPC: Y02P60/216

PatBase - JP2010213578_A2



Family:

Publication number	Publication date	Application number	Application date
JP2010213578 A2	20100930	JP20090060693	20090313
JP4456654 B1	20100428	JP20090060693	20090313

Priority:

JP20090060693 20090313

Probable Assignee:

FUJITA CORP

Assignee(s): (std):

FUJITA CORP

Inventor(s): (std):

SHIMADA YOSHIHIKO

Agent(s):

NOMOTO YOICHI

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
JP2010213578 A2	20100930	LSPB	+	published / reissued	
JP4456654 B1	20100428	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4456654 B1	20091222	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP4456654 B1	20100114	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP4456654 B1	20100212	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20100205
JP4456654 B1	20100212	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4456654 B1	20100212	LSGT	+R150	CERTIFICATE OF PATENT OR	TEXT : JAPANESE

				REGISTRATION OF UTILITY MODEL	INTERMEDIATE CODE: R150
JP4456654 B1	20130122	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4456654 B1	20140128	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4456654 B1	20150127	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4456654 B1	20151130	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP4456654 B1	20160126	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4456654 B1	20170110	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

Title: Working device, particularly cutting device, acting on the **vegetation** in contact with the ground, and working vehicle, such as a rotary mower-scrub clearer equipped with such a device

Abstract: The present invention relates to a working device acting on the **vegetation** in contact with the ground, this device 12 including at least one working member 13 provided with a **support** via which it can be mounted at the front of a carrying vehicle, characterised in that the said **support** is a framework 15 which, from a rear end intended for its mounting on the carrying vehicle is extended beyond the working member 13 by a front end 15a to which the latter is fixed by means of a linking structure, preferably a three-point hitch 25, 26, 27 directed overall towards the back of the framework and mounted in a **floating** manner on it. The present invention also relates to a working machine the chassis 1 of which carries such a device at the front, preferably articulated (at 21). Application in particular to rotary mowers-scrub clearers.

Classifications:

International (IPC 8-9): A01D34/44 (Advanced/Invention);

A01D34/412 (Core/Invention)

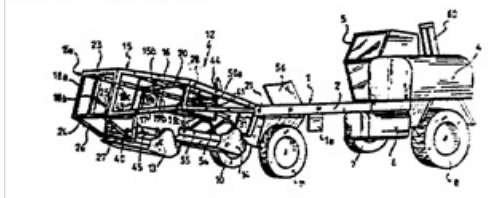
International (IPC 1-7): A01B73/06 A01D25/00 A01D34/44

A01D34/86

CPC: A01D34/44

European: A01D34/44

PatBase - FR2637449_A1



Family:

Publication number	Publication date	Application number	Application date
FR2637449 A1	19900413	FR19880013204	19881007
FR2637449 B1	19920214	FR19880013204	19881007

Priority:

FR19880013204 19881007

Probable Assignee:

HAVAS JEAN CLAUDE

Assignee(s): (std):

HAVAS JEAN CLAUDE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
FR2637449 A1	19900413	LSPB	+	published / reissued	
FR2637449 A1	19960906	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2637449 B1	19920214	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: APPAREIL DE RECUPERATION D'ENERGIE RADIANTE RECOVERY UNIT RADIANT ENERGY (Machine translation)

Abstract: Source: MA22750A [Source: Claim 1] MA 22750SP Elements de l'invention a breveter 1- Un appareil de recuperation de l'energie radiante, compre- nat: un reservoir a fluide; une plate-forme flottant sur le fluide place dans.le dit reser- voir a fluide; les moyens pour deplacer la dite plate-forme a l'interieur dudit reservoir; les moyens-places sur la dite plate-forme, pour concentrer. l'energie radiante sur, les (?iits collecteurs d'energie radiante; et les moyens pour submerger a la demande lesdits moyens de Co.ncen- -tration scus le niveau du liquide dudit reservoir pour les proteger contre les intemperies..2- L'appareil de la demande de brevet 1, y compris les moyens de submersion, comprend: les moyens pour pomper le liquide sur la surface de ladite plate-forme; et les moyens pour maintenir ledit fluide sur ladite plate-forme et sur lesdits moyens de concentration? ?- L'appareil de la demande de brevet 2. y compris lesdits moyens de maintien, comprend les nioyens pour etablir-u?e. basse pression sous ladite plate-forme pour maintenir ladite plate- forme sous le niveau du fluide pompe a partir du reservoir. 4- Les appareils de la demande de brevet 2., y compris les moyens de pompage et de maintien en plongee, comprenant les turbines d'alimentation montees sous ladite plate-forme pour maintenir ladite plate-forme a l'interieur dudit reservoir, et lesdites turbines d'alimentation communiquant avec l'exterieur de ladite plate-forme par le truchement d'ouvertures'. L'appareil de la demande de brevet 4 comprend egalement les turbines hydrauliques opposees et associees a chaque turbine d' alimentation en liquide, lesdites turbines opposees etant utilisables avec lesdites turbines d'alimentation.pour pousser le fluide en un sens oppose desdites turbines d'alimentation; et MA 22750SP les deflecteurs places entre lesdites turbines d'alimentation et lesdites turbines opposees. 6- L'appareil objet de la demande 5 comprenant les.dites turbines d'alimentation qui ont un pas contraire a celui des turbines opposees < et les turbines d'alimentation associees et leurs turbines opposees sont montees sur des axes montes verti- -calement. 7- L'appareil de la demande 4., ou ledit mobile comprend un conduit muni au moins d'une turbine et reliant deux ouvertures de conduit, ledit, conduit dirigeant le fluide dans une. direction verticale par une ouverture adjacente vers-au moins une turbine, et par l'autre ouverture adjacente au moins partiellement dans une direction horizontale. 8- L'appareil de la demande 1 ou la plate-forme a un coef- -ficient de flottabilite suffisant pour **supporter**: les moyens de concentrer.les rayons radiants au-dessus du niveau du fluide contenu dans le reservoir. 9- L'appareil de la demande 8 relatif aux moyens de submersion comprend: les moyens pour pomper 1' eau sur ladite plate-forme; et les moyens pour maintenir ledit fluide sur ladite plate-forme et au-dessus des moyens de concentrer de l'energie radiante. 10- L'appareil de la demande 9 relatif au pompage et au maintien du liquide sur la plate-forme comprend les turbines hydrauliques fixees sous ladite plate-forme a l'interieur dudit reservoir, lesdites turbines hydrauliques communiquant a travers la plate- forme par des ouvertures. ???- L'appareil de la demande 10 comprenant egalement: les turbines hydrauliques- opposees associees a chaque turbine d'alimentation en-liquide, lesdites turbines opposees fonctionnant avec lesdites turbines d'alimentation pour forcer le fluide dans une direction opposee a celle desdites turbines d' alimentation; et les deflecteurs entre lesdites turbines d'alimentation et MA 22750SP lesdites turbines opposees. 12- L'appareil de la demande 11, dans lequel les turbines d'alimentation ont un pas inverse de celui de leurs turbines opposees. et les turbines d'al.imentation associees et leurs turbines 5 opposees sont montees sur le meme axe oriente dans le sens verti- --cal. 12- L'appareil de la demande 10 ou ledit moyen de fonctionnement comprend un conduit muni d'au moins 'une turbine et joignant deux ouvertures de conduit, ledit conduit amenant,le,fluide dans 10 une directio'n verticale par une ouverture proche d'au mo'ins Une turbine et dirigeant le fluide par l'autre ouverture dans une direction au moins presque horizontale. 14- L'appareil de la demande 1 / ou: la plate-forme comprend une bordure tout autour pour isoler les 15 moyens de concentration de l'energie radiantequi y sont installes du fluide contenu dans le reservoir; et le moyen d'obtenir la submersion comprend une turbine hydraul- -lique fixee audit appareil de recuperation de l'energie radiante et pouvant etre actionnee de facon independante pour deplacer le 20 fluide entre l'appareil et le reservoir. 15- L'appareil de la demande 1 comprenant aussi les agents de flottaison fixes sur ladite plate-forme pour **supporter** cette derniere lorsque les moyens de concentration de l'energie radiante ont ete submerges dans le fluide dudit reservoir. 25 16- !.'appareil de la demande 15., ou le coefficient de flotta- -bilite augmente proportionnellement a la profondeur. 17- L'appareil de la demande 16. comprenant les m?yens de flot- -ta?Son places dans le sens longitudinal de la plate-forme et fixes sur cette derniere suivant leur longueur, lesdit.s moyens de ??? flottaison etant biseautes vers l'exterieur, partant d'une base etroite sur la plate-forme vers une base plus.large vers le haut. rr MA 22750SP 18- L'appareil de la demande 1 comprenant lesdits moyens de concentration comprend les reflecteurs places pour reflechir l'energie solaire en direction desdits collecteurs. 19- L'appareil de la demande 18, dans lequel chaque reflecteur est de forme parabolique avec un point focal, et les collecteurs, sont places sur le int focal d'un des reflecteurs. 20- L'appareil de la demande 1 , comprenant lesdits moyens de concentrer l'energie radiante, est constitue par une quantite d'elements allonges reflechissants places cote a cote et defi- -nissant un obi et. reflechissant de forme pa'rabolique. 21- l,'appareil de la demande 20, comprenant lesdits collec- -teurs constitues par des tuyaux contenant un moyen de transport de l'energie. 22- l,'appareil de la demande 20 avec lesdits collecteurs ins - -talles sur une charpente a une certaine distance desdits reflec- -teurs et. places essentiellement au point focal des reflecteurs paraboliques, ladite charpente comprenant egalement des reflecteurs pour diriger l'energie radiante vers les collecteurs. 23- Un appareil'-de recuperation de l'energie so: ssire comprenant: un reservoir a liquide; une plate-forme flottant sur le fluide dans le reservoir a fluide; les moyens pour deplacer ladite plate-forme a l'interieur du reservoir pour suivre les mouvements du soleil; une quantite de reflecteurs paralleles et longitudinaux fixes sur la plate-forme, chaque reflecteur etant de forme essentiel- -lement parabolique pour concentrer l'energie solaire sur une ligne essentiellement horizontal; des collecteurs d'energie solaire, installes sur la ligne focale des reflecteurs; et les moyens pour submerger a la demande lesdits reflecteurs sous le liquide pour en assurer la protection contre les intemperies, comprenant une pompe pour amener l'eau du reservoir sur le dessus de ladite plate-forme, et les moyens ur maintenir la plate-forme au dessous du niveau du liquide contenu dans le ?reservoir. MA 22750SP 24- Un appareil de recuperation de l'energie radiante, comprenant: un reservoir a fluide; une plate-forme flottant sur- le fluide dans ledit reservoir a fluide; 5 les moyens pour deplacer ladite plate-forme dans ledit reservoir; des collecteurs d'energie radiante montes sur.ladite plate- forme; les moyens places sur ladite plate-forme pour collecter l' energie radiante et la concentrer sur lesdits collecteurs d'energie 0 radiante; les moyens pour amener le fluide par pompage ?, ? sur ladite plate-forme pour commander la submersion desdits moyens de concentration sous le niveau du fluide contenu dans le reservoir aux fins de protection contre les intemperies; 5 des turbines hydrauliques fixees sous ladite plate-forme 1 ?interieur dudit reservoir, les dites-turbines hydrauliques communiquant par des ouvertures dans la dite plate-forme; des organes de flottaisons fixes sur ladite plate-forme pour **supporter** ladite plate-forme l.orsque les moyens de concentration 0 sont enfoncees dans le fluide du?it reservoir, la legerete des organes de flottabilite augmentant du bas vers le haut desdits organes de flottaison, 25- L 'appareil de la demande 24. comprenah't egalement: des turbines hydrauliques opposees associees a chaque turbine 5 d'alimentation, lesdites turbines opposees etant utilisables, avec lesdites turbines d'alimentation, pour forcer le fluide dans une direction opposee desdites turbines d'alimentation; et des deflecteurs entre lesdites turbines opposees et lesdites turbines d'alimentation. 0 26- L'appareil de la demande 25 ou lesdites turbines d'alimen- -tation ont un pas contraire a celui de leurs turbines opposees; les turbines d'alimentation associees et contraires etant fixees separement sur des arbres montes verticalement. 27- L'appareil de la demande 24 ou ledit moyens de deplacement comprend un conduit associe ? au moins une turbine et relie a deux ouvertures, ledit conduit -amenant le fluide a travers 1' ? MA 22750SP ouverture situee pres d'au moins une turbine dans une direction verticale et conduisant le fluide par l'autre ouverture dans une direction quasi horizontale. ???- L'appareil de la demande 24, ou la plate-forme a un coeffi- cient de flottabilite suffisant pour maintenir les moyens de concentration de l'energie radiante au dessus du niveau du fluide contenu dans le reservoir. 29- L'appareil de la demande 24 oue lesdits organes de flottaison sont de forme allongee et fixes sur ladite plate-forme dans le sens de leur longueur, lesdits organes etant biseautes avec la petite base dirigee vers l'interieur de la plate-forme et la grande base dirigee vers l'exterieur. 3?- Un appareil de recuperation de l'energie radiante, compre- -nant; une masse de liquide; une plate-forme flottant sur ladite masse de liquide; des moyens pour faire tourner ladite plate-forme; d?s collecteurs d'energie radiante fixes sur ladite plate-forme et ladite plate-forme faite d'un materiau leger et flexible pour epouser etroitement la surface sur laquelle flotte ladite plate-forme. Cy [Source: Claim 1] MY 22750SP Elements of l' invention patent 1 - a 1' radiant energy, compre-recovery device - nat: a fluid a tank; a platform **floating** on the place says dans.le Depo-fluid - see a fluid; the means to move the so-called platform has 1' of tank procedure; means-places on the said platform, for focus. 1' radiant energy, the (? collectors iits of radiant energy; and the means to overwhelm demand said means-Co.ncen - tration scus the liquid level of said reservoir to protect against the weather...) 2 - The system of the patent application 1, including submersion, includes: means for pumping the liquid on the surface of said platform; and the means to maintain said fluid on the said platform and said means concentration-the unit of the patent application 2. including said means of maintaining, includes the nioyens for establish-u? e. low pressure under the said platform to maintain the said flat - form under the level of the fluid pump from

the tank. 4 - Devices of the patent application 2., including the means of pumping and maintenance in diving, including the turbines of power climbs under the said platform to maintain the said platform has! Interior of said tank, and said power turbines contacting! outside of said platform through openings '. Unit 4 patent application also includes the opposite and associated hydraulic turbines has each turbine supply in liquid, such turbines can be used with such turbines being opposite to alimentation.pour push the fluid in a sense against such power turbines; and MY 22750SP deflectors places between those turbines of power and such turbines opposite. 6 - The unit object of the application 5 with les.dites turbines supply who have a not contrary to that of turbines opposite < and the associated power turbines and their opposite turbines are mounted on axes ride-verti - Cally. 7 - Demand 4, or the said mobile device includes a duct with at least a turbine and linking two openings conduit, said, leads pointing the fluid in one. vertical direction by an adjacent opening to - at least a turbine, and by the other adjacent opening at least partially in a horizontal direction. 8 - The unit of demand 1 or platform has a coef-buoyancy sufficient to **support** benefit: the means of concentrer.les radiant rays above the level of the fluid in the tank. 9 - The unit of demand 8 means of submergence on includes: means for pumping 1' water on the said platform; and the means to maintain said fluid on the said platform and beyond the means of focus 1' radiant energy. 10 - The unit of demand 9 related to the pumping and maintaining of the liquid on the platform includes hydraulic turbines attached under the said platform a 1' inside of said tank, hydraulic turbines said communicating through the flat - form through openings.??? -The unit of demand 10 includes also: turbines hydraulic-opposite associated has each turbine power-liquid, said turbines operating with such opposite turbines supply to force the fluid in a direction opposite to that of said turbines supply; and the deflectors between such turbines supply and MY 22750SP said turbines opposite. 12 - 11 request apparatus, in which the power turbines have a reverse of that of their opposite turbines. and the associated al.imentation turbines and their 5 opposite turbines are mounted on the same axle steers in the direction-verti - cal. 12 - The unit of demand 10 or said means of operation includes a muni led to at least ' a turbine and joining two conduit openings, said led bringing, fluid in 10 a branch ' vertical n by an opening close to at the mo'ins a turbine and directing the fluid by opening another in at least nearly horizontal direction. 14 - The unit of demand 1 / or: platform includes a border all around to isolate the 15 means of concentration of 1' energy radiantequi are installed of the fluid in the tank. and the way to get the submersion includes a turbine hydraulic-- alcoholic audit 1' energy recovery device fixed radiant and that can be operated independently to move 20 fluid between! device and the tank. 15. the unit of demand 1 including fixed flotation agents on the said platform to **support** the latter when the radiant 1' energy concentration means have been submerged in the fluid tank said. 25 16-!.' device demand 15, or the coefficient of flotta --bility increases a depth. 17 - The unit of demand 16. including the m? Yen-flow - your? His places in the direction longitudinal to the platform and fixed on the latter depending on their length, average lesdit.s of? **float** being biseautes to! outside, starting from a base narrow on the platform to a plus.large base upward. RR MY 22750SP 18 - the apparatus of claim 1 comprising said means of concentration includes reflectors places to think 1' solar energy in the direction of such bots. 19 unit 18 request, in which each reflector is a parabolic shape with a focal point, and collectors, are places on the focal interest of one of the reflectors. 20 - The unit of demand 1, including means of focus 1' power, radiant is by a number of elements extensions reflective places side by side and challenge--providing one obi and. pa shape reflecting ' rabolique. 21 - l, 'device of the 20 application, including such collective - producers consisting through pipes containing 1 transportation' energy. 22.!, 'device of 20 with ins collectors such demand - - tillers on a frame has a distance of such reflec - - producers and. essentially places the focal point of the parabolic reflectors, said frame including the reflectors also for heading 1' a tank; a platform **floating** in the fluid in the fluid a tank; has the means to move the platform said! inside of the tank to track the movements of the Sun; a quantity of parallel reflectors and longitudinal fixed on the platform, each being of shape-bulk - only dish reflector to concentrate solar energy on an essentially horizontal line 1'; collectors of solar energy, installed on the focal line of the reflectors; and means to overwhelm demand such reflectors under the fluid to ensure protection against bad weather, including a pump to bring water from the tank on top of the platform said, and means heart maintain the platform below the level of the liquid content in the? tank. MY 22750SP 24 - a 1' radiant energy recovery device, comprising: an a fluid reservoir. a platform **floating** on--the fluid tank therein has fluid; 5 ways to move the said platform in said tank; collectors of radiant energy get up on.The said plate - shape; How places on the said platform to collect the radiant energy and focus it on the collectors said of energy radiant 0; the means to bring the fluid by pumping? on the said platform to order the submersion of said average concentration under the level of the fluid in the tank for the purposes of protection against bad weather; 5 hydrauligues established under the said platform 1 turbines?' Interior of said tank, say-turbines hydrauligues communiquant by openings in the so-called platform; organs of fixed flotations on the said platform to **support** such platform l.orsgue means of concentration 0 are deeper in the fluid of the? it reservoir, the lightness of the organs of buoyancy increases from the bottom to the top bodies of water, 25 - L ' unit of demand 24. comprenah't also: turbines hydrauligues opposite associated a each turbine 5 power, said turbines opposite being usable, with such turbines to power, to force the fluid in a direction opposite of said turbines supply; and between those turbines deflectors opposite and such turbines supply. 0 26 - the unit of demand 25 or such turbines-food - **vegetation** have a not contrary to that of their turbines opposite; the power turbines associated and opposites being fixed separately on trees go up vertically. 27 - The unit of demand 24 or moving average said includes a led associate? at least one turbine and connects two openings, the latter led - bringing the fluid through a 1'? MY 22750SP opening located near at least one runner in a vertical direction and leading the fluid by!. another opening in a nearly horizontal direction.?? 2. - the device of the 24, or platform application has a coefficient - factor of buoyancy sufficient to maintain the concentration of 1' energy radiant above the level of the fluid in the tank. 29 - Demand 24 oue said bodies of flotation unit are extended and fixed on the said platform in the sense of their length, such bodies being biseautes with the small base directed to 1' inside of the platform and the large base directed to! outside. 3. - a unit of recovery of 1' radiant energy, compre - - nant; a mass of liquid. a platform **floating** on the said mass of liquid; ways to turn the said platform; d? s collectors of radiant energy fixed on the said platform and the said platform made of a light material and flexible marry closely the surface on which **floats** the said platform. CY

Classifications:

International (IPC 8-9): F24J2/00 (Advanced/Invention);

F24J2/00 (Core/Invention)

International (IPC 1-7): F24J2/00

CPC: F24J2/5269 F24J2/18 F24J2/4638 F24J2002/108 Y02E10/47

European: Y02E10/40

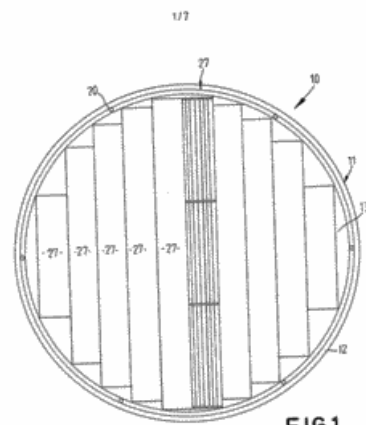


FIG. 1

MA22750_A1
fy

Family:

Publication number	Publication date	Application number	Application date
MA22750 A1	19930701	MA19920023041	19921223

Priority:

MA19920023041 19921223

Probable Assignee:

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Assignee(s): (std):

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Inventor(s): (std):

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Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
MA22750 A1	19930701	LSPB	+	published / reissued	

Title: ROTARY MOWER WITH MEANS PROVIDING SELECTIVE SUCTION FOR ITS BLADES

Abstract: Source: US3245209A 1,090,081. Mowing machines; couplings. INTERNATIONAL HARVESTER CO. Oct. 19, 1965 [Nov. 20, 1964], No. 44179/65. Heading A1F. A mower adapted for mid-mounting on a tractor comprises three rotating cutter blades, the outer ones of which cut material depressed by the front wheels of the tractor and are bent as at 123 and 124 to create an upwardly directed draft of air which is greater than the upward draft created by the bent parts 109 of the centre blade. The material cut by each blade is constrained to move along a tunnel 136 so that all the cut material is discharged through an outlet 148 at one side of the machine. Wheels 95 **support** the rear of the mower which is pivotally attached to the tractor by long beams 52. The front of the mower is pivotally **supported** from the beams 52 by links 77 which are interconnected by a torsion bar 85. The beams 52 are raised to lift the mower by means of a hand lever 71 rigidly secured to levers 67 which have a lost motion connection 96 with the beams whereby the mower can "**float**". The tractor engine drives the cutters via a belt 11.

