



- (51) **International Patent Classification:**
E02D 5/80 (2006.01) *E02D 17/20* (2006.01)
- (21) **International Application Number:**
PCT/US2012/026305
- (22) **International Filing Date:**
23 February 2012 (23.02.2012)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
13/069,954 23 March 2011 (23.03.2011) US
- (71) **Applicant (for all designated States except US):** REYNOLDS PRESTO PRODUCTS INC. [US/US]; 6641 West Broad Street, Richmond, VA 23230-1723 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** SCHNEIDER, Cory [US/US]; 2638 Oakwood Avenue, Green Bay, WI 54301 (US). HANDLOS, William [US/US]; 801 Sequoia Court, Manitowoc, WI 54220 (US). BACH, Gary, M. [US/US]; 2232 East Cedar Ridge Drive, Appleton, WI 54915 (US). WEDIN, Bryan, S. [US/US]; 3230 Windover Road, Green Bay, WI 54313 (US).

(74) **Agent:** BRUESS, Steven, C.; Merchant & Gould P.C., P.O. Box 2903, Minneapolis, MN 55402-0903 (US).

(81) **Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

[Continued on next page]

(54) **Title:** ANCHOR ARRANGEMENT FOR USE WITH OPEN MAT SYSTEM; OPEN MAT SYSTEM; AND METHODS FOR REINFORCING EARTH

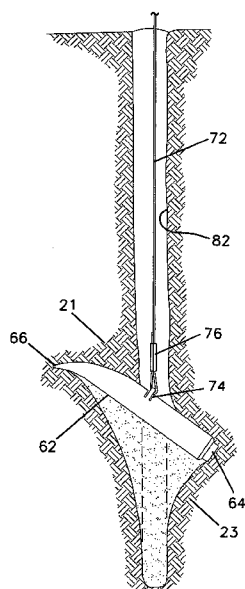


FIG. 5

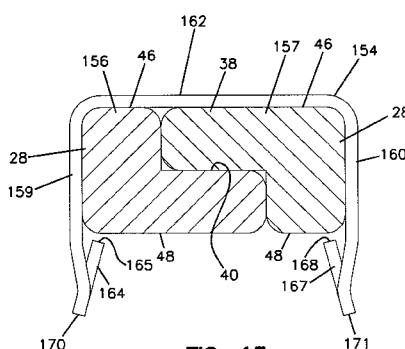


FIG. 13

(57) **Abstract:** An open mat system to reinforce turf includes an anchor arrangement to help secure the mat to the turf. The anchor arrangement includes an anchor head embedded in the earth, a cable connected to the anchor head, a cable connector device, and a brace. The cable is inserted into the connector device, which holds the cable against withdrawal from the connector device. The brace includes a receiver, in which the cable connector device is removably oriented in the receiver.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:
7 November 2013

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2012/026305

A. CLASSIFICATION OF SUBJECT MATTER
INV. E02D5/80 E02D17/20
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
E02D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 927 906 A (BACH GARY [US] ET AL) 27 July 1999 (1999-07-27) the whole document -----	1-23



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

18 June 2013

Date of mailing of the international search report

06/09/2013

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Friedrich, Albert

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2012/026305

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5927906	A	27-07-1999	NONE

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/026305

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-23

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-23

An anchor arrangement (claims 1-9), an open mat system using such anchor (claims 10-16), and a method of reinforced turf comprising such anchor (claims 17-23).

2. claims: 24-26

A clip for connecting together adjacent open grid mats.