Classifications:

International (IPC 8-9): A01D34/64 A01D34/66

A01D34/685 (Advanced/Invention);

A01D34/63 A01D34/67 (Core/Invention)

International (IPC 1-7): A01D35/26 A01D53/04

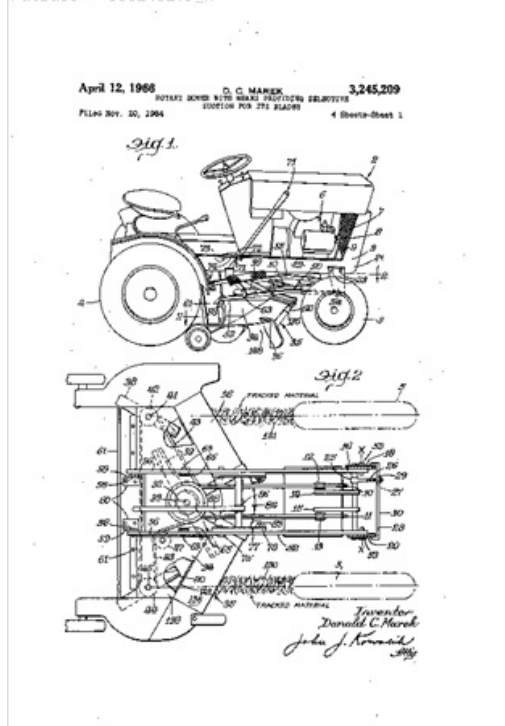
CPC: A01D34/661 A01D34/64 A01D34/66 A01D2101/00 Y10S56/22

European: A01D34/64 A01D34/66 A01D34/66A A01D34/685

K01D101/00

US: 56/13.4 56/13.6 56/DIG.22 D15/015 D15/15

PatBase - US3245209_R



Family:

Publication number	Publication date	Application number	Application date
CH451583 A	19680515	CH19650015955	19651119
FR1454389 A	19660930	FR19650039165	19651119
GB1090081 A	19671108	GB19650044179	19651019
US3245209 A	19660412	US19640412712	19641120

Priority:

US19640412712 19641120

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Inventor(s):

C MAREK DONALD

Legal status (INPADOC)

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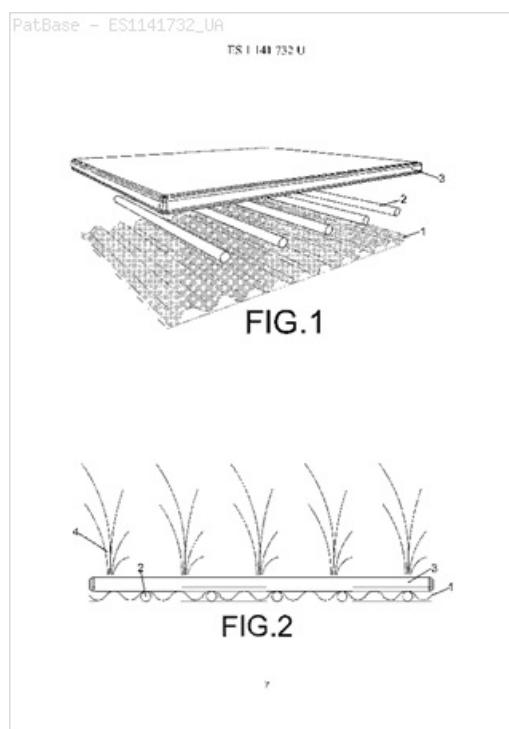
Patent	Date recorded	Event group	Code	Event	Details
CH451583 A	19680515	LSGT	+	granted / extensions (spc, cpc, pte)	
FR1454389 A	19660930	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1090081 A	19671108	LSGT	+	granted / extensions (spc, cpc, pte)	
US3245209 A	19660412	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: SOPORTE FLOTANTE DE VEGETACION HELOFITA PARA DEPURACION DE AGUAS

Abstract: Source: ES1141732U 1. Soporte flotante de vegetación helofita para depuración de aguas caracterizado porque comprende una malla volumétrica (1) que aloja una serie de barras (2) de espuma de polietileno de célula cerrada. 2. Soporte de acuerdo con la reivindicación 1 en donde las barras (2) son de tubo de polietileno. 3. Soporte de acuerdo con cualquiera de las reivindicaciones 1 - 2 en donde incorpora un colchón de fibra de coco (3) sobre el que se implanta la vegetación (4). 4. Soporte de acuerdo con cualquiera de las reivindicaciones 1 - 3 en donde la malla (1) está materializada en una mezcla de polipropileno, polietileno de alta densidad y espuma de polietileno de célula cerrada. 5. Soporte de acuerdo con cualquiera de las reivindicaciones 1 - 4 en donde el colchón de fibra de coco (3) está materializado en fibra de coco estructurada u otra fibra con características equivalentes; cosida con monofilamento de polietileno de alta densidad estabilizado. 6. Soporte de acuerdo con cualquiera de las reivindicaciones 1 - 5 en donde el colchón (3) tiene un gramaje de entre 750 y 2500 grams per square metre. 7. Soporte de acuerdo con cualquiera de las reivindicaciones 1 - 6 en donde incorpora unos anclajes, tales como anclas de hormigón, rocas, anclajes directos a estructuras existentes, u otros medios equivalentes. 1. Helofita support floating vegetation for purification of water characterized in that it comprises a volumetric mesh (1) that hosts a number of bars (2) polyethylene foam closed cell. 2. Support according to claim 1 wherein the bars (2) are of polyethylene tubing. 3. Support according to any of claims 1 - 2 which incorporates a mattress coir (3) on which vegetation (4) is implanted. 4. Support according to any of claims 1 - 3 wherein the stent (1) is embodied in a blend of polypropylene, high density polyethylene foam and closed cell polyethylene. 5. Support according to any of claims 1 - 4 wherein the coconut pound mattress (3) is materialized in structured coconut fiber or other fiber with equivalent characteristics; monofilament sewn stabilized high density polyethylene. 6. Support according to any of claims 1 - 5 wherein the mattress (3) has a grammage of between 750 and 2500 grams per square meter. 7. Support according to any of claims 1 - 6 which incorporates anchorages such as concrete anchors, rock anchors directly to existing structures, or other equivalent means.

Classifications:

International (IPC 8-9): C02F3/32 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
BR202016009270 U2	20170124	BR20162009270U	20160426
ES1141732 UA	20150723	ES20150030828U	20150715
ES1141732 Y1	20151020	ES20150030828U	20150715

Priority:

ES20150030828U 20150715

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Assignee(s): (std): COM PROJAR S A

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Inventor(s): VICENTE FRANCH CORONIL ; PABLO NAVARRO TENA ; FRANCISCO PEREZ BAS ; CONSTANTINO GALERA LOZANO

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
BR202016009270 U2	20170124	LSPB	+	published / reissued	
BR202016009270 U2	20170124	LSPB	B03A	PUBLICATION OF AN APPLICATION: PUBLICATION OF A PATENT APPLICATION OR OF A CERTIFICATE OF ADDITION OF INVENTION	

ES1141732 UA	20150723	LSPB	+	published / reissued	
ES1141732 UA	20151020	LSGT	+FG1K	UTILITY MODEL GRANTED	EFFECTIVE DATE : 20151014
ES1141732 Y1	20151020	LSGT	+	granted / extensions (spc, cpc, pte)	

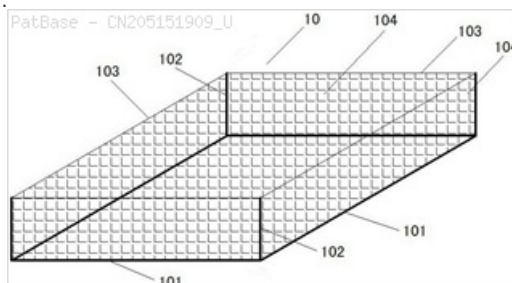
Title: LIVING **VEGETATION** PROSTHETIC DEVICES OF SMALL -SIZE RIVERWAY WATER

Abstract: Source: CN205151909U The utility model discloses a living **vegetation** prosthetic devices of small -size riverway water. Living **vegetation** prosthetic devices of small -size riverway water includes: four first superficial pipes, four tee bends, two adjacent first superficial pipes link to each other with the tee bend through the rectangle chassis that the tee bend links to each other and the formation level sets up, every first superficial pipe hermetcally, four seconds **float** the pipe, and four seconds **float** the lower extreme one -to -one ground of pipe and link to each other with four tee bends hermetcally, and four bracing pieces, every bracing piece **floats** to manage with adjacent two seconds and links to each other, and four first superficial pipes, four tee bends, four superficial pipes of second and four bracing pieces form the cuboid frame, and bottom surface and four sides of cuboid frame are equipped with at a distance from the net. According to the utility model discloses living **vegetation** prosthetic devices of small -size riverway water have simple structure, with low costs, prevent that the aquatic bird from herding and eat destroy, restore and fast effectively, easily carry out community's configuration and regulation and control, need not advantage such as maintenance.

Classifications:

International (IPC 8-9): A01G31/02 C02F3/32 (Advanced/Invention)

CPC: Y02P60/216



Family:

Publication number	Publication date	Application number	Application date
CN105198091 A	20151230	CN201510707760	20151027
CN205151909 U	20160413	CN201520841050U	20151027

Priority:

CN201510707760 20151027 CN201520841050U 20151027

Probable Assignee: NANJING INST GEOGRAPHY AND LIMNOLOGY CAS

Assignee(s): (std): NANJING INST GEOGRAPHY AND LIMNOLOGY CAS ; NANJING INST OF GEOGRAPHY AND LIMNOLOGY CHINESE ACAD OF SCIENCES ; NANJING INST OF GEOGRAPHY AND LIMNOLOGY CHINESE ACADEMY OF SCIENCES

Inventor(s): (std): CHEN YUN ; HU WEIPING ; ZHU JINGE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN105198091 A	20151230	LSPB	+	published / reissued	
CN105198091 A	20151230	LSPB	+C06	PUBLICATION	
CN205151909 U	20160413	LSGT	+	granted / extensions (spc, cpc, pte)	
CN205151909 U	20160413	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	

Title: ARTIFICIAL **VEGETATION** ISLAND FOR LANDSCAPE ARCHITECTURE

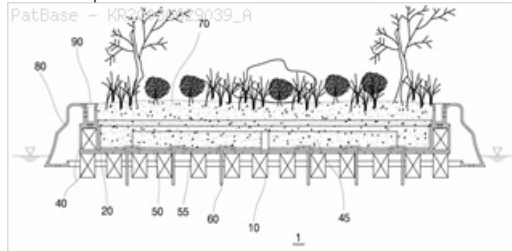
Abstract: Source: KR20030029039A PURPOSE: An architectural **vegetation** island for landscape architecture is provided to heighten the effect of landscape architecture, to prevent the overflow of water to **vegetation** soil and to discharge rainwater rapidly. CONSTITUTION: The architectural **vegetation** island for landscape architecture comprises: many primary **floating** bodies(10) whose tops are exposed to the surface of the water; a bottom **supporter**(20) fixed on the upper part of the primary **floating** bodies(10) to **support vegetation** soil(70); a side frame fixed on the edge of the bottom **supporter**(20) and provided with a secondary **floating** body(40); a synthetic sheet(50) installed on the upper side of the bottom **supporter**(20); many moisture-absorbers(60), whose one ends are submerged through holes formed on the synthetic sheet(50) and the other end is located on the upper side of the synthetic sheet(50), provided with many capillary gaps to suck in water of a lake or a pond; woven fabrics(55) spreading the water absorbed to **vegetation** soil(70); and **vegetation** soil(70) installed on the upper side of the woven fabrics(55) to plant terrestrial plants.

Classifications:

International (IPC 8-9): A01G31/00 E02B17/00 (Advanced/Invention);
A01G31/00 E02B17/00 (Advanced/Non-invention);
E02B17/00 (Core/Invention)

International (IPC 1-7): A01G31/00 E02B17/00

CPC: Y02P60/216



Family:

Publication number	Publication date	Application number	Application date
KR100475665 B1	20050310	KR20020080887	20021217
KR20030029039 A	20030411	KR20020080887	20021217
KR200313394 Y1	20030516	KR20030002323U	20030124

Priority:

KR20020080887 20021217 KR20030002323U 20030124

Probable Assignee:

KIM JAE PIL

Assignee(s): (std):

KIM JAE PIL

Assignee(s):

GIMJAE PIL

Inventor(s): (std):

KIM JAE PIL

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
KR100475665 B1	20050310	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100475665 B1	20021217	LSSES	A201	REQUEST FOR EXAMINATION	
KR100475665 B1	20030412	LSSES	A302	REQUEST FOR ACCELERATED EXAMINATION	
KR100475665 B1	20041130	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR100475665 B1	20050228	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR100475665 B1	20130228	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20130228 YEAR OF FEE PAYMENT : 9
KR100475665 B1	20140228	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20140228 YEAR OF FEE PAYMENT : 10
KR100475665 B1	20150302	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20150302 YEAR OF FEE PAYMENT : 11
KR20030029039 A	20030411	LSPB	+	published / reissued	
KR200313394 Y1	20030516	LSGT	+	granted / extensions (spc, cpc, pte)	
KR200313394 Y1	20040430	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20040503 YEAR OF FEE PAYMENT : 3
KR200313394 Y1	20050113	LSWD	-EXTG	EXTINGUISHMENT	

Title: Improved means for skimming oil and like **floating** liquids from bodies of water, such as the sea

Abstract: Source: GB804368A <PICT:0804368/III/1> An apparatus for collecting oil from the surface of the sea comprises a body or receptacle provided with a weir device, and a reservoir into which liquid flowing over the weir device is delivered, wherein the receptacle is floatably **supported** in the sea and the weir device is adjustable relative to the receptacle to control the flow of liquid into the receptacle. In the embodiment shown in Fig. 1 the reservoir 33 is filled with water, the boat 10 is advanced into the **floating** oil and the top surface of the liquid passes into the receptacle 70 **supported** by a **float** 72 and provided with an adjustable weir device. Water is drawn from the bottom of the reservoir 33 through a pipe 34 by a pump and discharged through a pipe 37, this causes liquid to flow from the receptacle 70 through pipe 73 to the reservoir 33, where separation of the water and oil takes place. In the case of an engine-driven boat the pump may be replaced by a suction nozzle disposed in front of the propeller as described in Specification 691,799, [Group XXXIII]. The reservoir 33 may be a tank in the boat 10 or a compartment of the boat. An intermediate tank may be interposed between the receptacle 70 and the reservoir 33, this tank being provided with a **float** valve to prevent air being sucked into the reservoir. Various forms of self-adjusting weir devices are described (see Group XXIX), which maintain the weir device at a constant depth below the surface of the sea. The recovered oil may be used, with or without previous treatment, for instance as fuel for furnaces.

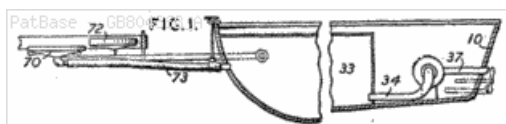
Classifications:

International (IPC 8-9): E02B15/04 E02B15/10 (Advanced/Invention)

International (IPC 1-7): B63B13/00 B63B35/32 E02B15/04

CPC: E02B15/106

European: E02B15/10G



Family:

Publication number	Publication date	Application number	Application date
GB804368 A	19581112	GB19550004827	19550217

Priority:

GB19550004827 19550217

Probable Assignee: FRANK ARTHUR OAKLEY WAREN

Assignee(s): (std): FRANK ARTHUR OAKLEY WAREN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
GB804368 A	19581112	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: RIDING MOWER

Abstract: Source: US5475971A A riding rotary mower is provided having a first chassis, a first chassis wheel assembly, a second chassis, a second chassis wheel assembly and a deck defining a blade housing containing a plurality of cutting blades. The second chassis is movably connected to the first chassis such that, upon actuation of a hydraulic assembly, the second chassis and the deck are movable relative to the first chassis between an operating position wherein the second chassis, the deck and the cutting blade are positioned for cutting grass, and an inspection position wherein the second chassis, the deck and the cutting blade extend in an upwardly direction at an angle to the first chassis. The connection of the second chassis to the first chassis also permits restricted horizontal and lateral movement of the second chassis and the mowing deck so that the second chassis and the mowing deck can automatically adjust to the contour of a **supporting** surface, such as the ground, when the second chassis is disposed in the operating position and the riding rotary mower travels along the **supporting** surface.

Classifications:

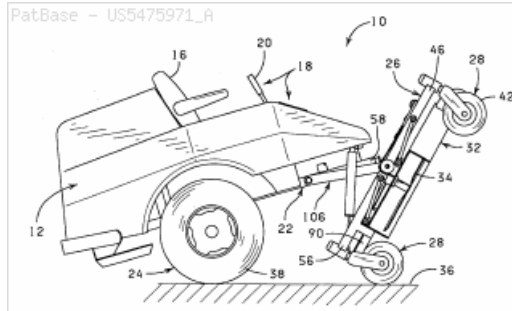
International (IPC 8-9): A01D34/64 (Advanced/Invention); A01D34/63 (Core/Invention)

International (IPC 1-7): A01D34/00

CPC: A01D34/662 A01D2034/645 A01D2101/00

European: A01D34/64 K01D101/00 K01D34/64M

US: 56/14.9 56/15.2 D15/015 D15/15



Family:

Publication number	Publication date	Application number	Application date
US5475971 A	19951219	US19940309218	19940920

Priority:

US19940309218 19940920

Probable Assignee: SHORT GRASS IND LLC

Assignee(s): (std): T AND M TECHNOLOGIES INC

Assignee(s): UNION PLANTERS BANK NA PO BOX ; UNION PLANTERS BANK NA ; CROSS COUNTY BANK ; CROSS COUNTY BANK POST OFFICE BOX ; DYNA MOW INC ; SHORT GRASS IND ; SHORT GRASS IND LLC

Inventor(s): (std): GODFREY JAMES G ; GOOD RONALD D ; ROCKHOLD JAMES W ; STORM KEITH E

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US5475971 A	19951219	LSGT	+	granted / extensions (spc, cpc, pte)	
US5475971 A	19940920	LSAS	AS	ASSIGNMENT	OWNER NAME : T AND M TECHNOLOGIES, INC., OKLAHOMA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GOOD, RONALD D.; ROCKHOLD, JAMES W.; STORM, KEITH E.; AND OTHERS; REEL/FRAME:007158/0462 EFFECTIVE DATE : 19940916
US5475971 A	19960611	LSRE	CC	CERTIFICATE OF CORRECTION	
US5475971 A	19990305	LSAS	AS	ASSIGNMENT	OWNER NAME : DYNA MOW, INC., OKLAHOMA DESCRIPTION : CHANGE OF NAME; ASSIGNOR:T AND M TECHNOLOGIES, INC.; REEL/FRAME:009798/0566 EFFECTIVE DATE : 19941228
US5475971 A	19990624	LSAS	AS	ASSIGNMENT	OWNER NAME : CROSS COUNTY BANK, ARKANSAS DESCRIPTION : SECURITY INTEREST; ASSIGNOR:SHORT GRASS INDUSTRIES, LLC; REEL/FRAME:010043/0564 EFFECTIVE DATE : 19990520
US5475971 A	19990629	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5475971 A	19990816	LSAS	AS	ASSIGNMENT	OWNER NAME : SHORT GRASS INDUSTRIES, LLC, ARKANSAS DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:DYNA MOW, INC., (FORMERLY T AND M TECHNOLOGIES); REEL/FRAME:010288/0440 EFFECTIVE DATE : 19990324

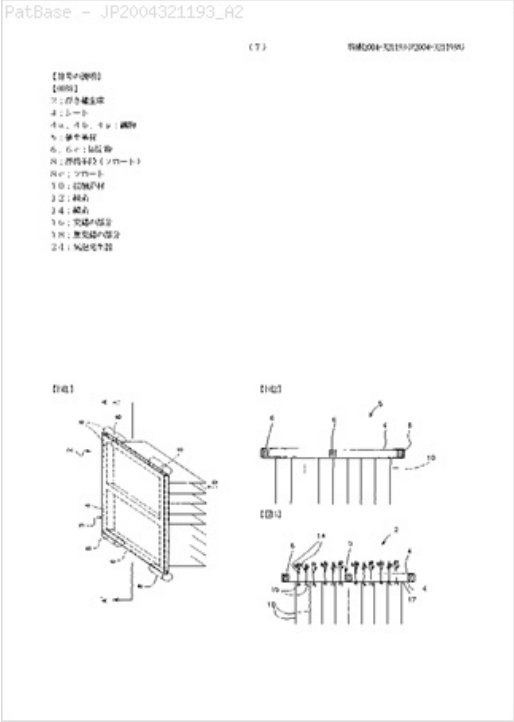
US5475971 A	20001002	LSAS	AS	ASSIGNMENT	OWNER NAME : UNION PLANTERS BANK, N.A., ARKANSAS DESCRIPTION : SECURITY INTEREST; ASSIGNOR:SHORT GRASS INDUSTRIES, LLC, AN ARKANSAS LIMITED LIABILITY COMPANY; REEL/FRAME:011177/0197 EFFECTIVE DATE : 20000919
US5475971 A	20031219	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5475971 A	20040217	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20031219

Title: **VEGETATION** METHOD

Abstract: Source: JP2004321193A PROBLEM TO BE SOLVED: To provide a water cleaning method requiring no excessive equipment, easy to be installed and maintained and suitable for cleaning water of lakes and marshes, ponds, and the like, and to provide a water cleaning method. SOLUTION: The **vegetation** method comprises planting seedlings on a **vegetation** base material comprising a plurality of sheets nearly horizontally arranged with a predetermined space, wherein roots of the seedlings penetrate the base material and pass out under the bottom of the base material to **support** the seedlings at a plurality of points, and **floating** the sheets on the water surface or in water near the water surface to **vegetate** the plants. The **vegetation** base material may contain contacting filter media hung from the **vegetation** base material and the sheets comprise a cloth having partially a non-interlaced part of warp with weft and for inserting the roots of the plants.

Classifications:

International (IPC 8-9): A01G31/00 C02F3/06 C02F3/32 (Advanced/Invention);
A01G31/00 C02F3/06 C02F3/32 (Core/Invention)
International (IPC 1-7): A01G31/00 C02F3/06 C02F3/32
CPC: Y02W10/15



Family:

Publication number	Publication date	Application number	Application date
JP2004321193 A2	20041118	JP20040225072	20040802
JP4039407 B2	20080130	JP20040225072	20000714
JP4039407 B2	20080130	JP20040225072	20040802

Priority:

JP20040225072 20040802

Probable Assignee: SHIGA PREF GOV

Assignee(s): (std): SHIGA PREF GOV

Inventor(s): (std): YOSHIDA KATSUMI ; YAMASHITA SHIGEKAZU ; URASHIMA HIRAKI ; TANIMURA YASUHIRO

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Patent	Date recorded	Event group	Code	Event	Details
JP2004321193 A2	20041118	LSPB	+	published / reissued	
JP4039407 B2	20080130	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4039407 B2	20080130	LSGT	+	granted / extensions (spc, cpc, pte)	
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JP4039407 B2	20041019	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20041018
JP4039407 B2	20061017	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE

JP4039407 B2	20061017	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	CODE: A131 EFFECTIVE DATE : 20061017
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JP4039407 B2	20061205	LSRE	A521	WRITTEN AMENDMENT	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20061204
JP4039407 B2	20061205	LSRE	A521	WRITTEN AMENDMENT	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20061204
JP4039407 B2	20070821	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20070821
JP4039407 B2	20070821	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20070821
JP4039407 B2	20071101	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20071029
JP4039407 B2	20071101	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20071029
JP4039407 B2	20071116	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	DESCRIPTION : PAYMENT UNTIL: 20101116 YEAR OF FEE PAYMENT : 3
JP4039407 B2	20071116	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	DESCRIPTION : PAYMENT UNTIL: 20101116 YEAR OF FEE PAYMENT : 3
JP4039407 B2	20071116	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: R150
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JP4039407 B2	20101116	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
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Title: IMPROVEMENTS IN, OR RELATING TO, **VEGETATION SUPPORT**

Abstract: Source: NZ627866A **Vegetation support** element (1) able to **support vegetation** in a **floating** disposition on or above a fluid medium, including. A body portion (4) which is substantially hollow, which body portion has at least one aperture (6) from an upper surface (7), to a lower surface (8), to allow contact of said **vegetation** with said fluid medium. An edge portion (9), peripheral to said body portion, adapted to allow engagement of said element with a neighbouring element (10). An array of conjoint **support** elements (20) **supports** a **floating** wetland.

Classifications:

International (IPC 8-9): A01G31/02 A01G9/02 C02F3/32 (Advanced/Invention)

CPC: Y02P60/216

Family:

Publication number	Publication date	Application number	Application date
NZ627866 A	20160331	NZ20130627866	20130517

Priority:

NZ20130627866 20130517

Probable Assignee: NATIVEAWA LTD

Assignee(s): (std): NATIVEAWA LTD

Inventor(s): (std): ROBERT STANLEY SHEARER

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
NZ627866 A	20160331	LSPB	+	published / reissued	
NZ627866 A	20160729	LSGT	+PSEA	PATENT SEALED	

Title: Blade assembly for a brush cutting machine

Abstract: Source: US5438819A A blade assembly for a brush cutting machine. The blade assembly comprises two blades, each blade having a two sided cutting edge on both a first and second ends. The four sided cutting edge blades are rotatable from the first end to the second end and invertible from the upper surface to take advantage of all four cutting edges on each blade. A first blade is attached to the bottom surface of a first end of the crossbar. A second blade is attached to the bottom surface of a second end of the crossbar. The blades are attached to the bottom surface of the crossbar with counter-bored holes in the blades that correspond to counter-bored holes in the crossbar. Counter-bored holes in the bottom surface of the blades recess the head of the attaching bolt so that the top of the head of the attaching bolt is flush with the bottom surface of the blades. Counter-bored holes in the crossbar allow the attaching bolt to have a graduated diameter such that a large diameter bolt is used for a secure attachment of the blades to the crossbar, while allowing a small diameter bolt to receive a conventionally sized nut at the top of the crossbar. The blades of the present blade assembly have a re-cuttable bevel to provide a resharpenable cutting edge. A second embodiment provides offsets on the crossbar for positioning the blades closer to the ground for a closer cut of brush. A method for cutting brush with a brush cutting machine having the present blade assembly is also disclosed.

Classifications:

International (ipc 8-9): A01D34/00 A01D34/44 A01D34/52

A01D34/535 A01D34/56 A01D34/66 A01D34/73 A01D34/76

A01D34/86 (Advanced/Invention);

A01D34/00 A01D34/412 A01D34/63 A01D34/73 (Core/Invention)

International (ipc 1-7): A01D34/00 A01D34/44 A01D34/52

A01D34/56 A01D34/64 A01D34/66 A01D34/73 A01D34/76

A01D34/86 A01D50/00 A01D50/02 A01D55/00

CPC: A01D34/52 A01D34/73 Y10T403/581 A01D34/535 A01D34/733

A01D34/736 A01D34/866

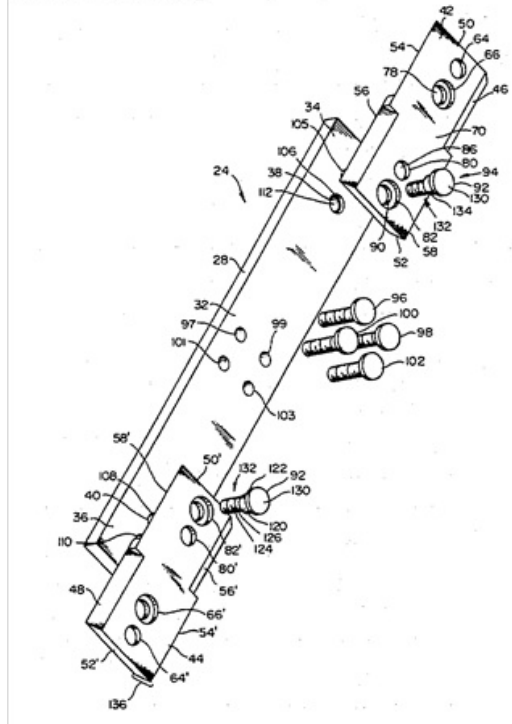
European: A01D34/52 A01D34/535 A01D34/73 A01D34/73A

A01D34/73B A01D34/86B

US: 144/208.7 144/208J 148/194 241/291 403/316 460/121 56/15.2

56/152 56/17.5 56/175 56/249.5 56/294 56/295 56/504 562/950

PatBase - US5438819_A



Family:

Publication number	Publication date	Application number	Application date
AT253808 E	20031115	AT19950114120T	19950425
AU199523131 A1	19951129	AU19950023131	19950425
AU199911269 A1	19990304	AU19990011269	19990112
AU697633 B2	19981015	AU19950023131	19950425
AU727331 B2	20001207	AU19990011269	19990112
CA2148011 AA	19951029	CA19952148011	19950427
CA2148013 AA	19951030	CA19952148013	19950427
CA2148013 C	20050125	CA19952148013	19950427
CA2162768 AA	19960515	CA19952162768	19951114
CA2163038 AA	19960518	CA19952163038	19951116
CA2163038 C	20050920	CA19952163038	19951116
DE69532144 D1	20031218	DE19956032144	19950425
EP0757516 A1	19970212	EP19950916760	19950425
EP0951815 A2	19991027	EP19990114120	19950425
EP0951815 A3	20001220	EP19990114120	19950425
EP0951815 B1	20031112	EP19990114120	19950425
US5438819 A	19950808	US19940234670	19940428
US5485718 A	19960123	US19940341019	19941117
US5537808 A	19960723	US19940235558	19940429
US5570571 A	19961105	US19960605653	19960222
US5733385 A	19980331	US19960671006	19960628
WO9529577 A2	19951109	WO1995GB00937	19950425
WO9529577 A3	19960111	WO1995GB00937	19950425

Priority:

AU19950023131	19950425	AU19990011269	19990112	CA19952148011	19950427
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WO1995GB00937	19950425	US19940234670	19940428	US19940235558	19940429
US19940338254	19941114	US19940341019	19941117		

Probable Assignee: JIMMIE J DALLMAN

Assignee(s): (std): DALLMAN JAMMIE J ; DALLMAN JIMMIE J ; DALLMAN JIMMIE JAY ; JIMMIE J DALLMAN ; JIMMIE JAY DALLMAN

Assignee(s): LITTLE AND CO ; LITTLE AND CO LLC
Inventor(s): (std): DALLMAN JAMMIE J ; DALLMAN JIMMIE J ; DALLMAN JIMMIE JAY
Inventor(s): JIMMIE JAY DALLMAN
Agent(s): FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; RIDOUT AND MAYBEE LLP
Designated states: AT AU BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT253808 E	20031115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT253808 E	20040515	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AU199523131 A1	19951129	LSPB	+	published / reissued	
AU199911269 A1	19990304	LSPB	+	published / reissued	
AU697633 B2	19981015	LSGT	+	granted / extensions (spc, cpc, pte)	
AU727331 B2	20001207	LSGT	+	granted / extensions (spc, cpc, pte)	
AU727331 B2	20010405	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
CA2148011 AA	19951029	LSPB	+	published / reissued	
CA2148011 AA	20010427	LSLE	-FZDE	DEAD	
CA2148013 AA	19951030	LSPB	+	published / reissued	
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CA2148013 AA	20080428	LSLE	-MKLA	LAPSED	
CA2148013 C	20050125	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2162768 AA	19960515	LSPB	+	published / reissued	
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EP0951815 A2	20031114	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0951815 A2	20040114	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0951815 A2	20040212	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : DK DESCRIPTION : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT EFFECTIVE DATE : 20040212
EP0951815 A2	20040212	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : GR DESCRIPTION : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT EFFECTIVE DATE : 20040212
EP0951815 A2	20040212	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : SE DESCRIPTION : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT EFFECTIVE DATE : 20040212
EP0951815 A2	20040213	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : DE DESCRIPTION : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT EFFECTIVE DATE : 20040213

EP0951815 A2	20040425	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : LU DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 20040425
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EP0951815 A2	20080331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : IT DESCRIPTION : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT EFFECTIVE DATE : 20031112
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US5438819 A	19950808	LSGT	+	granted / extensions (spc, cpc, pte)	
US5438819 A	19990808	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5438819 A	19991019	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19990808
US5485718 A	19960123	LSGT	+	granted / extensions (spc, cpc, pte)	
US5485718 A	19991007	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5485718 A	20030123	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5485718 A	20080123	LSAS	AS	ASSIGNMENT	OWNER NAME : LITTLE AND COMPANY, LLC, SOUTH CAROLINA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:DALLMAN, JIMMIE J.; REEL/FRAME:020393/0966 EFFECTIVE DATE : 20080122
US5485718 A	20080123	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5537808 A	19960723	LSGT	+	granted / extensions (spc, cpc, pte)	

US5537808 A	20000919	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20000723
US5537808 A	20020123	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5537808 A	20020312	LSRE	+PRDP	PATENT REINSTATED DUE TO THE ACCEPTANCE OF A LATE MAINTENANCE FEE	EFFECTIVE DATE : 20020204
US5537808 A	20040723	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5537808 A	20040921	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20040723
US5570571 A	19961105	LSGT	+	granted / extensions (spc, cpc, pte)	
US5570571 A	20001105	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5570571 A	20010109	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20001105
US5733385 A	19980331	LSGT	+	granted / extensions (spc, cpc, pte)	
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US5733385 A	20020528	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20020331
WO9529577 A2	19951109	LSPB	+	published / reissued	
WO9529577 A3	19961125	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1995916760 COUNTRY OF REF DOCUMENT : EP
WO9529577 A3	19970212	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995916760 COUNTRY OF REF DOCUMENT : EP
WO9529577 A3	19990911	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995916760 COUNTRY OF REF DOCUMENT : EP
WO9529577 A3	19991207	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995916760 COUNTRY OF REF DOCUMENT : EP

Title: INTEGRATED WATER TREATMENT SYSTEM

Abstract: Source: US2015041376A The invention provides an integrated water treatment system suitable for use in the treatment of contaminated water, wastewater, potable water, aquaculture, industrial water and polluted water bodies. An integrated water treatment system according to at least one embodiment of the invention comprises a plurality of modules adapted to **float** in a body of water integrating a plurality of different attached growth biofilm media types positioned within a plurality of water flow paths and circulations. The conditions provided by a multiple of media types and plurality of flow paths creates a multiplier effect increasing the number of treatment zones and an increased diversity of interconnected treatment process zone types. Embodiments of the invention provide a diversity of conditions and biological habitats establishing a poly-culture of producers, consumers and higher organisms in an ecosystem of biological treatment processes, with complex metabolic pathways and food chains increasing treatment efficiency and the range of pollutants which may be effectively treated. Modules comprised in the system are adjustable in operational rate, series, and timing, and are movable in configuration and/or proximity providing a new type of adaptable, re-configurable and adjustable multi-zone, integrated ecological biofilm water treatment system.

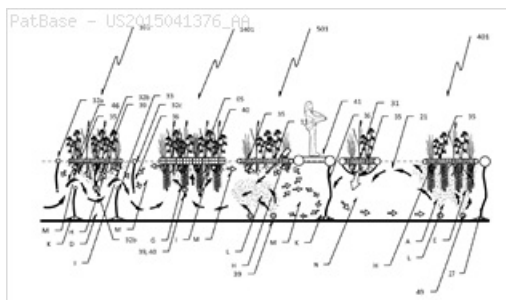
Classifications:

International (IPC 8-9): A47K5/12 B01F3/04 B01J19/30 C02F3/10 C02F3/20 C02F3/32 C02F7/00 (Advanced/Invention); C02F7/00 (Advanced/Non-invention)

CPC: C02F3/207 C02F3/32 C02F2203/006 C02F2303/02 B01F3/04099 B01J2219/30265 B01J2219/30269 B01J2219/30483 B01F3/04588 B01F3/04602 B01J19/30 C02F3/10 C02F2203/00 C02F3/103 C02F3/20 C02F3/206 C02F3/327 C02F7/00 C02F2103/007 Y02W10/18 Y02W10/15

European: B01F3/04C5C B01F3/04C5G C02F3/10E C02F3/20 C02F3/20E2 C02F3/32B L01J219/302N4 L01J219/302P L01J219/304V M02F103/00H M02F7/00

US: 210/143 210/194 210/198.1



Family:

Publication number	Publication date	Application number	Application date
BR112013023850 A2	20161213	BR20131123850	20120319
GB201104538 A0	20110504	GB20110004538	20110317
GB201104540 A0	20110504	GB20110004540	20110317
GB2489036 A1	20120919	GB20110004538	20110317
GB2489036 B2	20151014	GB20110004538	20110317
GB2489037 A1	20120919	GB20110004540	20110317
GB2489037 B2	20151014	GB20110004540	20110317
US2015041376 AA	20150212	US20120005427	20120319
WO12123767 A2	20120920	WO2012GB50599	20120319
WO12123767 A3	20130103	WO2012GB50599	20120319

Priority:

GB20110004538 20110317 GB20110004540 20110317 WO2012GB50599 20120319

Probable Assignee: BIOMATRIX WATER TECHNOLOGY LLP

Assignee(s): (std): BIOMATRIX WATER TECHNOLOGY LLP ; FULFORD GALEN YARROW

Inventor(s): (std): FULFORD GALEN YARROW

Inventor(s): GALEN YARROW FULFORD

Agent(s): LINCOLN IP

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
BR112013023850 A2	20161213	LSPB	+	published / reissued	
GB2489036 A1	20120919	LSPB	+	published / reissued	
GB2489036 B2	20151014	LSGT	+	granted / extensions (spc, cpc, pte)	
GB2489037 A1	20120919	LSPB	+	published / reissued	
GB2489037 B2	20151014	LSGT	+	granted / extensions (spc, cpc, pte)	
US2015041376 AA	20150212	LSPB	+	published / reissued	
US2015041376 AA	20140211	LSAS	AS	ASSIGNMENT	OWNER NAME : BIOMATRIX WATER TECHNOLOGY LLP, UNITED KINGDOM DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:FULFORD, GALEN YARROW;

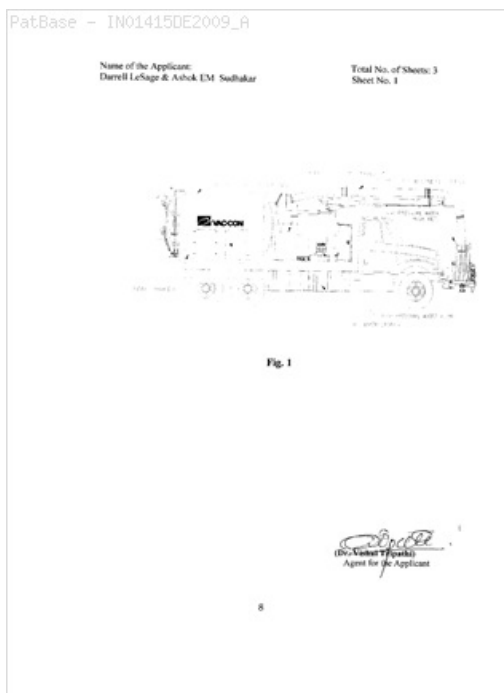
WO12123767 A2	20120920	LSPB	+	published / reissued	
WO12123767 A2	20130917	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
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WO12123767 A2	20161213	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112013023850 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20130917

Title: AN APPARATUS AND METHOD FOR CREATING A VACUUM SYSTEM

Abstract: Source: IN01415DE2009A The present invention provides solution to the problems involved in maintenance of sewers and drains which when properly maintained prevents pollution of rivers, streams and other surface and subsurface water bodies, prevents prorogation of infections, disease and potentially a life saver, prevents deterioration of roads because the water is channeled through the unclogged sewers and drains, prolongs the life of sewer and drains because the **vegetation** (and resulting cracks) cannot get established because of moving and absence of debris, assists in channeling the waste water to the respective treatment plants waste water.

Classifications:

International (IPC 8-9): H01L21/00 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
IN01415DE2009 A	20120525	IN2009DE01415	20090709

Probable Assignee: MR ASH SUDHAKAR
Assignee(s): MR ASH SUDHAKAR
Inventor(s): DARELL LESAGE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
IN01415DE2009 A	20120525	LSPB	+	published / reissued	

Title: METHOD FOR PRODUCTION OF ENHANCED TRACEABLE IMMUNIZING DRINKING WATER AND OTHER LIQUID AND GAS PRODUCTS, DEVICES FOR PRODUCTION AND USE THEREOF, AND USE OF THE ENHANCED PRODUCTS FOR IMMUNIZING LIVING BEINGS

Abstract: Source: US2003188740A A method for the production of enhanced traceable opto-physiological polished liquids, and gases or solids or combination for immunizing living beings, devices using the method, use, and preferred mode for utilization are disclosed. A multi processing platform is proposed according to the invention harnessing time domain optronics of light and sound, wherein the transient sound produced by light is measured, referenced or calibrated against the light produced by sound for the formation adequate energy levels or densities or fluence rates for the purpose of dissociation of noxious or innocuous species or combination constituents components while keeping their geometrical integrity above their predetermined resonance levels, thus intact for later traceable recognition and triggering of positive decisive action by immune systems.

Classifications:

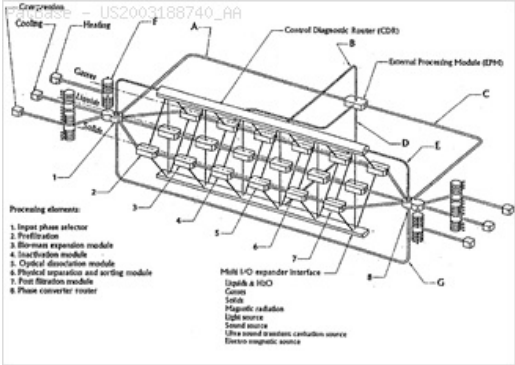
International (IPC 8-9): A23L1/29 A23L2/38 A23L2/52 A23L33/00 A61K36/00 A61K39/00 A61K47/04 A61K9/02 A61K9/08 A61K9/10 A61K9/20 A61K9/48 A61K9/72 A61P31/04 A61P31/12 A61P31/16 A61P35/00 A61P37/02 A61P37/04 A61P37/08 A61P43/00 B01D61/14 B01J19/08 B01J3/00 C02F1/30 C02F1/32 C02F1/34 C02F1/44 C02F1/72 C02F1/78 C02F9/00 (Advanced/Invention); C02F1/30 C02F1/32 C02F1/36 C02F1/68 C02F1/72 C02F1/78 (Advanced/Non-invention); A23L1/29 A23L2/38 A23L2/52 A61K36/00 A61K39/00 A61K47/02 A61K9/02 A61K9/08 A61K9/10 A61K9/20 A61K9/48 A61K9/72 A61P31/00 A61P35/00 A61P37/00 A61P43/00 B01D61/14 B01J19/08 B01J3/00 C02F1/30 C02F1/32 C02F1/34 C02F1/44 C02F1/72 C02F1/78 C02F9/00 (Core/Invention); C02F1/30 C02F1/32 C02F1/34 C02F1/68 C02F1/72 C02F1/78 (Core/Non-invention)

International (IPC 1-7): A23L A23L1/29 A23L2/38 A23L2/52 A61K33/00 A61K35/78 A61K39/00 A61K47/04 A61K9/02 A61K9/08 A61K9/10 A61K9/20 A61K9/48 A61K9/72 A61M11/00 A61P31/04 A61P31/12 A61P31/16 A61P35/00 A61P37/02 A61P37/04 A61P37/08 A61P43/00 B01D53/00 B01D61/14 B01J19/08 B01J3/00 C02F1/30 C02F1/32 C02F1/34 C02F1/44 C02F1/72 C02F1/78 C02F9/00

CPC: Y02W10/37 C02F9/00 C02F1/30 C02F1/32 C02F1/36 C02F1/68 C02F1/722 C02F1/725 C02F1/78

European: C02F9/00 M02F1/30 M02F1/32 M02F1/36 M02F1/68 M02F1/72C M02F1/72K M02F1/78

US: 128/200.14 424/600



Family:

Publication number	Publication date	Application number	Application date
AU2001252525 AA	20011112	AU20010252525	20010427
AU200152525 A5	20011112	AU20010052525	20010427
EP1294646 A2	20030326	EP20010925850	20010427
IL135843 A0	20010520	IL20000135843	20000428
JP2003531875 T2	20031028	JP20010580822T	20010427
US2003188740 AA	20031009	US20030258349	20030527
WO0183385 A2	20011108	WO20011L00383	20010427
WO0183385 A3	20020228	WO20011L00383	20010427

Priority:

IL20000135843 20000428 WO2001L00383 20010427

Probable Assignee: ATLANTIUM LASERS LTD

Assignee(s): (std): ATLANTIUM LTD ; ENDE MICHAEL ; TRIBELSKY ZAMIR

Assignee(s): ZAMIR TRIBELSKY ; MICHAEL ENDE ; ATLANTIUM LASERS LTD

Inventor(s): (std): ENDE MICHAEL ; TRIBELSKY ZAMIR

Inventor(s): ZAMIR TRIBELSKY ; MICHAEL ENDE

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2001252525 AA	20011112	LSPB	+	published / reissued	
AU200152525 A5	20011112	LSPB	+	published / reissued	
EP1294646 A2	20030326	LSPB	+	published / reissued	
EP1294646 A2	20030326	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20021127
EP1294646 A2	20030723	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20030605
EP1294646 A2	20051221	LSRV	-18R	REFUSED	EFFECTIVE DATE : 20050705
JP2003531875 T2	20031028	LSPB	+	published / reissued	

US2003188740 AA	20031009	LSPB	+	published / reissued	
US2003188740 AA	20030527	LSAS	AS	ASSIGNMENT	OWNER NAME : ATLANTIUM LASERS LIMITED, CYPRUS DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:TRIBELSKY, ZAMIR; ENDE, MICHAEL; REEL/FRAME:014106/0511 EFFECTIVE DATE : 20030311
WO0183385 A2	20011108	LSPB	+	published / reissued	
WO0183385 A3	20021028	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP REF DOCUMENT NUMBER : 2001 580822 KIND CODE OF REF DOCUMENT : A FORMAT OF REF DOCUMENT (F/P) : F
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WO0183385 A3	20030527	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10258349 COUNTRY OF REF DOCUMENT : US
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WO0183385 A3	20051031	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2001925850 COUNTRY OF REF DOCUMENT : EP

Title: INTEGRATED SYSTEM OF SHELLFISH PRODUCTION AND UTILIZATION

Abstract: The invention advances the economy, utility and scale of shellfish aquaculture such that ecosystem restoration is obviously cost effective and terra-forming uses of shellfish culture can substantially supplant dredging and beach replenishment. The invention improves, innovates and integrates: 1) tidally powered systems for breeding and raising shellfish seed, 2) grow-out, 3) brood stock conditioning, 4) market conditioning and food supplement, 5) water treatment, 6) Propulsion, 7) Anchorage and 8) Devices to achieve an Integration of Neighborhood Values with Shellfish Production and the optimal structure of the shellfish market. Such large increased economies of production (up to 100 fold) enable new uses for shellfish that are claimed herein. The system is optimized to fit in well with the estuarine community and be a highly desirable, unobtrusive neighbor.

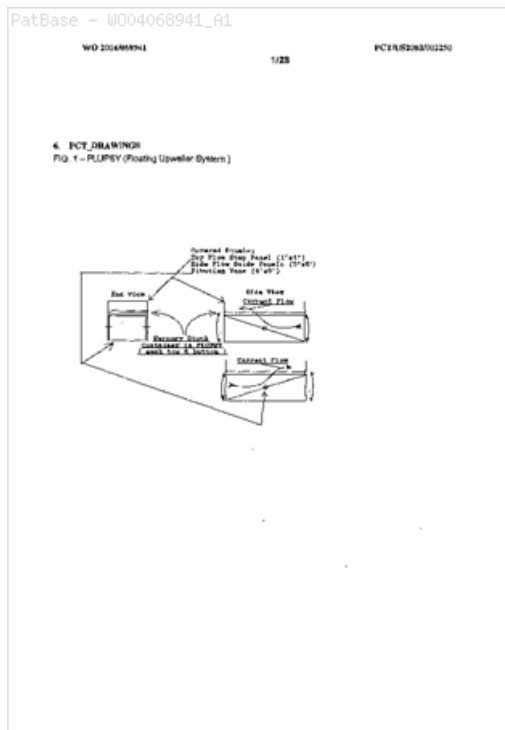
Classifications:

International (IPC 8-9): A01K61/00 (Advanced/Invention);
A01K61/00 (Core/Invention)

International (IPC 1-7): A01K61/00

CPC: A01K61/17 A01K61/54 A01K61/59 A01K61/60

European: A01K61/00B A01K61/00D A01K61/00F A01K61/00G

**Family:**

Publication number	Publication date	Application number	Application date
AU2003212837 AA	20040830	AU20030212837	20030127
WO04068941 A1	20040819	WO2003US02250	20030127

Priority:

WO2003US02250 20030127

Probable Assignee: DAVIS RUSSELL P

Assignee(s): (std): DAVIS RUSSELL P

Inventor(s): (std): DAVIS RUSSELL P

Inventor(s): RUSSELL P DAVIS

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

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Patent	Date recorded	Event group	Code	Event	Details
AU2003212837 AA	20040830	LSPB	+	published / reissued	
AU2003212837 AA	20051013	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2) (F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
WO04068941 A1	20040819	LSPB	+	published / reissued	
WO04068941 A1	20060802	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	
WO04068941 A1	20061225	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO04068941 A1	20061225	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : JP

Title: METHOD OF OF HYDROPONIC GROWING OF PLANTS

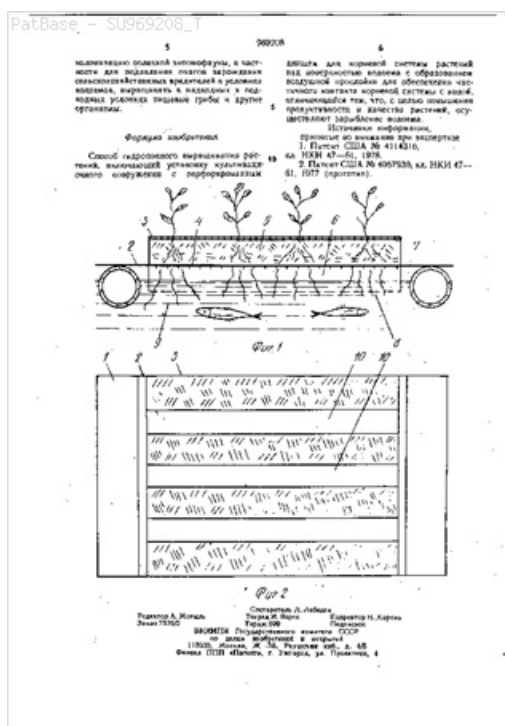
Abstract: Source: SU969208T Invention relates to rural households ystvu, in particular aimed at increasing the productivity of agricultural plants, mainly vegetable and fruit crops suitable, when grown in ponds with simultaneous production of commercial species fishery products. Discloses a method of growing plants in the aquarium, including **support** for the placement of plants and ensure the development of a substrate for plants 1. Discloses a method for hydroponic cultivation of plants, including plant cultivation facility with a perforated bottom to the root system of plants above the surface of the pond to form vozduchnoy layer to provide a partial root contact system with water 2. disadvantage of this method is the low productivity of plant quality. The purpose of the invention - improving productivity and quality of plants. Said aim is provided stocking the pond. According to the method of culture is placed on the plant nutrient substrate for breeding pond such that 30-40 percent of their biomass root system is in the water, between a surface of the base substrate and the water mass in the neck of the root zone of the plants creates an autonomous closed by an air layer. Thus cultured aquatic and plant biological objects are chosen based on their physiological compatibility of the water and the toxicity. Air gap, for example, is created using a plastic meshka. The magnitude of the contact surface of the root system of water depends on the type of the cultivated plants and **vegetation** controlled volume containers, e.g. tomato, cucumber and strawberry roots optimum weight of the substrate is not less than 30 percent, and the weight of the remainder of the root system is in the water. An active flow of aqueous nutrient medium is provided in the root system peremeschivaniem hydrobionts water or other means, the addition of an adsorbent substrate, e.g. ion-exchange resins, motorized feed particles and deposited on the substrate ekstrementov with subsequent filtration, trapping the gaseous products of metabolism of the substrate, and introducing corrective doses of fertilizers. In the early days of the growing season when the root system does not reach the surface of the water, the substrate is periodically removed by wetting or capillary oroscheni polar water supply by means of a wick. Vozduschna layer for root systems with optimal height of 2-4 cm is created to produce a greenhouse mode by enclosing it in a plastic meshchok space, thereby increasing the yield and productivity of aquatic organisms at 15-20 percent, the intensification of gas exchange processes and improve the hydrothermal regime. Selection compatible objects is determined by toxicological and physiological indices m their vzaimovli nor, especially in E for the active symbiosis, production quality, the need to form a physico-chemical environment and host-agricultural expediency. For example, bitter varieties of onion, horseradish, tobacco, garlic, poisonous plants and other fitontsidnoaktivnye culture detrimental effect on fish, zooplankton and benthos degrade water quality. Effective symbiosis cucumbers, lettuce, tomatoes, strawberries and fresh water fish, carp, eel, Sterl qb, providing conditions in co-cultivation, yield up to 12-14 kg and 60-70 kg vegetables fish per square meter of water surface. White amur completely eats the root system and twist the aboveground part of plants and reduces their productivity by 60-70 percent. Root exudates of cereals, as of wheat, rice, oats and some vegetable and fruit crops suitable to stimulate development of zooplankton at 18-20 percent, than in normal conditions. To improve conditions of water contact with atmospheric air, the effective use of straight water surface and reflected sunlight inner side of the sheet that repels pests and increases the sugar content in fruits and vitamins to 30 percent, creating conditions of eating fish falling into the water and pests Care fish between **vegetation** rafts are allowed lumens with a minimum width of 0.2 m ratio in contact with the water surface and **vegetation** unit poverhnosti.vodoema is 1:2, which significantly affects the s hydrobiological performance. Fig. 1 is a schematic diagram of **floating vegetation** apparatus for carrying out the inventive method; Fig. 2 - the same, top view. apparatus comprising **floats** 1 as a hollow sealed tube **supporting** frame 2 mounted thereon three pots having a perforated bottom 4 and 5 filled with nutrient substratum. Between pot bottom surface of the vessel and the water there is autonomously 6 indoor air gap (air layer) formed by the casing 7 and of translucent material, the upper part of the casing mounted on the base perimeter of the growing vessel and the lower hanging partial immersion for storing greenhouse effect in wave formation. With the growth of plants root system penetrates ryboobitaemuyu 8 Wednesday 9. Passages between 10 pots, as well as between the rafts, provide contact of water with the atmosphere. method may realizovats as for open ground, and for the protected ground. Stationary apparatus embodiment has a similar schematic diagram, the difference resides only in the form of execution the holders of the device, ie the **float** acid substitutions are rigidly fixed on a **support**. An exemplary method . In conditions hatchery near Moscow host ystva a perforated raft with dimensions of 2 X 2,8 m in nutrient substrate layer 8 cm thick with the addition of sediment planted dill, radishes, lettuce, spinach. Under the dress was suspended mesh cage and he started carp fry. June 8 harvested early vegetables and in their place were planted cucumbers and tomatoes conventional varieties are ripe in early August, ie, 18 days earlier than usual and had a high consumer. offers ways to enhance the biological productivity of water bodies, providing additional receive 300 - 800 c / ha of **vegetation** quality food without reducing fish productivity, eliminates the use of fertilizers, dohimikatov, watering, weeding weeds and other cultivation practices of the field of agriculture, which is much easier and more affordable for a obtaining food. At the same time, without additional techniques, water purified from nutrient contamination and due to the stimulating effect of the root exudates of appropriate species of terrestrial plants gidrobiantov is intensified development of plankton, which ultimately increases fish production by 10-12 percent. proposed method makes it possible to employ ornamental floriculture, cultivation of fruit trees and shrubs, herbs in reservoirs to hold

Classifications:

International (IPC 8-9): A01G31/00 (Advanced/Invention);
A01G31/00 (Core/Invention)

International (IPC 1-7): A01G31/00

CPC: Y02P60/216

**Family:**

Publication number	Publication date	Application number	Application date
SU969208 A1	19821030	SU19792798282	19790717
SU969208 T	19821030	SU19792798282	19790717

Priority:

SU19792798282 19790717

Probable Assignee:	VNII PRUDOVOGO RYBNOGO KHOZ
Assignee(s): (std):	VNII PRUDOVOGO RYBNOGO KHOZ
Assignee(s):	VNII PRUDOVOGO RYBNOGO KHOZYAJSTVA
Inventor(s): (std):	SAMARIN NIKOLAJ I
Inventor(s):	SAMARIN NIKOLAJ I SU

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
SU969208 A1	19821030	LSGT	+	granted / extensions (spc, cpc, pte)	
SU969208 T	19821030	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: AGRICULTURAL IMPLEMENT

Abstract: Source: US3530944A (Claim 1) 1. In combination, an agricultural implement comprising-. a frame; first elongated, shaft-like housing having two ends; one end of said housing hingedly mounted on said frame for movement solely about a horizontal axis whereby the other end of said housing can travel in a vertical plane; a first **vegetation** cutting and earth scarifying mechanism operatively connected to the end of said housing opposite said frame; first ground engaging **support** means connected to said first elongated housing adjacent the first mechanism; a second elongated housing hingedly mounted solely for vertical movement on said frame in spaced horizontal relation to said first mentioned housing; a second cutting and scarifying mechanism operatively mounted on the end of said second housing opposite said frame in such a manner that the swath cut by said second mentioned mechanism will overlap the swath cut by the first mechanism as the implement moves over the ground; second ground engaging **support** means connected to second elongated housing adjacent the second mechanism; a third elongated housing pivotedly mounted on said frame for movement in both horizontal and vertical planes; third and fourth cutting and scarifying mechanisms operatively mounted within a single mechanism housing on the end of said third elongated housing opposite said frame in such a manner that the swath cut by said third and fourth mechanisms will at all times overlap at least one of the swaths cut by the first two mentioned mechanisms and will move laterally toward such swaths when an obstruction is encountered; and height adjustable, third ground engaging **support** means connected to said third elongated housing adjacent the mechanism housing.

Classifications:

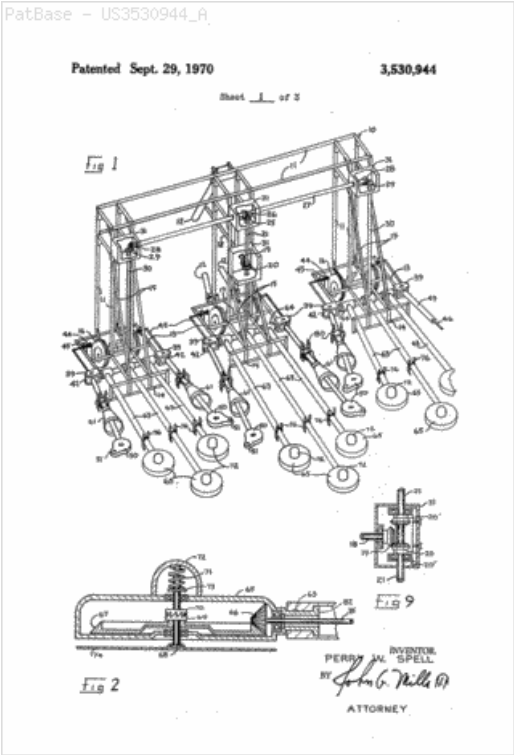
International (IPC 8-9): A01B33/06 A01B39/08 (Advanced/Invention); A01B33/00 A01B39/00 (Core/Invention)

International (IPC 1-7): A01B33/06 A01B39/08

CPC: A01B33/06 A01B39/085

European: A01B33/06 A01B39/08D

US: 172/103 172/111 172/125 172/421 172/59 172/657 172/710 172/76 172/78 172/99



Family:

Publication number	Publication date	Application number	Application date
US3530944 A	19700929	US19690862347	19690930

Priority:

US19690862347 19690930

Probable Assignee:

PERRY W SPELL

Assignee(s): (std):

PERRY W SPELL

Inventor(s): (std):

SPELL PERRY W

Inventor(s):

PERRY W SPELL

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US3530944 A	19700929	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Automatic appliance for cutting and gathering leaves and the like

Abstract: Source: GB900224A 900,224. Harvesting tea. TARPEN ENGINEERING CO. Ltd. Nov. 26, 1959 [Sept. 18, 1958], No. 29929/58. Class 6(3). A device for cutting and gathering **vegetation**, especially tea, comprises a chassis 1 arranged to pass over the **vegetation** and carrying a skid 4 and a cutter 36 separately adjustable vertically relatively to one another and to the chassis, and a power-lift device 40 for adjusting the cutter-height, actuated through a relay 45 controlled by the skid as it rides over the **vegetation**. As shown in Fig. 2, the chassis is rigidly attached to a tractor TC and includes a cantilever 2 on which is mounted a double-acting hydraulic jack 40 connected to a parallel linkwork 25, 26 **supporting** the cutter 36. The cutter may be rotary or (as shown) reciprocating and it includes a reel 36a to sweep the tea-leaves rearwardly into a hopper 63, the arrangement being that described in Specification 618,339. The skid 4 is suspended by a parallel links 5, 6 from the chassis and is counterbalanced by a weight 20 on a lever 21 pivoted on the cantilever 2 and connected to the skid by a vertical rod 23. The rod 23 is connected to both the ram 40 and the relay 45 by a **floating** lever 56, the relay comprising a multiport valve controlling the admission of fluid to, and the exhaust from, the ram. In Fig. 3 control is exercised by a skid 100 through a lost-motion connection, which permits a limited **floating** of the skid 100, to a second skid 101, directly attached to the cutter-head 102. The crop is fed by an endless elevator 117 to a hopper 118 carried on the linkwork 112, 114 and tippable by a hydraulic cylinder 136, the main control-ram 106 being also connected to the linkwork. In another modification, Fig. 7 (not shown) the relay is electromechanical.

Classifications:

International (IPC 8-9): A01D47/00 (Advanced/Invention);

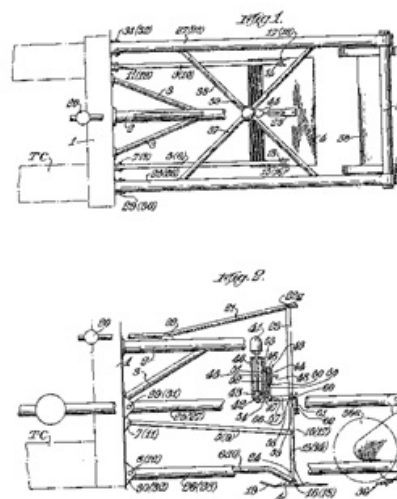
A01D47/00 (Core/Invention)

International (IPC 1-7): A01D55/22

CPC: A01D47/00

European: A01D47/00

PatBase - GB900224_A



Family:

Publication number	Publication date	Application number	Application date
GB900224 A	19620704	GB19580029929	19580918

Priority:

GB19580029929 19580918

Probable Assignee: TARPEN ENGINEERING COMPANY LTD

Assignee(s): (std): TARPEN ENGINEERING COMPANY LTD

Assignee(s): TARPEN ENGINEERING CO LTD ; TARPEN ENGINEERING COMPANY LIMITED

Inventor(s): (std): ROSS JAMES EDWARD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
GB900224 A	19620704	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: AN INTEGRATED SYSTEM OF SHELLFISH PRODUCTION AND UTILIZATION

Abstract: The integrated system of shellfish production and utilization advances the economy, utility and scale of shellfish aquaculture such that ecosystem restoration is obviously cost effective and terra-forming uses of shellfish culture can substantially supplant dredging and beach replenishment. The invention improves, innovates and integrates: 1) tidally powered systems for breeding and raising shellfish seed, 2) grow-out, 3) brood stock conditioning, 4) market conditioning and food supplement, 5) water treatment, 6) Propulsion, 7) Anchorage and 8) Devices to achieve an Integration of Neighborhood Values with Shellfish Production and the optimal structure of the shellfish market. Such large increased economies of production (up to 100 fold) enable new uses for shellfish that are claimed herein. The system is optimized to fit in well with the estuarine community and be a highly desirable, unobtrusive neighbor.

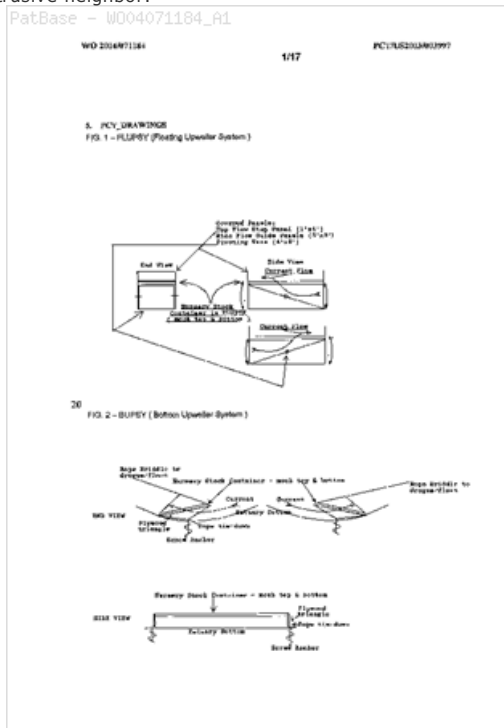
Classifications:

International (IPC 8-9): A01K61/00 (Advanced/Invention); A01K61/00 (Core/Invention)

International (IPC 1-7): A01K61/00

CPC: A01K61/17 A01K61/54 A01K61/59 A01K61/60

European: A01K61/00B A01K61/00D A01K61/00F A01K61/00G



Family:

Publication number	Publication date	Application number	Application date
AU2003216226 AA	20040906	AU20030216226	20030210
WO04071184 A1	20040826	WO2003US03997	20030210

Priority:

WO2003US03997 20030210

Probable Assignee: DAVIS RUSSELL P

Assignee(s): (std): DAVIS RUSSELL P

Inventor(s): (std): DAVIS RUSSELL P

Inventor(s): RUSSELL P DAVIS

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

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Patent	Date recorded	Event group	Code	Event	Details
AU2003216226 AA	20040906	LSPB	+	published / reissued	
AU2003216226 AA	20051027	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2) (F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
WO04071184 A1	20040826	LSPB	+	published / reissued	
WO04071184 A1	20070112	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO04071184 A1	20070112	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : JP

Title: AQUATIC **VEGETATION** GROOMER

Abstract: Source: US2007079591A An aquatic **vegetation** cutting and removal system is disclosed which is a self-contained **floating** system having a depth-variable cutting assembly operated in conjunction with a rake device which gathers and removes detached aquatic weeds or other **vegetation**. The system may be large enough to have a rider-operator or small and light enough to be easily portable.

Classifications:

International (IPC 8-9): A01D44/00 (Advanced/Invention);

A01D44/00 (Core/Invention)

CPC: A01D44/00

European: A01D44/00

US: 56/9

PatBase - US2007079591_AA



Family:

Publication number	Publication date	Application number	Application date
US2007079591 AA	20070412	US20060545248	20061009

Priority:

US20050725607P 20051010

US20060545248 20061009

Probable Assignee:

LIEN DOUGLAS E

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Inventor(s): (std):

LIEN DOUGLAS E

Inventor(s):

LIEN DOUGLAS

Agent(s):

NIKOLAI AND MERSEREAU PA

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2007079591 AA	20070412	LSPB	+	published / reissued	

Title: PLANT CULTIVATING UNIT AND PLANT CULTIVATING CONTAINER

Abstract: Source: US2009260282A An object of the present invention is to provide a plant cultivating unit that can perform a watering operation in a simple manner and can supply water uniformly to plants in locations where a floor surface is sloped, such as the rooftop of a building, without requiring separate water supply piping work. A plant cultivating unit (1) comprises a water storage tray (2) in which water can be stored and in which receivers (3) for housing the roots of plants can be arranged in an interior thereof, a water storage space (8) in the water storage tray (2) and the receivers (3) being communicated via water feeders (7), and the water stored in the water storage space (8) being able to be supplied to the plants via the water feeders (7). The water storage tray (2) is provided with connectors (6) capable of communicably connecting adjacent water storage trays (2) to each other, the connectors (6) being configured from an inflow connector (6a) and an outflow connector (6b), the water flowing in through the inflow connector (6a) to the water storage space (8), and the water being able to flow out through the outflow connector (6b) by an overflow when a specific amount of water is stored in the water storage space (8).

Classifications:

International (IPC 8-9): A01G1/00 A01G13/02 A01G27/00

A01G27/02 A01G31/02 A01G9/00 A01G9/02

A01G9/04 (Advanced/Invention);

A01G13/02 A01G27/00 A01G9/02 A01G9/04 (Core/Invention)

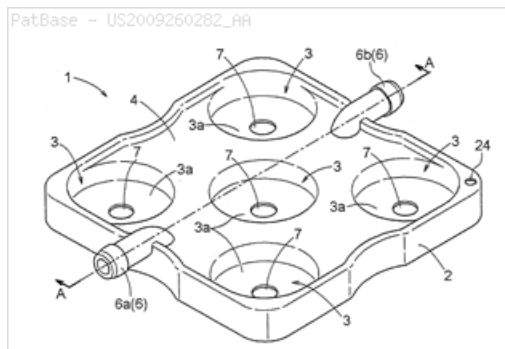
International (IPC 1-7): A01G9/02

CPC: A01G1/007 A01G9/045 A01G27/00 A01G9/022 A01G31/02 Y02B80/32 Y02P60/216

European: A01G27/00 A01G9/04C

US: 47/20.1 47/20.100P 47/48.5 47/66.1 47/66.100S 47/66.5

47/66.500S 47/67 47/67S 47/79 47/79S 47/82 47/82S



Family:

Publication number	Publication date	Application number	Application date
CN1973606 A	20070606	CN200610161120	20061130
CN1973606 B	20130807	CN200610161120	20061130
EP1955586 A1	20080813	EP20060833444	20061128
EP1955586 A4	20140115	EP20060833444	20061128
EP2845464 A2	20150311	EP20140182847	20061128
EP2845464 A3	20150429	EP20140182847	20061128
IN03361CN2008 A	20090306	IN2008CN03361	20080630
JP2007063815 A1	20090507	JP20070547931T	20061128
KR101342475 B1	20131217	KR20087014348	20061128
KR20080083280 A	20080917	KR20087014348	20080613
TW200735767 A	20071001	TW20060144040	20061128
TW200917955 A	20090501	TW20080138724	20061128
TWI321034 B	20100301	TW20060144040	20061128
TWI321035 B	20100301	TW20080138724	20061128
US2009260282 AA	20091022	US20060095106	20061128
US8555547 BB	20131015	US20060095106	20061128
WO07063815 A1	20070607	WO2006JP323640	20061128

Priority:

EP20060833444 20061128 JP20050345984 20051130 WO2006JP23640 20061128
WO2006JP323640 20061128

Probable Assignee: SUNTORY HOLDINGS LTD

Assignee(s): (std): HASHIMOTO MASAKI ; MIYAGAWA KATSURO ; SAITOH MASAYUKI ; SUNTORY HOLDINGS LTD ; SAITO MASAYUKI ; SUNTORY LTD

Assignee(s): SUNTORY LIMITED ; SUNTORY HOLDINGS LIMITED

Inventor(s): (std): MIYAGAWA KATSURO ; MASAYUKI HASHIMOTO MASAKI MIYA ; HASHIMOTO MASAKI ; SAITOH MASAYUKI ; SAITO MASAYUKI

Inventor(s): HASHIMOTO MASAKI MIYAGAWA KATSURO SAITOH MASAYUKI

Agent(s): VOSSIUS AND PARTNER; VOSSIUS AND PARTNER PATENTANWALTE RECHTSANWALTE MBB; KITAMURA SHUICHIRO; DRINKER BIDDLE AND REATH (DC); DRINKER BIDDLE AND REATH; DRINKER BIDDLE AND REATH LLP

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN1973606 A	20070606	LSPB	+	published / reissued	
CN1973606 A	20070606	LSPB	+C06	PUBLICATION	
CN1973606 A	20090722	LSAS	ASS	SUCCESSION OR ASSIGNMENT OF PATENT RIGHT	OWNER NAME : SUNTORY HOLDINGS CO., LTD. DESCRIPTION : FORMER OWNER: SUNTORY LTD.

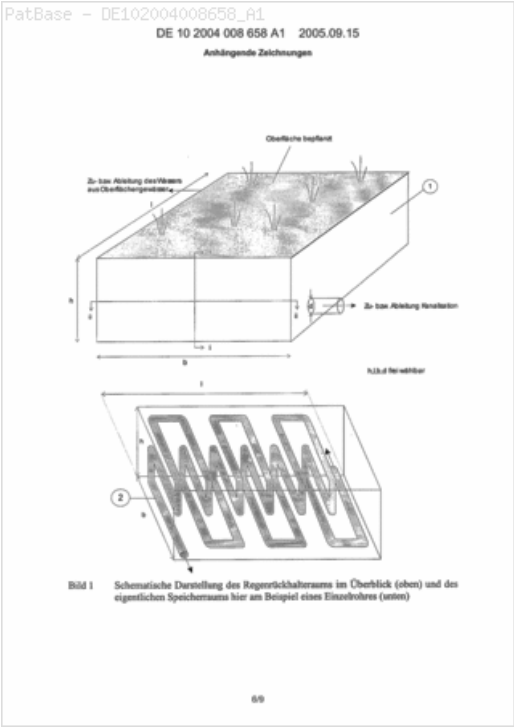
EFFECTIVE DATE : 20090619					
CN1973606 A	20090722	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
CN1973606 A	20130807	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1973606 B	20130807	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1955586 A1	20080813	LSPB	+	published / reissued	
EP1955586 A1	20080813	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080613
EP1955586 A1	20090701	LSAS	RAP1	TRANSFER OF RIGHTS OF AN EP PUBLISHED APPLICATION	OWNER NAME : SUNTORY HOLDINGS LIMITED
EP1955586 A1	20140115	LSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	EFFECTIVE DATE : 20131217
EP1955586 A1	20140115	LSRE	RIC1	CLASSIFICATION (CORRECTION)	IPC : A01G 1/00 20060101ALI20131211BHEP
EP1955586 A1	20140115	LSRE	RIC1	CLASSIFICATION (CORRECTION)	IPC : A01G 9/04 20060101ALI20131211BHEP
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EP1955586 A1	20140115	LSRE	RIC1	CLASSIFICATION (CORRECTION)	IPC : A01G 27/00 20060101ALI20131211BHEP
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IN03361CN2008 A	20090306	LSPB	+	published / reissued	
JP2007063815 A1	20090507	LSPB	+	published / reissued	
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KR20080083280 A	20080917	LSPB	+	published / reissued	
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TW200735767 A	20071001	LSPB	+	published / reissued	
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US8555547 BB	20131015	LSGT	+	granted / extensions (spc, cpc, pte)	
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US8555547 BB	20090804	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUNTORY HOLDINGS LIMITED, JAPAN OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:SUNTORY LIMITED; REEL/FRAME:023076/0235 EFFECTIVE DATE : 20090331
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US8555547 BB	20170330	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
WO07063815 A1	20070607	LSPB	+	published / reissued	
WO07063815 A1	20080526	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007547931 COUNTRY OF REF DOCUMENT : JP
WO07063815 A1	20080531	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO07063815 A1	20090424	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12095106 COUNTRY OF REF DOCUMENT : US

Title: SYSTEM TO RETAIN RAIN AND SOILED WATER HAS A MODULAR STRUCTURE, WHICH CAN BE PLANTED WITH WETLAND **VEGETATION** IMMERSED OR **FLOATING** IN WATER BODIES WITH PIPES LINKED TO DRAINS FITTED WITH SELF-CLEANING PIGS

Abstract: Source: DE102004008658A1 The system to retain rain water or soiled water is in a modular structure, for water management. It can be in a wide range in free dimensions as self-standing structures (1), superstructures, separate pipes (2), etc., to take and hold water from the drains. The system is initially filled from surface water, and water can be taken from the drains to augment it, and surplus water flows back into the drains. The modules can be immersed in natural or artificial water bodies, or **float** and be anchored at the bank. A pig can be used to separate the rain and soiled water, and clean the pipes. The module can be planted with wetland **vegetation**.

Classifications:
International (IPC 8-9): E03F5/10 (Advanced/Invention);
E03F5/10 (Core/Invention)
International (IPC 1-7): E03F5/10
CPC: E03F5/10



Family:

Publication number	Publication date	Application number	Application date
DE102004008658 A1	20050915	DE200410008658	20040221

Priority:
DE200410008658 20040221

Probable Assignee: MEHLHASE SVEN DIPL ING
Assignee(s): (std): MEHLHASE SVEN DIPL ING

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE102004008658 A1	20050915	LSPB	+	published / reissued	
DE102004008658 A1	20051020	LSLI	8122	NONBINDING INTEREST IN GRANTING LICENCES DECLARED	
DE102004008658 A1	20091217	LSLE	-8139	DISPOSAL/NON-PAYMENT OF THE ANNUAL FEE	

Title: **Floatable** unit for decorative **vegetation**

Abstract: Source: US6014838A A buoyant apparatus is provided for **floating** plants and other foliage in ponds. It is directed to a **floating support** or raft for one or more plant pots. Such materials are attractive to fish and other aquatic animals frequently present in such decorative ponds. In the **floatable** foliage pots herein the **floating** base or collar is protected so that it cannot be chewed, and ruined by aquatic animals. A mesh screen is adapted to cover exposed surfaces of the collar to prevent fish from biting it.

Classifications:

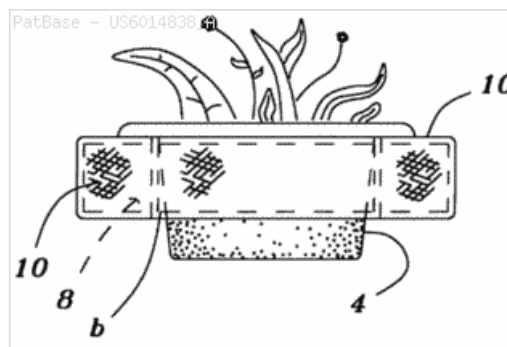
International (IPC 8-9): A01G9/00 (Advanced/Invention);
A01G9/00 (Core/Invention)

International (IPC 1-7): A01G31/02

CPC: A01G9/00

European: A01G9/00

US: 47/39 47/65 47/650



Family:

Publication number	Publication date	Application number	Application date
US6014838 A	20000118	US19980062016	19980417

Priority:

US19980062016 19980417

Probable Assignee: ASHER CONNIE MAUREEN

Assignee(s): (std): ASHER CONNIE MAUREEN

Inventor(s): (std): ASHER CONNIE MAUREEN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US6014838 A	20000118	LSGT	+	granted / extensions (spc, cpc, pte)	
US6014838 A	20040120	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6014838 A	20040316	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20040118

Title: APPARATUS FOR THE CONTINUOUS CULTIVATION OF AQUATIC MACROPHYTES

Abstract: Source: US5636472A An apparatus for cultivating macrophytes grown on the water surface in a circular basin structure containing a channel of plant growth nutrients water spiraling from the basin structure periphery into the center of the basin structure and then back out again to the periphery. Two spiraling berms, constructed in parallel, define the single, continuous channel of water. A conveyor means is mounted on a rotatable arm that extends from the basin structure center to the basin structure periphery and rotates about the central **support**. The conveyor means moves laterally along the rotatable arm so as to remain in the center of the channel of water as that arm rotates. A portion of the **floating** macrophytes on the water surface is harvested one or more times each day and transported to beyond the periphery of the basin structure where the **floating** macrophytes are available for subsequent processing. The proportion of plant cover harvested can be controlled by adjustments to the conveyor means and by adjusting the speed at which the rotatable arm rotates. The rotatable arm contains a means for dispensing macrophytes with water jet heads that mix and redistribute the plant cover after the conveyor means has passed through.

Classifications:

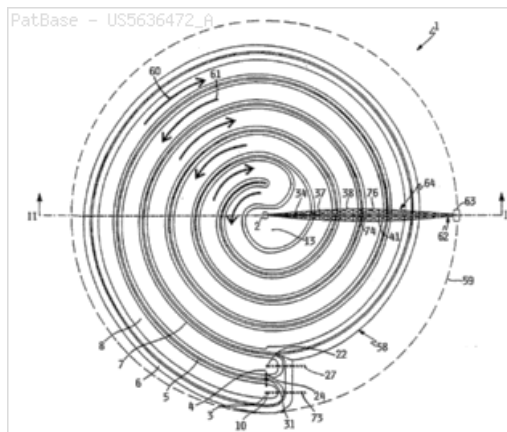
International (IPC 8-9): A01G31/02 (Advanced/Invention);
A01G31/02 (Core/Invention)

International (IPC 1-7): A01G33/00

CPC: Y10S210/926 A01G31/02 Y02P60/216

European: A01G31/02

US: 210/150 210/602 210/926 47/1.4 47/14

**Family:**

Publication number	Publication date	Application number	Application date
US5636472 A	19970610	US19950526077	19950911

Priority:

US19950526077 19950911

Probable Assignee:

GREENGOLD CORP

Assignee(s): (std):

SKILLICORN PAUL W ; SPIRA WILLIAM M

Assignee(s):

GREENGOLD CORP

Inventor(s): (std):

SKILLICORN PAUL W ; SPIRA WILLIAM M

Legal status (INPADOC)

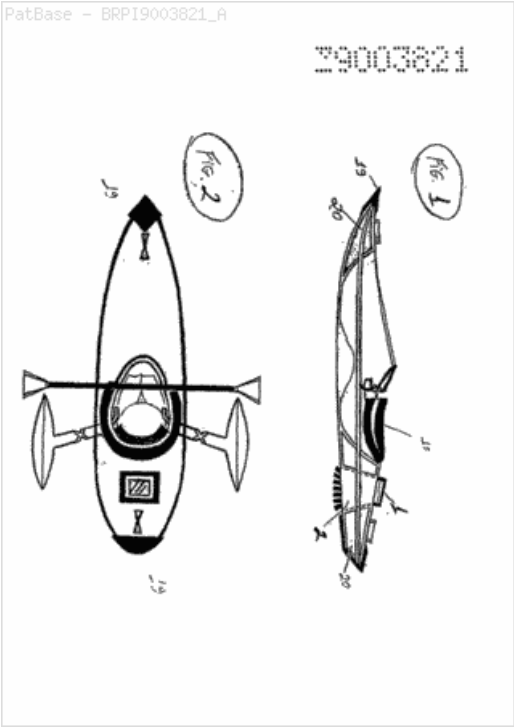
[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US5636472 A	19970610	LSGT	+	granted / extensions (spc, cpc, pte)	
US5636472 A	19960131	LSAS	AS	ASSIGNMENT	OWNER NAME : GREENGOLD CORPORATION, THE, MINNESOTA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SPIRA, WILLIAM M.; SKILLICORN, PAUL W.; REEL/FRAME:007794/0049; SIGNING DATES FROM 19960115 TO 19960123
US5636472 A	19980827	LSAS	AS	ASSIGNMENT	OWNER NAME : GREENGOLD CORPORATION, THE, MINNESOTA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SPIRA, WILLIAM M.; SKILLICORN, PAUL W.; REEL/FRAME:009405/0968 EFFECTIVE DATE : 19980820
US5636472 A	20001204	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5636472 A	20050610	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5636472 A	20050809	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20050610

Title: EMBARCACOES DE CANOAGEM AUTOPROPELIDAS DECLARATION OF CANOEING AT AUTOPROPELIDAS (Machine translation)

Abstract: Source: BRPI9003821A [Source: Claim 1] o nr S i » » s.Vss fc ss «ss ** **** REINVIDICACOES. 1 - 11 Embarcacoeswde canoagem autopronelidas ",caraf terizadas pel a adaptacao de um bloco propulsor (-/; 2) com-.nos to por um a unidade encaixavel e/ou portatil de motori- 5 zacao (J.) acoplada a um conjunto propulsor (-2),que pode ser composto por turbinas de propulsao (?) a jato d1agua helices embutidas (8) protegidas por grades,esteiras ro- lantes (.9)fou eixos com palhetas (j1O) rigidas ou flexi-/ veisjpodendo ser usadas por pessoas de qualquer tipo fisi 10 co,prestando-se a serem utilizadas eficientemente,em pas- seios,turismo,esporte, excursoes, expedicoes,exploracoes, / pesquisas e salvamento,, 2 - 11 Embarcacoes de canoagem autonronelidas 11,de a- cordo com a reinvidicacao 1,caracterizadas pelo fato de / 15 receberem a adaptarao de hidrofolios-flutuadores (Es- peciais,sendo retrateis e/ou pantograficos e acionavexs / atraves de alavancas (li),distinguindo-se pela sua movi-/ mentacao lateral (-) independente,podendo ser acionado / para o lado que o canoista necessitar. 20 3 - 11 Embarcacoes de canoagem autopropelidas ",de a- cordo com a reinvidicacao 1,caracterizadas pelo fato de possuirem as suas guarnicoes de contorno das cabinas (-13) flutuantes e encaixave is,adantadas para nronorcionarem / aos canoistas a sua utilizacao cono elemento flutuador do 25 conves e como boia (13) salva-vidas, 6 - " Embarcacoes de canoagem autonronelidas 11,de a- cordo com a reinvidicacao 1.caracterizadas pelo fato de utilizarem remos especiais (JSjJie),distinguindo-se nelas / suas nes flutuantes (i and),com ganchos em suas partes ante- 30 riores i=ss) para o apoio em galhos da vegetacao,ou o res- gate de cabos lancados na agua.An serem encaixados no con ves,tornam-se remos-f1utuadores,que auxiliam o equilibrio dos canoistas, 5 - 11 Embarcacoes de canoagem autonronelidas 11 fde a- 35 cordo com a reinvidicacao 1,caracterizadas pelo fato de que em seu sistema direcional,o manche ou o volante, os. lemes ou as quilhas escamoteaveis ou nao,sao interligados I» sss ss « ** | II | # ss ss ss ss I I .. I I .. I I .. I I .. | por cabos e roldanas formando um conjunto eficiente,de fa c11 manejo e manutencao,podendo o acelerador estar acopl? do ao manche/volante ou nao. "™" fi - 11 Embarcacoes de canoagem autopropelidas ",de a- 5 cordo com a reinvidicacao 1,caracterizadas pelo fato de possuirem elementos de flutuacao {aip) para as cavernas no bico da proa e da popa,e,elementos de protecao de borrar-/ cha()para as partes externas do casco. 7 - 11 Embarcacoes de canoagem autopropel id a s 11,de a- 10 cordo com a reinvidicacao 1,caracterizadas pelo fato de/ possuirem um chassi acoplado ao interior do casco,podendo o chassis se feito de estruturas tubulares (). [Source: Claim 1] nr S i» » s. V ss fc ss ss ss ss ss ss ss ss REINVIDICACOES. 1-11 Embarcacoeswde autopronelidas "man kayaking £ terizadas pel the adaptation of a propeller block (-/; 2) with-in to for a encaixavel unit and/or motorized portable 5 zacao (j.) coupled to a propeller set (-2), which can be composed of propulsion turbines (?) the d1agua inline helices Jet (8) protected by bars, mats ro-connector (9) fou shafts with vanes (j1O) rigid or flexi-/ veisjpodendo be used by people of any kind fisi 10 co, lending itself to be used efficiently, in pas-breasts, tourism, sport, hiking, expeditions, archaeological, research and rescue/"2-Declaration of 11 autonronelidas 11, canoeing-gree with reinvidicacao 1, characterized by the fact/15 get the match of hidrofolios-**floats** (Es-precautions, reach and/or being pantograficos and acionavexs/via levers (li), characterised by its moving/mentacao (-) independent, and may be triggered/to the side that the canoeist needs. 11 Declaration canoe 20 3-autopropelidas" a-gree, with the reinvidicacao I, characterized by the fact of having their garrisons will outline of cabs (-13) and encaixave is, **floating** adantadas for nronorcionarem/to canoistas their use cono 25 **float** element deck and as ball (13), 6-"Declaration of autonronelidas 11, canoeing-gree with reinvidicacao 1. characterized by the fact of use special paddles (JSjJie), **distinguishing** them/their **floating** nes (i and), with hooks in your ante-30 parts which i = ss) for **support** in branches of the **vegetation**, or the gate of cables launched in the water. An be docked at con ves, become oars- f1utuadores, that help the balance of canoistas, 5-11 autonronelidas 11 canoeing fde ships sighted a-gree with 35 reinvidicacao 1, characterized by the fact that in your directional system, joystick or steering wheel. rudders or keels escamoteaveis or not, are interconnected I sss ' | II | # ***** I I I II I | for cables and pulleys forming an efficient set of fa c11 management and maintenance, and the throttle be gek? of the joystick/steering wheel or not. "™ "fi-11 canoe autopropelidas Declaration", a-5 RMS with 1 reinvidicacao, characterized by the fact of having elements of {daily fluctuation aip) to the caves in the beak of bow and Stern, and protective elements of blur-/cha () for the external parts of the hull. 7-11 Declaration of canoeing autopropel id's 11, a-10 RMS with 1 reinvidicacao, characterized by the fact/have a chassis attached to the inside of the hull, and the chassis made of tubular structures ().

Classifications:
International (IPC 8-9): B63B35/71 (Advanced/Invention);
B63B35/71 (Core/Invention)
International (IPC 1-7): B63B35/71



Family:

Publication number	Publication date	Application number	Application date
BRPI9003821 A	19920225	BR1990PI03821	19900803

Priority:
BR1990PI03821 19900803

Probable Assignee:

Assignee(s): (std):

Inventor(s): (std):

Inventor(s):

MARCELO TENORIO

MARCELO TENORIO

TENORIO MARCELO

MARCELO TENORIO

Legal status (INPADOC)

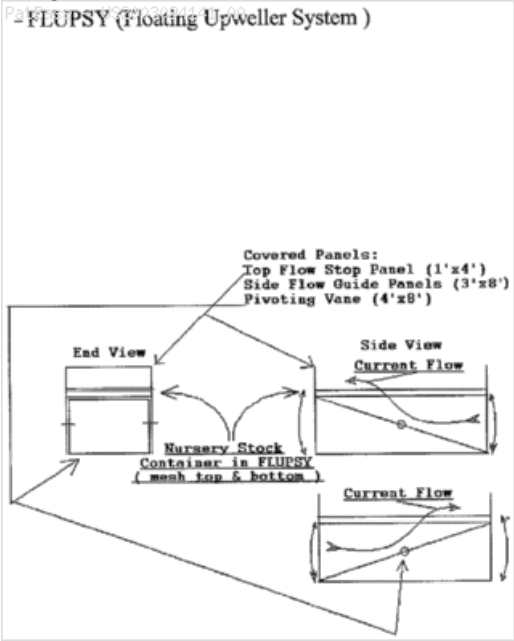
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Patent	Date recorded	Event group	Code	Event	Details
BRPI9003821 A	19920225	LSPB	+	published / reissued	

Title: INTEGRATED SYSTEM FOR SHELLFISH PRODUCTION: ENCOMPASSING HATCHERY, NURSERY, BROOD-STOCK CONDITIONING AND MARKET CONDITIONING PHASES; ALSO WATER TREATMENT, FOOD SUPPLEMENT, PROPULSION, ANCHORING, SECURITY, AND DEVICES FOR THE INTEGRATION OF NEIGHBORHOOD VALUES AND SHELLFISH PRODUCTION.

Abstract: Source: US2003094141A The invention (the process, its supporting devices, and applications) serves the endeavor of shellfish aquaculture. The invention improves and innovates: 1) tidally powered systems for raising shellfish seed, 2) grow-out, 3) brood stock conditioning, 4) market conditioning, and food supplement, 5) hatchery systems, 6) hatchery/nursery integration, resource sharing and optimization, ergonomics and economics, 7) water treatment, 8) Propulsion, 9) Anchorage, 10) Security, and 11) Devices for the Integration of Neighborhood Values and Shellfish Production. Such large increased economies of production suggest new uses for shellfish. Shellfish grow-out can provide cost effective and ecologically advantageous infrastructure benefits to eroding beaches, unstable channels, and water quality and the health of estuaries in general. The system is flexible in operation so that it may maximize the use of estuarine tidal energy and phytoplankton in order to maximize the ecological and economic benefits of the operation. The system is designed with particular attention to Virginia and Federal law so that permitting needs are minimized. Moreover the system is optimized to fit in well with the estuarine community and be a desirable, unobtrusive neighbor.

Classifications:
International (IPC 8-9): A01K61/00 (Advanced/Invention); A01K61/00 (Core/Invention)
International (IPC 1-7): A01K61/00
CPC: A01K61/17 A01K61/54 A01K61/59
European: A01K61/00B A01K61/00D A01K61/00G
US: 119/234



Family:

Publication number	Publication date	Application number	Application date
US2003094141 AA	20030522	US20010891757	20010626

Priority:

US20000214458P 20000628	US20000232079P 20000908	US20000237033P 20001002
US20010891757 20010626	US20010263820P 20010202	US20000250389P 20001201

Probable Assignee: DAVIS RUSSELL P
Assignee(s): (std): DAVIS RUSSELL P
Inventor(s): (std): DAVIS RUSSELL P

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2003094141 AA	20030522	LSPB	+	published / reissued	

Title: MODULAR **FLOATING** ROOF- GARDEN SYSTEM

Abstract: A modular panel (17) for realizing a roof-garden system laying on a flat surface, said modular panel defining a plane (X) for arranging organic cultivation material, comprising a peripheral **support** frame (4) adapted to keep said plane (X) in elevation with respect to the laying surface and thus defining a passage (7, 7') adapted to permit, at least, the flow of air and/or water, engagement means (1) being further provided over the plane (X) for engaging with wall means (11) adapted to rise from the plane (X) for containing said cultivation material side-ways, the engagement means (1) being also adapted to engage with paving means (9, 15) for lining the top of said panel and/or with other supplementary furnishing elements.

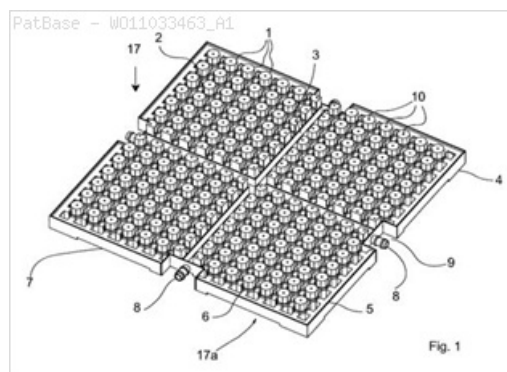
Classifications:

International (IPC 8-9): A01G1/00 E01C5/22

E04D11/00 (Advanced/Invention)

CPC: E04D11/002 A01G1/007 E04D11/007 Y02B80/32

European: A01G1/00C E04D11/00B E04D11/00D1 Y02B80/32



Family:

Publication number	Publication date	Application number	Application date
IT1397862 B1	20130204	IT2009FI00201	20090918
ITFI20090201 A1	20110319	IT2009FI00201	20090918
WO11033463 A1	20110324	WO2010IB54178	20100916

Priority:

IT2009FI00201 20090918

Probable Assignee: DEPALO

Assignee(s): (std): BURDO ; BURDO RICCARDINA ; DEPALO ; DEPALO VITO VINCENZO ORONZO MARIA

Inventor(s): (std): BURDO RICCARDINA ; DEPALO VITO VINCENZO ORONZO MARIA

Agent(s): SOLDATINI ANDREA ET AL

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
IT1397862 B1	20130204	LSGT	+	granted / extensions (spc, cpc, pte)	
ITFI20090201 A1	20110319	LSPB	+	published / reissued	
WO11033463 A1	20110324	LSPB	+	published / reissued	
WO11033463 A1	20120319	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO11033463 A1	20121010	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 10771189 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1

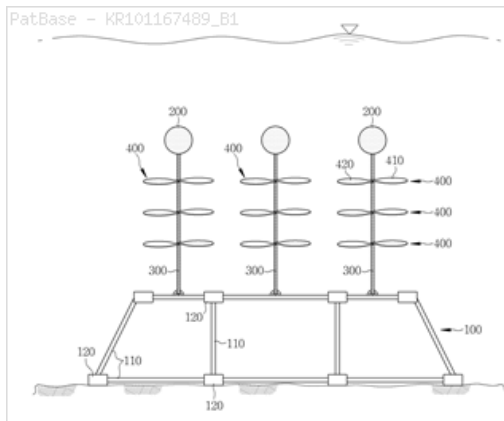
Title: HYBRID ARTIFICIAL REEF

Abstract: Source: KR101167489B PURPOSE: A cluster-type artificial fish reef is provided to provide **vegetation** environment for Macroalgae and improve the **vegetation** environment by coating the surface with diatomite ceramic layer. CONSTITUTION: A cluster-type artificial fish reef comprises a **support** structure(100), **floating** bodies(200), and fish reef members(400). The **support** structure includes a plurality of steel beams and a plurality of connecting members in which end parts of the steel beams are inserted and fixed. The **floating** body keeps as being **float**ed in underwater by the buoyancy in order for the fish reef members are **float**ed in underwater. The fish reef member is composed of a synthetic resin material in which the diatomite ceramic layer is coated on the surface. The fish reef member comprises a first fish reef and a second fish reef which are mutually combined leaving the rope in between, and the combining tool which combines the first and the second fish reefs.

Classifications:

International (IPC 8-9): A01K61/00 E02B3/14 (Advanced/Invention)

CPC: A01K61/70 A01K61/54 B29C63/0017 B29K2103/08 E02B3/046



Family:

Publication number	Publication date	Application number	Application date
KR101167489 B1	20120727	KR20120014345	20120213

Priority:

KR20120014345 20120213

Probable Assignee:

KIM DUK YOMG

Assignee(s): (std):

KIM DUK YOMG

Inventor(s): (std):

KIM DUK YOMG

Legal status (INPADOC)

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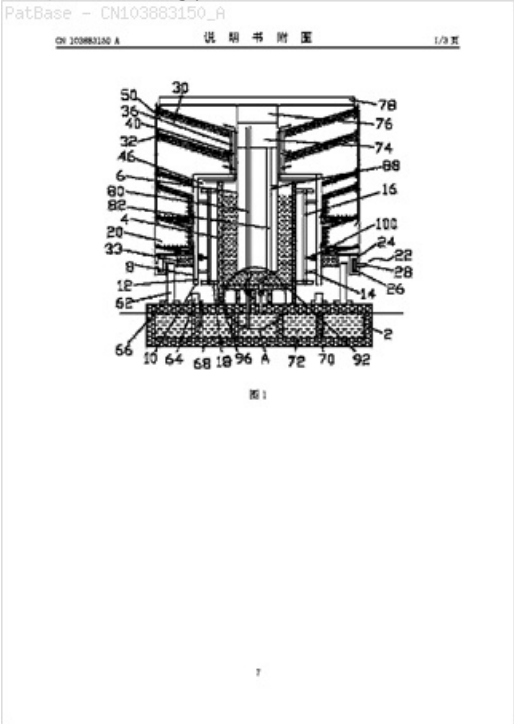
Patent	Date recorded	Event group	Code	Event	Details
KR101167489 B1	20120727	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101167489 B1	20120213	LSES	A201	REQUEST FOR EXAMINATION	
KR101167489 B1	20120516	LSES	A302	REQUEST FOR ACCELERATED EXAMINATION	
KR101167489 B1	20120612	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR101167489 B1	20120713	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR101167489 B1	20150714	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	

Title: SUSPENSION TYPE STEREOSCOPIC ECOLOGICAL BALANCE STRUCTURE WITH **FLOATING** BIN

Abstract: Source: CN103883150A The invention relates to a suspension type stereoscopic ecological balance structure with a **floating** bin. The suspension type stereoscopic ecological balance structure comprises a base and a ballast bin. The ballast bin is positioned on the base, a **floating** body is suspended in the ballast bin, a suspension frame is connected to the upper end of the **floating** body, first air inlets are formed in the suspension frame, first air inlet channels are arranged in the suspension frame, rotary shafts are connected to the inner side of the suspension frame by adjustable elastic **support** seats, elastic wheels are fixed to two ends of each rotary shaft and are butted to the ballast bin, at least one culture layer is mounted at the outer side end of the suspension frame, each culture layer is provided with a plurality of culture chambers, balance devices are fixed to the lower ends of the culture chambers, each balance device comprises a hollow circular base, an annular groove and a counterweight slider, each annular groove is formed in the peripheral surface of the corresponding circular base, each counterweight slider can slide along the corresponding annular groove, at least one planting layer is mounted at the upper end of the suspension frame, each planting layer comprises a plurality of planting chambers, and **vegetation** layers are arranged in the planting chambers. The suspension type stereoscopic ecological balance structure has the advantages that the culture chambers and the planting chambers are in ecological balance states, excrement of livestock can directly drop into biogas digesters without being conveyed by pipelines, and accordingly the cost can be saved.

Classifications:

International (IPC 8-9): E04B1/94 E04H9/00
E04H9/02 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN103883150 A	20140625	CN201410069973	20140228
CN103883150 B	20160113	CN201410069973	20140228

Priority:

CN201410069973 20140228

Probable Assignee:

ZHANG WEIZHONG

Assignee(s): (std):

ZHANG WEIZHONG

Assignee(s):

ZHANG WEI IN

Inventor(s): (std):

ZHANG WEIZHONG

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN103883150 A	20140625	LSPB	+	published / reissued	
CN103883150 A	20140625	LSPB	+C06	PUBLICATION	
CN103883150 A	20160113	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN103883150 B	20160113	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: HABITAT REEF FOR LOBSTER AND SEA-CUCUMBER

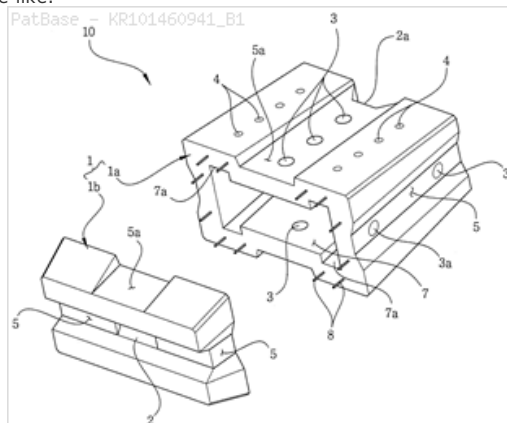
Abstract: Source: KR101460941B The present invention relates to an artificial habitat reef that is installed in the sea bed so as to provide crayfish or sea cucumbers with a habitat space. More specifically, the present invention relates to a habitat reef for crayfish and sea cucumbers in which a concrete habitat reef main body that is a cuboid-shaped case structure is produced so as to provide the habitat space for the crayfish or sea cucumbers therein, a passage structure is formed on the habitat reef main body so as to allow entrance and movements of the crayfish or sea cucumbers and seawater flow, a porous **vegetation** plate formed of porous concrete is arranged in the habitat space in the habitat reef main body, the habitat space is partitioned into upper and lower spaces by the porous **vegetation** plate so that an inner portion of the habitat reef main body can be provided with a sufficient corner space for easy attachment and growth of the sea cucumbers, a sufficient rough surface, and a sufficient dark shadow space required for crayfish feeding, sea cucumber estivation, and the like, a partition-shaped porous **vegetation** plate is additionally arranged in the inner habitat space so that the corner space, the attachment surface, and the shadow space can be maximized, various types of organic matters and **floating** matters, which are feed for young crayfish and sea cucumbers, are allowed to be adsorbed to and concentrated on the porous **vegetation** plate in quantity so that an excellent feeder is established in the inner space of the habitat reef, effective swarming of fry, shellfish, and the like which are feed for mature crayfish is allowed on inner and outer side surfaces of the habitat reef main body and in the vicinity thereof, and a receiving leg is additionally provided on the habitat reef main body so that the habitat reef facilities can be available even on soft soil of quicksand, mud, and the like.

Classifications:

International (IPC 8-9): A01K61/00 E02D29/00

E02D29/045 (Advanced/Invention)

CPC: A01K61/70 E02B3/046



Family:

Publication number	Publication date	Application number	Application date
AU2015201804 AA	20151029	AU20150201804	20150410
KR101460941 B1	20141114	KR20140042983	20140410

Priority:

KR20140042983 20140410

Probable Assignee: HAEJOO ENC CO LTD

Assignee(s): (std): HAEJOO ENC CO LTD ; HAEJOO PTY LTD ; PAIK RYAN ; PAIK SANG HYUN

Assignee(s): HAEJOO ENC CO

Inventor(s): (std): PAIK SANG HYUN

Agent(s): CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; HAEJOO PTY LTD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2015201804 AA	20151029	LSPB	+	published / reissued	
AU2015201804 AA	20170330	LSLE	-MK1	APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION IN RELEVANT PERIOD	
KR101460941 B1	20141114	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101460941 B1	20140929	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR101460941 B1	20141105	LSGT	+GRNT	WRITTEN DECISION TO GRANT	

Title: PLANT SHAPE TEMPLATE

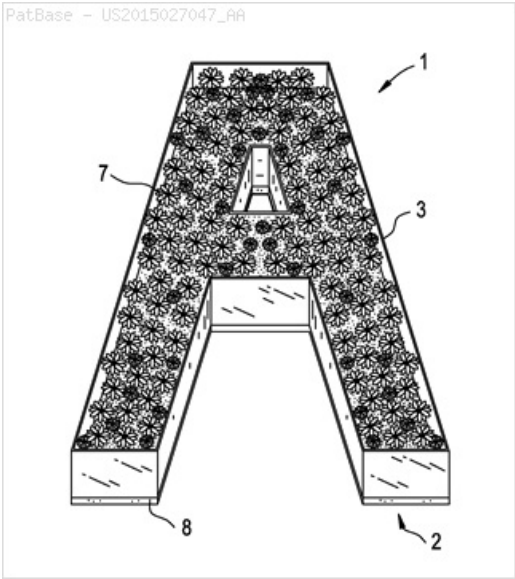
Abstract: Source: US2015027047A Disclosed herein are devices and related methods for using those devices in the planting and/or placing of plants, flowers, and/or other **vegetation** in specific and defined shapes. The devices and methods for using those devices are related to carpet bedding, gardens, home gardening, gardening kits, **floating** plant shapes and designs, and others.

Classifications:

International (IPC 8-9): A01G9/02 (Advanced/Invention)

CPC: A01G9/02 A01G9/00

US: 47/65.5 47/66.7



Family:

Publication number	Publication date	Application number	Application date
US2015027047 AA	20150129	US20130952401	20130726

Priority:

US20130952401 20130726

Probable Assignee:

ROBERTS GREG

Assignee(s): (std):

ROBERTS GREG

Inventor(s): (std):

ROBERTS GREG

Legal status (INPADOC)

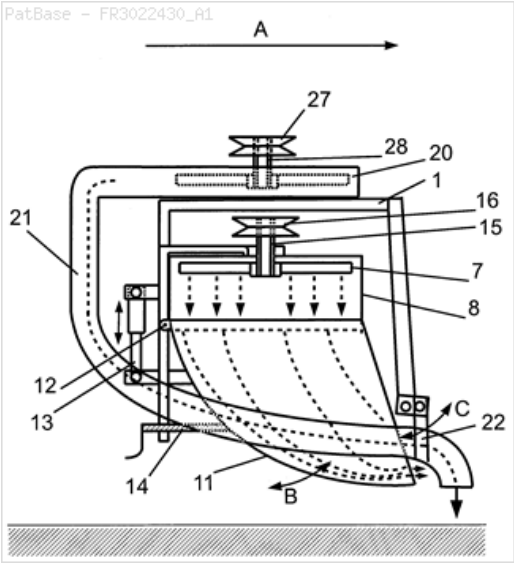
[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US2015027047 AA	20150129	LSPB	+	published / reissued	

Title: MACHINE DE FENAIISON POUR L'ANDAINAGE, LE FANAGE ET LE DEPLACEMENT DE VEGETAUX COUPES ET AUTRES PRODUITS SUR LE SOL FENAIISON MACHINE FOR swathing, tedding AND TRAVEL CUTS AND OTHER PLANTS ON THE FLOOR (Machine translation)

Abstract: Source: FR3022430A L'invention concerne une machine permettant de deplacer les vegetaux coupes au moyen d'air pulse. Cette machine est constituee d'un bati sur lequel est fixe un ensemble reglable en hauteur a ventilateurs (7) et gaines (8) sous lequel est attache un diffuseur d'air sensiblement elliptique (11) orientable par un axe et un verin dirigeant un flux d'air vers le fourrage coupe. Lorsque l'ensemble de ventilation est oriente en oblique et le flux d'air dirige dans le sens de l'avancement de la machine, ce dispositif permet de former des andains. Lorsque l'ensemble de ventilation est oriente perpendiculairement a l'avancement de la machine et le flux d'air dirige vers l'arriere, ce dispositif permet de faner. Sur ce bati est egalement fixe un ventilateur muni d'une gaine (21) a orientation variable en tout sens par la position du **support**. En utilisation d'andainage de la machine, lorsque l'extremite de cette gaine est orientee sensiblement verticalement, le flux d'air sortant permet de separer le fourrage au sol et eviter un bourrage au niveau de l'extremite du capteur diffuseur d'air. En utilisation de fanage de la machine, lorsque l'extremite de cette gaine est orientee sensiblement verticalement sur le cote du dispositif, le flux d'air permet le degagement de fourrage au pourtour du champ. A machine to move the cups Plant using air pulse. This machine consists of a frame on which is fixed an adjustable set height has fans (7) and casings (8) in which is attached a substantially elliptical air diffuser (11) rotatable by a shaft and an actuator directing a air flow to the feed section. When the fan assembly is directed obliquely and the air flow moving in the direction of advance of the machine, this device makes it possible to form swaths. When the fan assembly is oriented perpendicularly to the advance of the machine and the flow of air towards the rear, this device allows fade. This frame is also fixed a fan provided with a sheath (21) has variable orientation in every direction by the position of the **support**. In use windrowing machine when the end of the sheath is oriented substantially vertically, the outgoing air flow separates the feed on the ground and prevent a jam at the end of the air diffuser sensor. In use tedding machine when the end of the sheath is oriented substantially vertically on the side of the device, the air flow allows the feed of degagement the periphery of the field.

Classifications:
International (IPC 8-9): A01D84/00 (Advanced/Invention)
CPC: A01D84/00



Family:

Publication number	Publication date	Application number	Application date
FR3022430 A1	20151225	FR20140001490	20140624

Priority:
FR20140001490 20140624

Probable Assignee: CARREE FRANCIS JEAN EUGENE MARIE
Assignee(s): (std): CARREE FRANCIS JEAN EUGENE MARIE
Assignee(s): FRANCIS JEAN EUGENE MARIE CARREE
Inventor(s): (std): CARREE FRANCIS JEAN EUGENE MARIE
Inventor(s): FRANCIS JEAN EUGENE MARIE CARREE
Agent(s): FRANCIS CARREE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
FR3022430 A1	20151225	LSPB	+	published / reissued	
FR3022430 A1	20151225	LSSES	PLSC	SEARCH REPORT READY	EFFECTIVE DATE : 20151225
FR3022430 A1	20160401	LSLE	-ST	NOTIFICATION OF LAPSE	EFFECTIVE DATE : 20160229

Title: Reference signal processor circuit

Abstract: Source: US4255778A To counteract the phase error in the signal from an rpm transducer of an engine test stand or analyzer at varying engine speeds, the signal processor of the invention receives the transducer signal whose amplitude varies with frequency and generates therefrom an output signal of constant amplitude. This signal is supplied to a threshold switch which includes circuitry for integrating periodic output signals and generating therefrom a control signal whose amplitude is proportional to the frequency of the input signal. This analog signal is used to alter the switching threshold of the threshold switch, thereby imparting to the output signal a frequency compensation which counteracts the inherent phase error and results in an output signal of constant phase with respect to the transducer signal. The apparatus of the invention is particularly useful for adjusting ignition timing, valve timing, etc. in internal combustion engines in which the input signal is derived from the crankshaft speed.

Classifications:

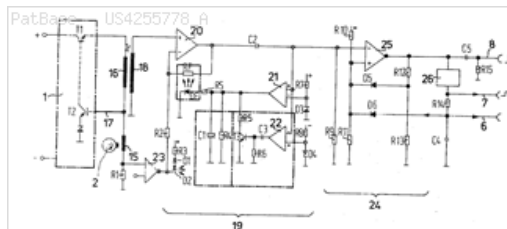
International (IPC 8-9): F02P17/04 (Advanced/Invention);
F02P17/00 (Core/Invention)

International (IPC 1-7): F02P17/00 G08C9/04 H03K5/153

CPC: F02P17/04

European: F02P17/04

US: 324/392 361/236



Family:

Publication number	Publication date	Application number	Application date
DE2827799 A1	19800110	DE19782827799	19780624
FR2432100 A1	19800222	FR19790015427	19790615
FR2432100 B3	19820528	FR19790015427	19790615
US4255778 A	19810310	US19790048038	19790613

Priority:

DE19782827799 19780624

Probable Assignee:

BOSCH GMBH ROBERT

Assignee(s): (std):

BOSCH GMBH ROBERT

Assignee(s):

ROBERT BOSCH GMBH

Inventor(s): (std):

BRECKEL WERNER ; BREKEL WERNER

Legal status (INPADOC)

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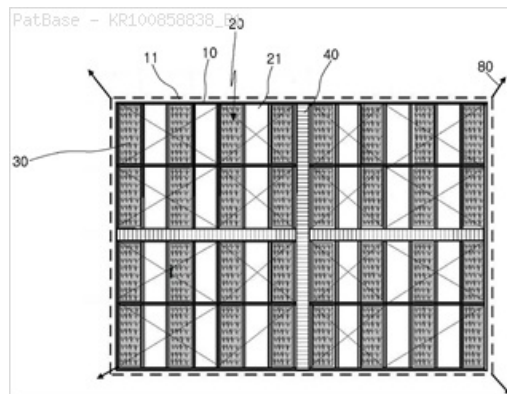
Patent	Date recorded	Event group	Code	Event	Details
DE2827799 A1	19800110	LSPB	+	published / reissued	
DE2827799 A1	19801218	LSSES	+OD	REQUEST FOR EXAMINATION	
DE2827799 A1	19820506	LSWD	-8130	WITHDRAWAL	
FR2432100 A1	19800222	LSPB	+	published / reissued	
FR2432100 A1	19830422	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2432100 B3	19820528	LSGT	+	granted / extensions (spc, cpc, pte)	
US4255778 A	19810310	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: THE STRUCTURE FOR SPAWNING OF FISH

Abstract: Source: KR100858838B A seedbed type spawning structure with **vegetation** and water plants is provided to create a safe place for spawning and nurturing of fish, and to increase lifespan of the structure by replacing old planting frames with new ones whenever the water plants are dead. A spawning structure for fish includes a body frame(10) and a plurality of units(20), each being defined with a **support** and a **support** angle. The body frame is integrally formed with a **floating** material(11) on the top, and planting frames(30) having water plants being planted therein are coupled to each unit. In order to form space(21) between units, some units are not coupled with the planting frames. Moreover, to allow people to observe spawning procedure and generative environment of fish, **floating** bridges(40) are provided between units of the body frame.

Classifications:

International (IPC 8-9): A01K61/00 (Advanced/Invention);
A01K61/00 (Core/Invention)



Family:

Publication number	Publication date	Application number	Application date
KR100858838 B1	20080917	KR20080053459	20080609

Priority:

KR20080053459 20080609

Probable Assignee:

LEE JE KYUN

Assignee(s): (std):

LEE JE KYUN

Inventor(s): (std):

LEE JE KYUN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
KR100858838 B1	20080917	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100858838 B1	20080609	LSSES	A201	REQUEST FOR EXAMINATION	
KR100858838 B1	20080618	LSSES	A302	REQUEST FOR ACCELERATED EXAMINATION	
KR100858838 B1	20080829	LSSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR100858838 B1	20080909	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR100858838 B1	20080910	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR100858838 B1	20110911	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	

Title: Rototiller skirt assembly

Abstract: Source: US5632345A A free-floating skirt assembly for attachment to the deck of a cultivator to protect adjacent vegetation from the blades of the cultivator includes a pair of elongate straps attached to the cultivator deck with shield supports projecting outwardly from the straps and slidably receiving shield suspension rods to which are attached the shields so that the shields may float as they encounter terrain irregularities. The range of sliding movement of the suspension rods is adjusted and controlled by the provision of through bores in the rods and replaceable pins inserted into the bores above the shield supports which include short shafts extending outwardly from each strap and T-shaped connectors which receive the shafts and the suspension rods. Braces depend from the straps to engage the cultivator deck in instances where the deck has a downwardly tapering rear portion.

Classifications:

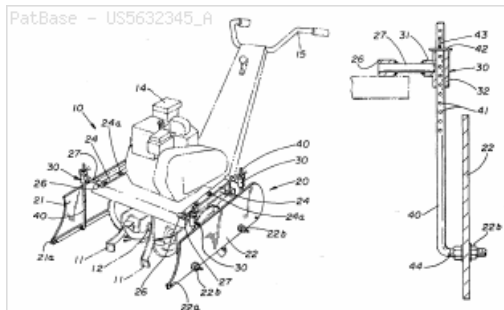
International (IPC 8-9): A01B33/12 (Advanced/Invention);
A01B33/00 (Core/Invention)

International (IPC 1-7): A01B33/00

CPC: A01B33/12

European: A01B33/12

US: 172/112 172/508 172/517 172/81



Family:

Publication number	Publication date	Application number	Application date
US5632345 A	19970527	US19960639443	19960429

Priority:

US19960639443 19960429

Probable Assignee:

STAHL FRANK A

Assignee(s): (std):

STAHL FRANK A

Inventor(s): (std):

STAHL FRANK A

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US5632345 A	19970527	LSGT	+	granted / extensions (spc, cpc, pte)	
US5632345 A	19970729	LSRE	CC	CERTIFICATE OF CORRECTION	
US5632345 A	20010527	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5632345 A	20010731	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20010527

Title: ROADWAY CONSTRUCTION

Abstract: The invention is based on the fact that when the average density of a roadway construction, taking into account the permitted maximum loading thereof, is selected to be less than the average density of the foundation medium (1) surrounding the roadway or the loose medium arranged as **floating** bed (30) between the foundation medium (1) and the roadway surface (2) and further when a unit extending in the longitudinal and transverse direction of ready-made and assembled in-situ rib elements is produced then said roadway construction may be subjected to a **floating** load on the surrounding foundation equivalent to that of conventional stable roadways. In wetlands, stable anchor points (19) are arranged along the planned roadway at separations dependent on the structure of the foundation medium (1).

Classifications:

International (IPC 8-9): E01C1/00 E01C3/00 E01D15/14

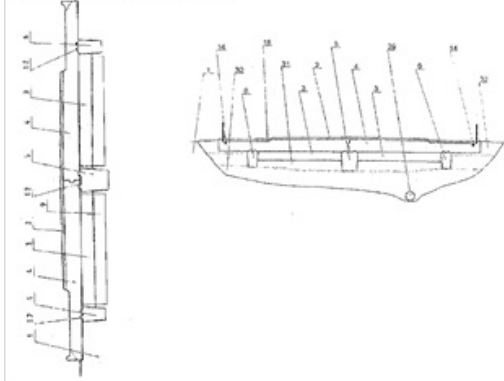
E02D27/36 (Advanced/Invention);

E01C1/00 E01C3/00 E01D15/00 E02D27/32 (Core/Invention)

CPC: E01C3/003 E01C3/006 E01D15/14

European: E01C3/00B E01C3/00C E01D15/14

PatBase - WO07096682_A2



Family:

Publication number	Publication date	Application number	Application date
HU0600117 A0	20060428	HU20060000117	20060213
HU0600117 AB	20071228	HU20060000117	20060213
WO07096682 A2	20070830	WO2007HU00007	20070212
WO07096682 A3	20071122	WO2007HU00007	20070212

Priority:

HU20060000117 20060213

Probable Assignee: FOGARASI ZSOLT

Assignee(s): (std): FOGARASI ZSOLT

Inventor(s): (std): FOGARASI ZSOLT

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
HU0600117 AB	20071228	LSPB	+	published / reissued	
HU0600117 AB	20080828	LSLE	-FD9A	LAPSE OF PROVISIONAL PROTECTION DUE TO NON-PAYMENT OF FEES	
WO07096682 A2	20070830	LSPB	+	published / reissued	
WO07096682 A3	20080814	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: **FLOATING** PLASTIC BODY FOR PRODUCING AGAR BY HYDROPONICS, MADE BY FORMING LARGE AIR BUBBLES IN MIXTURE OF MOLTEN THERMOPLASTIC MATERIAL

Abstract: Source: DE202005002795U1 The **floating** body is made from a mixture of molten thermoplastic materials which have not been sorted into different material types and preferably comprise waste material. Large air bubbles (1) are formed inside the plastic to produce a foam-type structure. The bubbles are generated using a standard compressor to blow compressed air into the molten plastic. The **floating** body has a trough shape and **floats** like a boat in water.

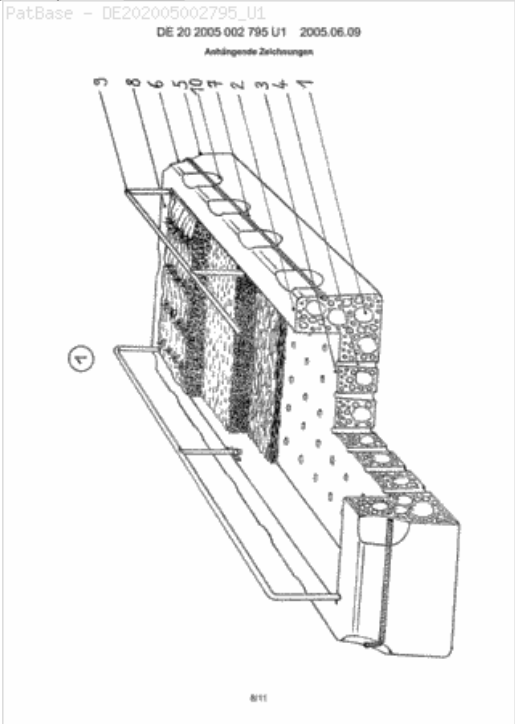
Classifications:

International (IPC 8-9): A01G31/02 A01G9/00 (Advanced/Invention); A01G31/02 A01G9/00 (Core/Invention)

International (IPC 1-7): A01G31/00 A01G31/02

CPC: A01G9/00 A01G31/02 Y02P60/216

European: A01G31/02 A01G9/00



Family:

Publication number	Publication date	Application number	Application date
DE202005002795 U1	20050504	DE200520002795U	20050222

Priority:

DE200520002795U 20050222

Probable Assignee: STRIEBEL CHRISTHARD

Assignee(s): (std): STRIEBEL CHRISTHARD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE202005002795 U1	20050504	LSGT	+	granted / extensions (spc, cpc, pte)	
DE202005002795 U1	20050222	LSLI	R086	NON-BINDING DECLARATION OF LICENSING INTEREST	
DE202005002795 U1	20050609	LSGT	R207	UTILITY MODEL SPECIFICATION	EFFECTIVE DATE : 20050609
DE202005002795 U1	20081224	LSLE	-R156	LAPSE OF IP RIGHT AFTER 3 YEARS	EFFECTIVE DATE : 20080902

Title: WATER-**SUPPORTED** ECOLOGICAL AQUACULTURE PLANT HAS SELF-CONTAINED CULTURE CONTAINER, OPPOSITE TO NATURAL AQUATIC HABITAT WHEREBY **FLOATING** BODIES ARE ATTACHED ON CULTURE CONTAINER WHICH MAKES ENTIRE PLANT **FLOATABLE**

Abstract: Source: DE202006006949U1 The plant has self-contained culture container, opposite to the natural aquatic habitat. **Floating** and buoyant bodies (20,35) are attached firmly or flexibly on the culture container, which makes the entire plant **floatable** and due to the position of its attachment, the culture container is tilted, rolled and raised. Each culture container can achieve several working positions. The culture container has a material, which reduces the size of the **floating** and buoyant bodies as well as possibly the balancing weight (4) and at the same time, by its upper surface or its coating, hinders the bio-fouling, that is the fouling with undesirable creatures. The plant has a water delivery system, in particular a pump (44), which supplies water for the species (64), which are to be cultivated, from the surrounding or remote body to the culture containers. The water level within the culture container or culture containers increases, which develops the necessary pressure to pressurize the water, dirtied by the cultivated organisms in the plant, through a filter system (6,7), integrated with the container whereby the filter system cleans the dirty water. Accumulated production residue of firm kind in the sediment chamber (5) are separated, collected and continuously or in intervals can be disposed through the sediment outlet (8) or drain (14).

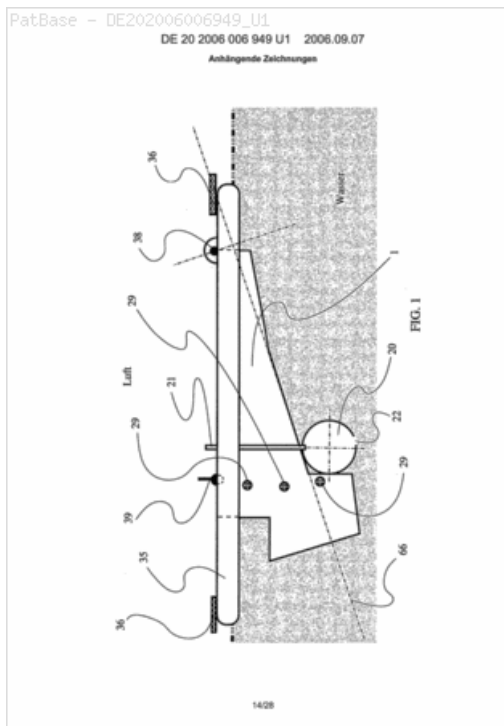
Classifications:

International (IPC 8-9): A01K61/00 A01K71/00 (Advanced/Invention);

A01K61/00 A01K71/00 (Core/Invention)

CPC: A01K61/60

European: A01K61/00F



Family:

Publication number	Publication date	Application number	Application date
DE202006006949 U1	20060803	DE200620006949U	20060426

Priority:

DE200520013136U 20050816

DE200620006949U 20060426

Probable Assignee:

AQUANOVA GMBH

Assignee(s): (std):

AQUANOVA GMBH

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE202006006949 U1	20060803	LSGT	+	granted / extensions (spc, cpc, pte)	
DE202006006949 U1	20060907	LSGT	R207	UTILITY MODEL SPECIFICATION	EFFECTIVE DATE : 20060907
DE202006006949 U1	20100218	LSLE	-R156	LAPSE OF IP RIGHT AFTER 3 YEARS	EFFECTIVE DATE : 20091103

Title: ISLAND HOTEL COMPLEX ON METAL **floating** platforms (Machine translation)

Abstract: Source: RU65902U

Machine translation: (Claim 1) 1. Island hotel on metal **floating** platforms, consisting of platforms that are installed at a distance from each other on the pontoons in the area of coastal waters, bounded by the perimeter fence, surface and / or underwater surveillance equipment security system, central control station life **support**, communications, and switching, surveillance equipment associated with platforms and pipelines placed on the beach or on one of the platforms or on the island of natural or synthetic origin, and the platform, preferably bunk, formed frame and deck located on top of it, preferably of a polymer material, which are one or two low-rise residential buildings, formed pool, on the deck or in the floor of the platform formed in the openings placed containers with soil and living **vegetation** or container from plantation to the lower tier of the frame is attached an additional room design of a transparent material, hard, natural air pressure inside, lift or spiral staircase.

Classifications:

International (IPC 8-9): E02B17/00 (Advanced/Invention);
E02B17/00 (Core/Invention)

Family:

Publication number	Publication date	Application number	Application date
RU65902 U1	20070827	RU20070116020U	20070427

Priority:

RU20070116020U 20070427

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
RU65902 U1	20070827	LSGT	+	granted / extensions (spc, cpc, pte)	
RU65902 U1	20110827	LSLE	-MM1K	UTILITY MODEL HAS BECOME INVALID (NON-PAYMENT OF FEES)	EFFECTIVE DATE : 20090428

Title: Method and facility for killing oncomelania

Abstract: Source: CN101233842A The invention relates to a method and a device for killing snails. By applying a. a snail killing pad for restraining plant growing and preventing snails from getting in and out of earth, b. a snail breeding ground with large water change, and a separation device, the snails are prevented from moving with water level so as to obtain a suitable breeding environment and further kill the snails; By covering the snail killing pad, the snails can not obtain necessary wet earth for living and **vegetation** for hiding and eating. During flood season, the separation device can prevent the snails on water side from moving with the water level and cause the snails to be drowned; during water withdrawal, the snails can not move with water level to a suitable breeding ground due to the existing of the separation device and then die. The separation device can be a separating channel, **floating** separating matters, as well as separating nets, separating boards or separating cloth with fixed **support** structures. According to different environments and snail breeding grounds, the snail killing pad and the separation device, or the snail killing pad and the separation device can be adopted for killing the snails. The snail killing pad, the **floating** separation device, etc. can contain drugs for killing and expulsing snail and other drugs.

Classifications:

International (IPC 8-9): A01K61/00 A01K69/00 A01K80/00 A01M99/00 (Advanced/Invention);
A01K61/00 A01K69/00 A01K80/00 (Advanced/Non-invention);
A01K61/00 A01K69/00 A01K80/00 A01M99/00 (Core/Invention)

Family:

Publication number	Publication date	Application number	Application date
CN101233842 A	20080806	CN200710051417	20070130

Priority:

CN200710051417 20070130

Probable Assignee: QIANGSHENG KANG
Assignee(s): (std): QIANGSHENG KANG
Assignee(s): KANG QIANGSHENG
Inventor(s): (std): QIANGSHENG KANG
Inventor(s): KANG QIANGSHENG

Legal status (INPADOC)

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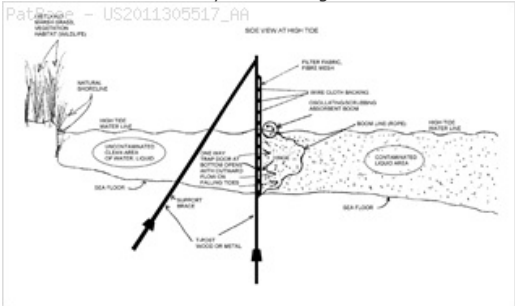
Patent	Date recorded	Event group	Code	Event	Details
CN101233842 A	20080806	LSPB	+	published / reissued	
CN101233842 A	20080806	LSPB	+C06	PUBLICATION	
CN101233842 A	20120620	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	

Title: VERTICAL BARRIER FENCING FOR CONTAINING CONTAMINATED MATERIALS, AND USE THEREOF

Abstract: Source: US2011305517A A system for separating contaminated materials from clean natural waterways and environmentally safe areas that thrive in wildlife breeding grounds, wetlands, marsh grass, natural **vegetation**, and wildlife habitats. The invention provides an effective and relatively inexpensive apparatus and process for hazardous material containment along shorelines, rivers, and estuaries (for maximum protection against contamination). Vertical erected fiber mesh filter fabric which allows clean water molecules to pass through but does not allow heavier/larger contaminated molecules to enter into uncontaminated areas, either from surface areas or subsurface areas. A **floating** boom acts as an oscillating scrub brush as tidal waters increase (rise) as well as an absorbent pad for the contaminated materials. One-way tidal doors allow juvenile sea life to naturally migrate to deeper safe havens with normal daily tidal changes.

Classifications:

International (IPC 8-9): E02B15/04 (Advanced/Invention)
CPC: E02B3/04 E02B15/06 E02B15/08 E02B15/0814
European: E02B15/06 E02B15/08 E02B15/08C E02B3/04
US: 405/63 405/63P



Family:

Publication number	Publication date	Application number	Application date
US2011305517 AA	20111215	US20110985477	20110106

Priority:

US20100354244P 20100613	US20110985477 20110106
Probable Assignee:	BORRIES SAMUEL DOUGLAS
Assignee(s): (std):	BORRIES SAMUEL DOUGLAS
Inventor(s): (std):	BORRIES SAMUEL DOUGLAS

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2011305517 AA	20111215	LSPB	+	published / reissued	

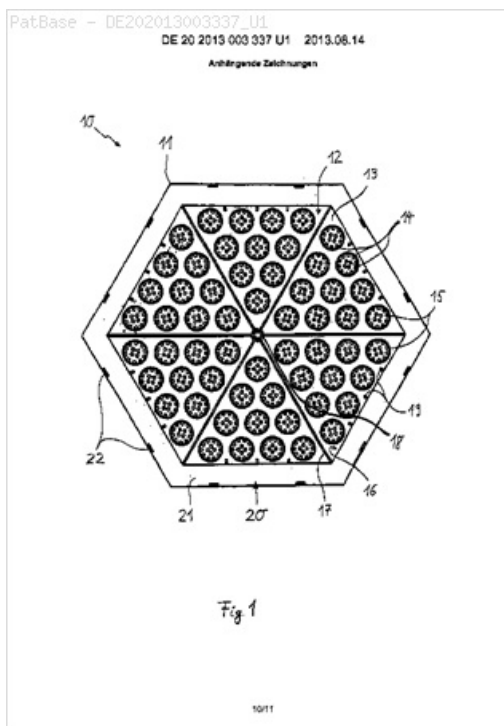
Title: PFLANZENINSEL UND PFLANZENINSELSYSTEM ZUM AUFNEHMEN MEHRERER PFLANZEN ISLAND ISLAND PLANTS AND PLANT SYSTEM FOR RECEIVING SEVERAL PLANTS (Machine translation)

Abstract: Source: DE202013003337U1 Pflanzeninsel zum Aufnehmen mehrerer Pflanzen mit einer Tragstruktur (11), dadurch gekennzeichnet, dass die Tragstruktur (11) eine flächige Bepflanzungsebene (12) fuer die Pflanzen aufweist und selbsttragend ist. Plant island for receiving a plurality of plants having a **support** structure (11), characterized in that the **supporting** structure (11) has a planting flat plane (12) for the plants, and is self-**supporting**.

Classifications:

International (IPC 8-9): A01G31/00 A01G9/00 (Advanced/Invention)

CPC: A01G9/00 A01G1/007 A01G9/025 Y02P60/244



Family:

Publication number	Publication date	Application number	Application date
DE202013003337 U1	20130814	DE201320003337U	20130410

Priority:

DE201320003337U 20130410

Probable Assignee:

SOBOTTA HANS JOACHIM

Assignee(s): (std):

SOBOTTA HANS JOACHIM

Assignee(s):

SOBOTTA

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE202013003337 U1	20130814	LSGT	+	granted / extensions (spc, cpc, pte)	
DE202013003337 U1	20130814	LSGT	R207	UTILITY MODEL SPECIFICATION	EFFECTIVE DATE : 20130814
DE202013003337 U1	20161101	LSLE	-R156	LAPSE OF IP RIGHT AFTER 3 YEARS	

Title: Arrangement for shoreline construction, maintenance, and protection, and methods for making and using the same

Abstract: Source: US5338131A An arrangement for the construction, maintenance and protection of a shoreline having a variable level of water is disclosed. The arrangement utilizes a plurality of ecological-botanical elements (12, 13, 14, 16, 17, 26, and 30 implanted among construction materials (10, 11, 15, 18, 19, 20, 21, 22, 24, 25, 27, 28, 29, 31, and 32) for stabilization and maintenance of shoreline shape and location. The ecological-botanical elements comprise precultivated, emergent aquatic plants (14) called plant plugs (12) whose roots are held within a water-permeable, biodegradable vegetative carrier system (13). Another ecological-botanical element is a fiber roll (17) comprising slowly decaying fibrous material in which are rooted precultivated, emergent aquatic plants (14). Appropriately arranged combinations of ecological-botanical elements implanted among construction materials stabilize and maintain shorelines.

Classifications:

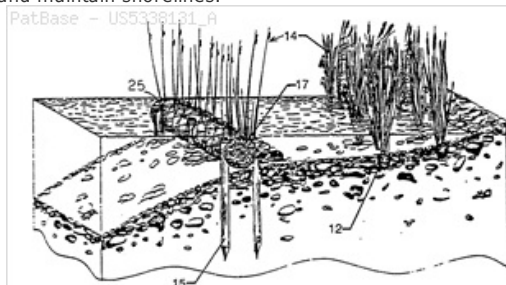
International (IPC 8-9): E02B3/12 (Advanced/Invention)

International (IPC 1-7): E02B3/04 E02B3/08 E02B3/12 F02B3/12

CPC: E02B3/12 E02B3/125

European: E02B3/12 E02B3/12C4

US: 405/15 405/16 405/19 405/21 405/24 405/25



Family:

Publication number	Publication date	Application number	Application date
EP0562135 A1	19930929	EP19920105015	19920324
US5338131 A	19940816	US19930043272	19930406
US5425597 A	19950620	US19940225584	19940510
US5641244 A	19970624	US19950402842	19950313
US5678954 A	19971021	US19950448680	19950524

Priority:

EP19920105015	19920324	US19920886693	19920521	US19930043272	19930406
US19950402842	19950313	US19940225584	19940510	US19950448680	19950524

Probable Assignee: NIKKI SPANGLER

Assignee(s): (std): BESTMANN LOTHAR

Assignee(s): KING FIBRE COIRPORATION LLC ; NI KK ; SPANGLER ERIC ; NIKKI SPANGLER

Inventor(s): (std): BESTMANN LOTHAR

Designated states: AT BE CH DE DK ES FR GB GR IT LI LU NL SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
EP0562135 A1	19930929	LSPB	+	published / reissued	
EP0562135 A1	19940209	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19931210
EP0562135 A1	19940817	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19940630
EP0562135 A1	19960710	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19960109
US5338131 A	19940816	LSGT	+	granted / extensions (spc, cpc, pte)	
US5338131 A	19950110	LSRE	CC	CERTIFICATE OF CORRECTION	
US5338131 A	19980213	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5338131 A	20010620	LSAS	AS	ASSIGNMENT	OWNER NAME : KING FIBRE COIRPORATION, LLC, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR: SPANGLER, ERIC; REEL/FRAME: 011911/0536 EFFECTIVE DATE : 20010612
US5338131 A	20010620	LSAS	AS	ASSIGNMENT	OWNER NAME : SPANGLER, ERIC, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR: BESTMAN, LOTHAR; REEL/FRAME: 011911/0081 EFFECTIVE DATE : 20010521

US5338131 A	20020211	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5338131 A	20050214	LSAS	AS	ASSIGNMENT	OWNER NAME : NIKKI SPANGLER, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:FIBER KING LLP D/B/A KING FIBRE COIRPORATION LLC; REEL/FRAME:016245/0546 EFFECTIVE DATE : 20050207
US5338131 A	20060816	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5338131 A	20061010	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20060816
US5425597 A	19950620	LSGT	+	granted / extensions (spc, cpc, pte)	
US5425597 A	19951017	LSRE	CC	CERTIFICATE OF CORRECTION	
US5425597 A	19981214	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5425597 A	20010620	LSAS	AS	ASSIGNMENT	OWNER NAME : KING FIBRE COIRPORATION, LLC, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SPANGLER, ERIC; REEL/FRAME:011911/0536 EFFECTIVE DATE : 20010612
US5425597 A	20010620	LSAS	AS	ASSIGNMENT	OWNER NAME : SPANGLER, ERIC, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BESTMAN, LOTHAR; REEL/FRAME:011911/0081 EFFECTIVE DATE : 20010521
US5425597 A	20021202	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5425597 A	20050214	LSAS	AS	ASSIGNMENT	OWNER NAME : NIKKI SPANGLER, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:FIBER KING LLP D/B/A KING FIBRE COIRPORATION LLC; REEL/FRAME:016245/0546 EFFECTIVE DATE : 20050207
US5425597 A	20070620	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5425597 A	20070807	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20070620
US5641244 A	19970624	LSGT	+	granted / extensions (spc, cpc, pte)	
US5641244 A	20010620	LSAS	AS	ASSIGNMENT	OWNER NAME : SPANGLER, ERIC, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BESTMAN, LOTHAR; REEL/FRAME:011911/0081 EFFECTIVE DATE : 20010521
US5641244 A	20010620	LSAS	AS	ASSIGNMENT	OWNER NAME : KING FIBRE COIRPORATION, LLC, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SPANGLER, ERIC; REEL/FRAME:011911/0536 EFFECTIVE DATE : 20010612
US5641244 A	20010621	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5641244 A	20041201	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5641244 A	20050214	LSAS	AS	ASSIGNMENT	OWNER NAME : NIKKI SPANGLER, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:FIBER

					KING LLP D/B/A KING FIBRE COIRPORATION LLC; REEL/FRAME:016245/0546 EFFECTIVE DATE : 20050207
US5641244 A	20090624	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5641244 A	20090811	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20090624
US5678954 A	19971021	LSGT	+	granted / extensions (spc, cpc, pte)	
US5678954 A	20010620	LSAS	AS	ASSIGNMENT	OWNER NAME : KING FIBRE COIRPORATION, LLC, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SPANGLER, ERIC; REEL/FRAME:011911/0536 EFFECTIVE DATE : 20010612
US5678954 A	20010620	LSAS	AS	ASSIGNMENT	OWNER NAME : SPANGLER, ERIC, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR: BESTMAN, LOTHAR; REEL/FRAME:011911/0081 EFFECTIVE DATE : 20010521
US5678954 A	20011010	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5678954 A	20050214	LSAS	AS	ASSIGNMENT	OWNER NAME : NIKKI SPANGLER, INDIANA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:FIBER KING LLP D/B/A KING FIBRE COIRPORATION LLC; REEL/FRAME:016245/0546 EFFECTIVE DATE : 20050207
US5678954 A	20050330	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5678954 A	20091021	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5678954 A	20091208	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20091021

Title: ROTARY DRIVE AND/OR MOTOR FOR INVASIVE AND/OR EXPANSIVE DRIVE ARRANGEMENT HAS CENTRAL OR PERIPHERAL ROTATION BODY **SUPPORTED** BY CENTRAL AXLE OR SHAFT OR BY OUTER RING OR BAR, ACTION AND REACTION BODY WALL LYING OPPOSITE ROTARY BODY

Abstract: The rotary drive and/or motor has a central rotation body that is **supported** by a central axle or shaft or a peripheral rotation body that is **supported** by an outer ring or bar and that is provided for driving and/or rotation. There is also an action and reaction body wall lying opposite the rotation body.

Classifications:

International (IPC 8-9): E03B1/00 F01D1/02 F01D1/04 F15D1/00 (Advanced/Invention);
E03B1/00 F01D1/00 F15D1/00 (Core/Invention)

International (IPC 1-7): F15D1/00

CPC: F01D1/02 F01D1/026 F01D1/34 E03B1/00 E03C2201/40

European: E03B1/00 F01D1/02 F01D1/02D F01D1/34 P03C201/40

Family:

Publication number	Publication date	Application number	Application date
DE102004013179 A1	20051006	DE200410013179	20040317
DE102005011016 A1	20060914	DE200510011016	20050310

Priority:

DE200410013179 20040317 DE200510011016 20050310

Probable Assignee: MEYER FLORIAN

Assignee(s): (std): MEYER FLORIAN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE102004013179 A1	20051006	LSPB	+	published / reissued	
DE102004013179 A1	20110120	LSLE	-8139	DISPOSAL/NON-PAYMENT OF THE ANNUAL FEE	
DE102005011016 A1	20060914	LSPB	+	published / reissued	
DE102005011016 A1	20110222	LSRV	-R001	REFUSAL DECISION IN PRELIMINARY PROCEEDINGS	
DE102005011016 A1	20110616	LSRV	-8131	REJECTION	
DE102005011016 A1	20110616	LSRV	-R003	REFUSAL DECISION NOW FINAL	EFFECTIVE DATE : 20110323

Title: TRAILING HOSE SYSTEM FOR AQUATIC ECOSYSTEM LIQUID AND GRANULAR MATERIALS APPLICATION

Abstract: Source: US2009293788A A trailing hose system is disclosed for the application of materials (liquid or granular pesticides, nutrient inactivation, water quality improvement compounds) in a water body. The trailing hose or hoses release the material (liquid or granular pesticides, nutrient inactivation, water quality improvement compounds) at the desired depth within the water column. The current technology for the subsurface application of these materials is surface injection, granular spreaders, and the use of weighted hoses deployed from a vessel (boat). Surface injection of these materials below the thermocline, or to the bottom of a water body in sufficient concentrations to control the target pest, to deactivate nutrients, and or enhance water quality is required in the industry. The current technology that utilizes the use of weighted hose is cumbersome, and is a slow process that allows for the application of these materials at approximately 1-2 miles per hour.

Classifications:

International (IPC 8-9): A01M21/04 B60P3/22 B60P3/30 B63B35/30

E21D20/00 (Advanced/Invention);

A01M21/00 B60P3/22 B60P3/30 B63B35/00

E21D20/00 (Core/Invention)

CPC: B63B35/00 B63B35/305 Y10T137/402 Y10T137/6899

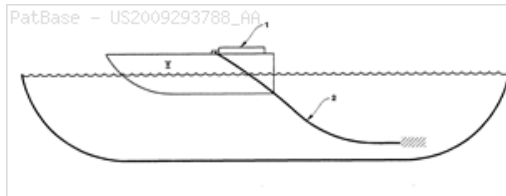
Y10T137/6906 Y10T137/6918

European: B63B35/00 B63B35/30D

US: 114/26 114/27 137/236.1 137/236.100P 137/355.12

137/355.120S 137/355.16 137/355.160S 137/899.2 137/899.200S

405/303



Family:

Publication number	Publication date	Application number	Application date
US2009293788 AA	20091203	US20080132398	20080603
US2010018586 AA	20100128	US20090574496	20091006

Priority:

US20080132398 20080603 US20090180356P 20090521 US20090574496 20091006

Probable Assignee: LITTLIN ENVIRONMENTAL TECHNOLOGIES LLC

Assignee(s): (std): MCNABB THOMAS J ; MCNABB THOMAS JOHN ; MOORHOUSE THOMAS G

Assignee(s): LITTLIN ENVIRONMENTAL TECHNOLOGIES LLC

Inventor(s): (std): MCNABB THOMAS J ; MCNABB THOMAS JOHN ; MOORHOUSE THOMAS G

Agent(s): CLEAN LAKES INC; MICHAEL BEST AND FRIEDRICH LLP

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2009293788 AA	20091203	LSPB	+	published / reissued	
US2009293788 AA	20091216	LSAS	AS	ASSIGNMENT	OWNER NAME : LITTLIN ENVIRONMENTAL TECHNOLOGIES, LLC, IDAHO DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MCNABB, THOMAS J.; REEL/FRAME:023662/0710 EFFECTIVE DATE : 20091130
US2010018586 AA	20100128	LSPB	+	published / reissued	
US2010018586 AA	20091216	LSAS	AS	ASSIGNMENT	OWNER NAME : LITTLIN ENVIRONMENTAL TECHNOLOGIES, LLC, IDAHO DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MCNABB, THOMAS J.; MOORHOUSE, THOMAS G.; REEL/FRAME:023662/0813 EFFECTIVE DATE : 20091130

Title: DEVICE FOR UNPOWERED IRRIGATION AND FERTILIZATION, AND UNPOWERED POT CULTIVATION SYSTEM USING SAME

Abstract: Source: US2013074405A The present invention relates to a device for unpowered irrigation and fertilization, and to an unpowered pot cultivation system using same, which are capable of performing continuous irrigation and fertilization to a pot by using a single supply source without consuming electric or mechanical energy. The system comprises: a pot holder provided with a collecting recess in which water or a nutrient solution can be collected, and configured such that the bottom of the pot can be immersed in water; a water tank holder on which a water tank can be seated; a linking passage connecting the water tank holder to the pot holder; a valve unit mounted on the water tank so as to be opened and closed by means of the movement of a moving member; and a water level controller configured to move the moving member according to fluctuations in the water level of the collecting recess, in order to consistently maintain the water level in the collecting recess.

Classifications:

International (IPC 8-9): A01G25/00 A01G27/00 A01G27/02

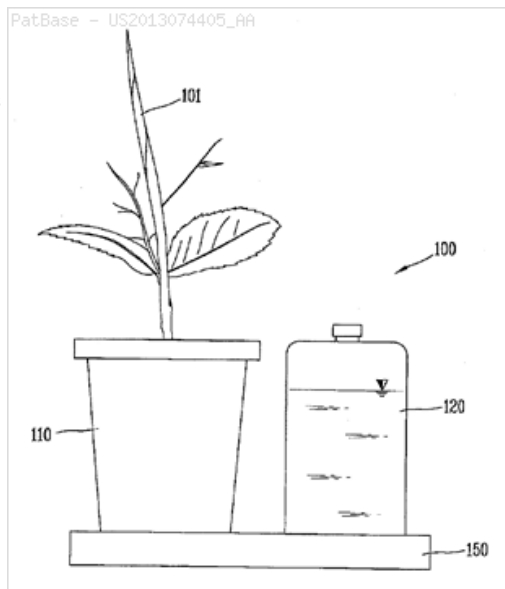
A01G31/00 A01G9/00 A01G9/04 (Advanced/Invention);

A01G27/02 (Advanced/Non-invention)

CPC: A01G27/006 A01G27/003 A01G27/005 A01G27/02 A01G27/008 A01G27/06

European: A01G27/00D A01G27/00E

US: 47/48.5 47/66.6 47/79



Family:

Publication number	Publication date	Application number	Application date
CN102970860 A	20130313	CN201080067345	20101208
EP2580957 A1	20130417	EP20100852959	20101208
IN00059KN2013 A	20160826	IN2013KN00059	20130108
JP2013531493 T2	20130808	JP20130514092T	20101208
KR100981598 B1	20100913	KR20100055032	20100610
KR101106130 B1	20120119	KR20100079958	20100818
KR101106131 B1	20120119	KR20100079959	20100818
KR101186872 B1	20121002	KR20100110624	20101108
KR20110135318 A	20111216	KR20100079958	20100818
KR20110135319 A	20111216	KR20100079959	20100818
KR20120049055 A	20120516	KR20100110624	20101108
US2013074405 AA	20130328	US20100703073	20101208
WO11155677 A1	20111215	WO2010KR08769	20101208

Priority:

KR20100055032 20100610 KR20100079958 20100818 KR20100110624 20101108
 KR20100079959 20100818 WO2010KR08769 20101208

Probable Assignee: SOHN YONG MAN

Assignee(s): (std): SOHN YONG MAN

Inventor(s): (std): SOHN YONG MAN ; SON YONG MAN

Agent(s): LUPPI EMANUELE; PARK JANG WON

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN102970860 A	20130313	LSPB	+	published / reissued	
CN102970860 A	20130313	LSPB	+C06	PUBLICATION	
CN102970860 A	20140813	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EP2580957 A1	20130417	LSPB	+	published / reissued	

EP2580957 A1	20130417	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20121219
EP2580957 A1	20151223	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20150701
IN00059KN2013 A	20160826	LSPB	+	published / reissued	
JP2013531493 T2	20130808	LSPB	+	published / reissued	
JP2013531493 T2	20131129	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20131128
JP2013531493 T2	20140423	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140422
JP2013531493 T2	20141016	LSRV	-A02	DECISION OF REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20141015
KR100981598 B1	20100913	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100981598 B1	20100610	LSES	A201	REQUEST FOR EXAMINATION	
KR100981598 B1	20100701	LSES	A302	REQUEST FOR ACCELERATED EXAMINATION	
KR100981598 B1	20100716	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR100981598 B1	20100902	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR100981598 B1	20100906	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR100981598 B1	20130903	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20130904 YEAR OF FEE PAYMENT : 6
KR100981598 B1	20170303	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20170303 YEAR OF FEE PAYMENT : 7
KR101106130 B1	20120119	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101106130 B1	20100818	LSES	A201	REQUEST FOR EXAMINATION	
KR101106130 B1	20110419	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR101106130 B1	20111223	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR101106130 B1	20120109	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR101106130 B1	20150601	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20150601 YEAR OF FEE PAYMENT : 4
KR101106130 B1	20160107	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20160107 YEAR OF FEE PAYMENT : 5
KR101106130 B1	20170303	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20170303 YEAR OF FEE PAYMENT : 6
KR101106131 B1	20120119	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101106131 B1	20100818	LSES	A201	REQUEST FOR EXAMINATION	
KR101106131 B1	20110419	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR101106131 B1	20111223	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	

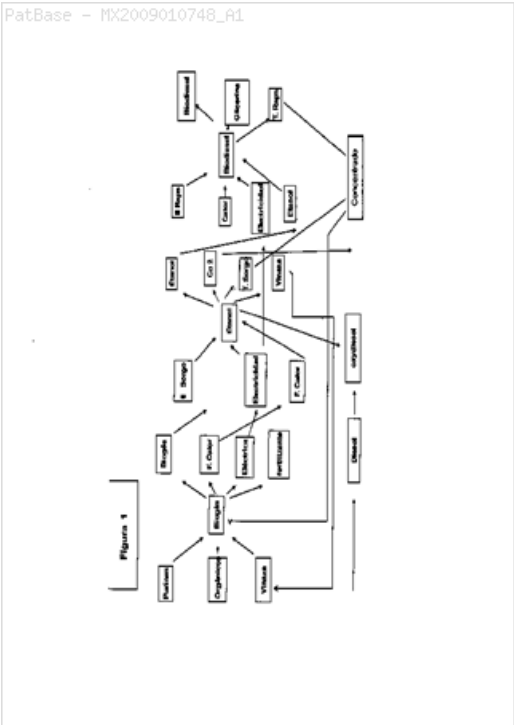
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KR101106131 B1	20150601	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20150601 YEAR OF FEE PAYMENT : 4
KR101106131 B1	20160107	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20160107 YEAR OF FEE PAYMENT : 5
KR101106131 B1	20170303	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20170303 YEAR OF FEE PAYMENT : 6
KR101186872 B1	20121002	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101186872 B1	20101108	LSSES	A201	REQUEST FOR EXAMINATION	
KR101186872 B1	20120717	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR101186872 B1	20120924	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR101186872 B1	20150729	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20150729 YEAR OF FEE PAYMENT : 4
KR101186872 B1	20170303	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20170303 YEAR OF FEE PAYMENT : 5
KR20110135318 A	20111216	LSPB	+	published / reissued	
KR20110135319 A	20111216	LSPB	+	published / reissued	
KR20120049055 A	20120516	LSPB	+	published / reissued	
US2013074405 AA	20130328	LSPB	+	published / reissued	
WO11155677 A1	20111215	LSPB	+	published / reissued	
WO11155677 A1	20121210	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2013514092 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A
WO11155677 A1	20121210	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO11155677 A1	20121210	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13703073 COUNTRY OF REF DOCUMENT : US

Title: INTEGRATED ENERGETIC SYSTEM AND BIO-REFINERY.

Abstract: DESCRIBED IS THE RELATIONSHIP OCCURRED BETWEEN THE ROW MATERIALS AND THE DIFFERENT INDUSTRIAL PLANTS. - BIOGAS PLANT: INCLUDES THE FOLLOWING ROW MATERIALS; 1 PURINES, 2 VINASSES (RESULTING FROM THE ETHANOL PLANT) AND 3 ORGANIC WASTES (LIQUID AND SOLID). ON THE OTHER HAND, THIS PLANT GENERATES THE FOLLOWING: 1. ELECTRIC POWER (USED IN THE ETHANOL AND BIODIESEL PLANTS), 2. A HEAT SOURCE (TRANSPORTED TO THE SILOS AND WAREHOUSES WHERE THE ROW MATERIAL OF THE ETHANOL AND BIODIESEL PLANTS ARE RECEIVED), 3. BIO-FERTILIZERS WHICH MAY BE SELL IN A DIRECT FORM OR MAY BE REFINED FOR WHICH A CALCAREOUS SOURCE MAY BE

Classifications:

International (IPC 8-9): H02P31/00 (Core/Invention)



Family:

Publication number	Publication date	Application number	Application date
MX2009010748 A1	20110504	MX20090010748	20091002

Priority:

MX20090010748 20091002

Probable Assignee: SALAZAR CRISTIAN AUGUSTO ROMERO

Assignee(s): (std): SALAZAR CRISTIAN AUGUSTO ROMERO

Assignee(s): CRISTIAN AUGUSTO ROMERO SALAZAR

Inventor(s): (std): SALAZAR CRISTIAN AUGUSTO ROMERO

Inventor(s): CRISTIAN AUGUSTO ROMERO SALAZAR

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
MX2009010748 A1	20110504	LSPB	+	published / reissued	

Title: Amphibian vehicle for shallow water.

Abstract: Source: EP0139789A1 Amphibian vehicle for shallow water, adapted for executing ground operations, such as dredging, removal of growth in channels, ditches and water courses. The vehicle has a hull (1) with **floating** capacity, comprising a pontoon under which several mechanisms for adjusting the height can be mounted, such as vertically slidable posts (32) or pivotable two armed levers (8). These rest in their turn on ground transport mechanisms, such as drums (7), track assemblies (30;31) or such. The invention places the mechanisms (8;32) for adjusting the height and the bottom transport mechanisms outwardly from the hull (1) and therefore freely movable with respect to the hull. This gives an improved stability during the operations standing on the bottom (4) and also during sailing, whereby the possible applications are enlarged. As the vehicle is self propelled also the displacement speed can be substantially increased.

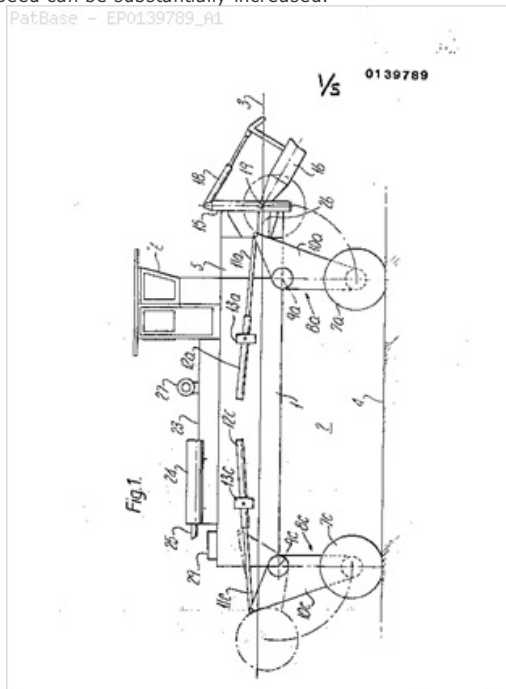
Classifications:

International (IPC 8-9): B60F3/00 (Advanced/Invention);
B60F3/00 (Core/Invention)

International (IPC 1-7): B60F3/00 E02F5/28

CPC: B60F3/0061

European: B60F3/00D



Family:

Publication number	Publication date	Application number	Application date
AU198322873 A1	19850627	AU19830022873	19831223
AU569713 B2	19880218	AU19830022873	19831223
CA1230268 A1	19871215	CA19830440322	19831102
DE3375989 D1	19880421	DE19833375989	19831030
EP0139789 A1	19850508	EP19830201552	19831030
EP0139789 B1	19880316	EP19830201552	19831030

Priority:

AU19830022873 19831223 CA19830440322 19831102 EP19830201552 19831030

Probable Assignee: HYDROWEGA HOLLAND BV

Assignee(s): (std): HYDROWEGA CONSULTING BV ; HYDROWEGA HOLLAND BV

Assignee(s): KOOT BASTIAAN CM

Inventor(s): (std): KOOT BASTIAAN C M ; KOOT BASTIAAN CORNELIS MARIA

Inventor(s): BASTIAAN CORNELIS MARIA KOOT ; KOOT BASTIAAN CM

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP

Designated states: BE DE FR GB LU NL

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU198322873 A1	19850627	LSPB	+	published / reissued	
AU569713 B2	19880218	LSGT	+	granted / extensions (spc, cpc, pte)	
CA1230268 A1	19871215	LSPB	+	published / reissued	
CA1230268 A1	20041215	LSLE	-MKEX	EXPIRY	
DE3375989 D1	19890413	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3375989 D1	19891005	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0139789 A1	19850508	LSPB	+	published / reissued	
EP0139789 A1	19860115	LSSE	+17P	REQUEST FOR EXAMINATION	EFFECTIVE DATE :

				FILED	19851031
EP0139789 A1	19860917	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19860730
EP0139789 A1	19880316	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : BE EFFECTIVE DATE : 19880316
EP0139789 A1	19881030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : GB EFFECTIVE DATE : 19881030
EP0139789 A1	19881031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : LU DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19881031
EP0139789 A1	19890308	LSGT	+26N	NO OPPOSITION FILED	
EP0139789 A1	19890701	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : DE EFFECTIVE DATE : 19890701
EP0139789 A1	19890705	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	
EP0139789 A1	19971014	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : FR PAYMENT DATE : 19971014 YEAR OF FEE PAYMENT : 15
EP0139789 A1	19971027	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : NL PAYMENT DATE : 19971027 YEAR OF FEE PAYMENT : 15
EP0139789 A1	19990501	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : NL DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19990501
EP0139789 A1	19990630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : FR DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19990630
EP0139789 A1	19990701	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	EFFECTIVE DATE : 19990501
EP0139789 A1	19990730	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0139789 B1	19880316	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: TREATMENT OF NITROGEN AND PHOSPHORUS COMPOUNDS IN PIG-BREEDING WASTEWATER OBTAINED FROM THE PROCESS OF ANAEROBIC MICROBIAL PROCESSING USING AQUATIC PLANTS (Machine translation)

Abstract: Source: VN1451U Useful solution refers to the process of nitrogen and phosphorus compounds in pig-breeding wastewater obtained from treating anaerobic micro-organisms using aquatic plants, this process includes the steps of: micro-aerobic processing of waste water from anaerobic microbial processing platform to metabolize nitrogen compounds into nitrates (NO⁻³) that created the sewage has been processed aerobic; waste water obtained after the aerobic processing step by aquatic **vegetation**, a combination of **floating** plants, plant and process flow across platforms (Chrysopogon zizanioides) Vetiver for **support**. Aquatic plant species used in useful solutions is selected to match the ability to handle and natural conditions, the crop of Vietnam to ensure stable handling efficiency, saving and processing costs.

Classifications:

International (IPC 1-7): C02F3/00 C02F3/32

Family:

Publication number	Publication date	Application number	Application date
VN1451 U	20161226	VN20160000237U	20140924

Priority:

VN20160000237U 20140924

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
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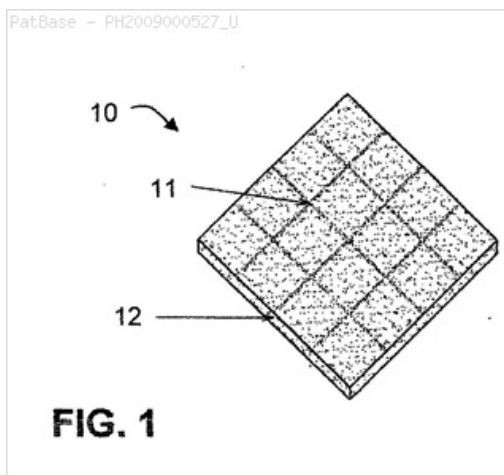
VN1451 U	20161226	LSPB	+	published / reissued	
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Title: FIBRE BIOMEMBRANE SUBSTRATE

Abstract: Source: PH2009000527U Fibre Biomembrane (FBM) is a modular, lightweight, flexible and adaptable planting substrate that provides micro and macro plant nutrients, root reinforcement and branch and rhizome **support**, aeration, and moisture retention that are all conducive for seed germination and plant growth. The FBM and its **vegetation** will provide insulation to the building, interior and exterior beautification of buildings and landscape, and will provide food and livelihood for the dweller.

Classifications:

International (IPC 8-9): A01G31/00 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
PH2009000527 U	20110711	PH20090000527U	20090901

Priority:

PH20090000527U 20090901

Probable Assignee: NICANOR L CUENCA

Assignee(s): NICANOR L CUENCA

Inventor(s): (std): NICANOR L CUENCA ; SAMUEL G GELERA

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
PH2009000527 U	20110711	LSPB	+	published / reissued	

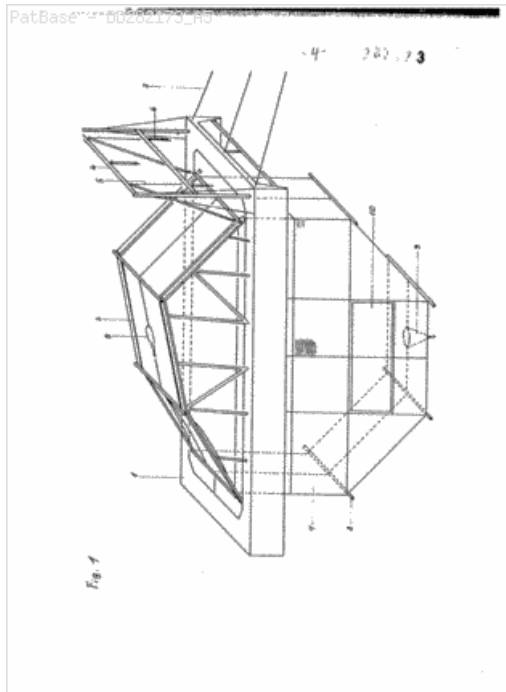
Title: FISCHHALTUNGSEINRICHTUNG FISH ATTITUDE BE TOWARDS (Machine translation)

Abstract: Source: DD282173A [Source: Claim 1] 1 Pa.; ntf»r»sprrch: Fchhaltungseinrichtung, dadurch gekennzeichnet, dass ein katamaranaehnlicher, Schwimmkoerper (1) aufweisender und innen offener Ponton einen A-Mast (4) mit Hebezeugen (5,6) sowie zwei schiefe Ebenen (3) traegt, an welchen ein vieleckiger, durch Spreizbaeume (8) geformter Netzaefig (7) aufgehaeugt und gefuehrt wird. [Source: claim 1] «« 1 PA.; ntf» r» sprrch: Fchhaltungseinrichtung, characterised in that a similar catamaran, **float** (1) facing up and inside open pontoon A mast carries (4) inclined hoists (5,6), as well as two planes (3), on which is hung up and led a polygonal, shaped by spreading trees (8) net cage (7).

Classifications:

International (IPC 8-9): A01K61/00 A01K75/04 (Advanced/Invention);
A01K61/00 A01K75/00 (Core/Invention)

International (IPC 1-7): A01K61/00 A01K75/04



Family:

Publication number	Publication date	Application number	Application date
DD282173 A5	19900905	DD19890327561	19890413

Priority:

DD19890327561 19890413

Probable Assignee: INST HOCHSEEFISCHEREI

Assignee(s): (std): INST HOCHSEEFISCHEREI

Assignee(s): INSTITUT FUER HOCHSEEFISCHEREI UND FISCHVERARBEITU ; INSTITUT FUER HOCHSEEFISCHEREI UND FISCHVERARBEITUNG DD

Inventor(s): (std): MIESKE BERND ; MOHR THOMAS

Inventor(s): MOHR THOMAS DD ; MIESKE BERND DD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DD282173 A5	19900905	LSGT	+	granted / extensions (spc, cpc, pte)	
DD282173 A5	19951123	LSLE	-ENJ	CEASED DUE TO NON-PAYMENT OF RENEWAL FEE	

Title: SPAWNING AID FOR FISH CULTURE

Abstract: Source: DE4316995C1 The mesh-sided cages (1) are positioned where the fish roe and the spawn collectors comprise shaped strips (9) set vertically over the cages. The fish rub over the strips and the spawn is collected to drop into the cages. The cage floors are covered with marine plants and the entry side of the water flow through the cages has absorbing panels (17) to generate a warm water flow through the cages.

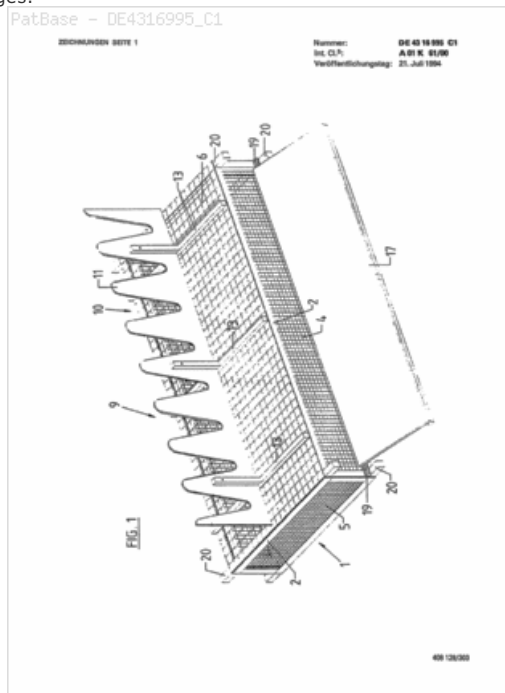
Classifications:

International (IPC 8-9): A01K61/00 (Advanced/Invention);
A01K61/00 (Core/Invention)

International (IPC 1-7): A01K61/00

CPC: A01K61/70

European: A01K61/00E



Family:

Publication number	Publication date	Application number	Application date
DE4316995 C1	19940721	DE19934316995	19930521

Priority:

DE19934316995 19930521

Probable Assignee: VIELBERTH INST ENTW AND FORSCH

Assignee(s): (std): VIELBERTH INST ENTW AND FORSCH

Assignee(s): F ENTWICKLUNG U FORSCHUNG DR VIELBERTH 93059 REGENSBURG INST KG ; INSTITUT FUER ENTWICKLUNG UND FORSCHUNG DR VIELBER ; INSTITUT FUER ENTWICKLUNG UND FORSCHUNG DR VIELBERTH KG 93059 REGENSBURG

Inventor(s): (std): VIELBERTH JOHANN DR

Inventor(s): VIELBERTH JOHANN DR 8411 ZEITLARN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE4316995 C1	19940721	LSGT	+	granted / extensions (spc, cpc, pte)	
DE4316995 C1	19940721	LSPB	+8100	PUBLICATION OF THE EXAMINED APPLICATION WITHOUT PUBLICATION OF UNEXAMINED APPLICATION	
DE4316995 C1	19940721	LSGT	+D1	GRANT (NO UNEXAMINED APPLICATION PUBLISHED) PATENT LAW 81	
DE4316995 C1	19950126	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE4316995 C1	19980507	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	

Title: VOLTATHERM-DACHZIEGEL VOLTATHERM-TILE (Machine translation)

Abstract: Source: DE20108106U1 (Claim 1) Voltai. hcrm-Dachziegei Ansprüche Ansprüche: 1. Schuppenfoermige Elemente, insbesondere Dachziegel fuer die Bedeckung von Daechern in an sich bekannter, herkoemmlicher Weise, die durch Ueberlappungsbereiche gekennzeichnet sind, die beispielsweise mit Kopf-, Fussund/oder Seitenfalz vorliegen.

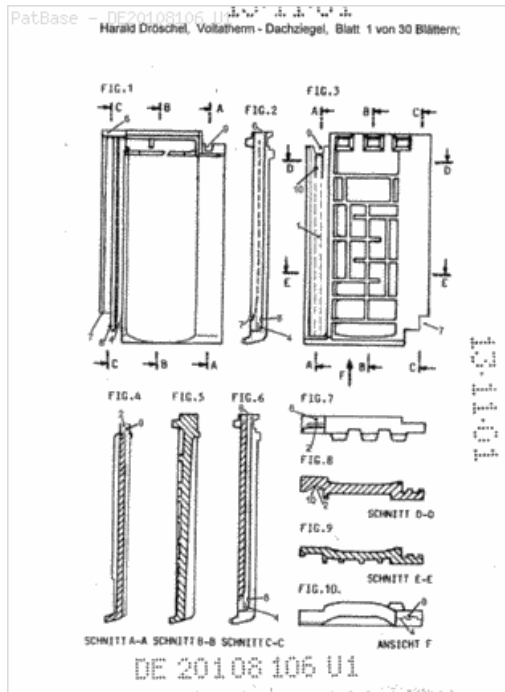
Machine translation: (Claim 1) Voltai. Hcrm Dachziegei of requirements of requirements: 1. Schuppenfoermige of elements, in particular roofing tiles for the coverage of roofs in actually well-known, conventional way, which are characterized by lap ranges, those for example with head, Fussund/or side creases are present.

Classifications:

International (IPC 8-9): E04D1/04 E04D13/18 F24J2/04 H01L31/048 H01L31/058 H02S20/23 H02S20/25 H02S40/44 (Advanced/Invention); E04D1/02 E04D13/18 F24J2/04 H01L31/048 H01L31/058 (Core/Invention)

International (IPC 1-7): E04D13/18 H01L31/0392 H01L31/058 **CPC:** E04D1/04 F24J2/0455 H02S20/23 H02S20/25 H02S40/44 Y02B10/12 Y02B10/20 Y02B10/70 Y02E10/44 Y02E10/60

European: E04D1/04 F24J2/04B12 F24J2/04B14 H01L31/048B H01L31/048B2 H01L31/058 Y02B10/12 Y02B10/20 Y02B10/70 Y02E10/44 Y02E10/50 Y02E10/60



Family:

Publication number	Publication date	Application number	Application date
DE20108106 U1	20020228	DE20012008106U	20010514

Priority:

DE20012008106U 20010514

Probable Assignee:

DROESCHEL HARALD

Assignee(s): (std):

DROESCHEL HARALD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE20108106 U1	20020228	LSGT	+	granted / extensions (spc, cpc, pte)	
DE20108106 U1	20010514	LSLI	R086	NON-BINDING DECLARATION OF LICENSING INTEREST	
DE20108106 U1	20020404	LSGT	R207	UTILITY MODEL SPECIFICATION	EFFECTIVE DATE : 20020404
DE20108106 U1	20050317	LSLE	-R156	LAPSE OF IP RIGHT AFTER 3 YEARS	EFFECTIVE DATE : 20041201