

(11) **EP 2 168 639 A1**

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication: **31.03.2010 Bulletin 2010/13**

(51) Int Cl.: **A63B 57/00** (2006.01)

(21) Application number: 08018864.2

(22) Date of filing: 29.10.2008

(84) Designated Contracting States:

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

Designated Extension States:

AL BA MK RS

(30) Priority: 30.09.2008 NO 20084137

(71) Applicant: Michelsen, Einar 0781 Oslo (NO)

(72) Inventor: Michelsen, Einar 0781 Oslo (NO)

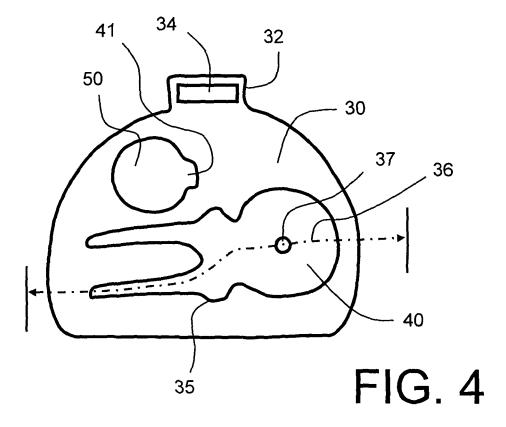
(74) Representative: Norris, Timothy Sweyn Acapo AS

Strandgatan 198 P.O. Box 1880 Nordnes 5817 Bergen (NO)

(54) Device of a pitchfork

(57) There is described an apparatus for a green fork (10) for managing grass in regions impacted by falling golf balls, therein the green fork (10) comprises a holding portion (12) for gripping by fingers, and a trunk (12) with two or more prongs (16, 18) for servicing said grass, and

is distinguished by the green fork (10) being disposed to be permanently or releasably attached to a marker sheet (30) for golf equipment, in that the apparatus is disposable between an active user state, and a passive storage state in the marker sheet (30).



EP 2 168 639 A1

20

40

Description

Field of the invention

[0001] The present invention relates to an apparatus in the form of a so-called "green fork" such as defined in the preamble of the following claim 1. The present invention has a resemblance to a fork-like instrument.

1

Background of the invention

[0002] Golfing ranges are often specially constructed

[0003] A green, for example a putting green, on a golf range is a region whereat grass is finely prepared. Each golf range's hole has such a putting green which encircles the hole on a slope.

[0004] The grass of the green is cut severely short, so that a ball is able to role several metres thereover. The hole is demarcated with a flag such that it can be seen from a given distance. When the ball lands of the green, the golf player proceeds to operate in a putting mode, namely the ball is knocked along the slope.

[0005] Contemporary golf balls weigh up to 46 grammes, have a diameter of substantially 43 millimetres and have a form resembling an ideal spherical form (information source: Wikipedia).

[0006] The aforementioned information suggests that a golf ball is a rather compact and heavy sphere. Thus, a golf ball, after receiving a strike, will fly through the air in a bowed trajectory and will meet the slope giving a powerful downward force when it contacts the grass there.

[0007] The blades of grass in the region of contact are bent downwards, and it can occur that the blades of grass can be broken and permanently bent. It has been shown that the grass in the region of contact can be damaged or even die. Such damage can therefore be permanent and relatively visible on a golfing range in the form of brown patches in the green.

[0008] Moreover, it has been shown that grass damage is less or completely diminished when the blades are lifted up from a bent position. There is therefore a rule during playing golf on golf ranges that an impact region should be "helped" to elevate itself again. Practice has shown that the damage is much less when grass is elevated in this manner.

[0009] It is therefore obligatory for golf players to personally carry with them an instrument which is useable for grass elevation. This instrument is known as a "green fork" as a term of art. It is also defined that this "green fork" is implemented with two linear prongs which extend from a stem. When the green fork is driven horizontally down in the grass, the grass blades pass between the prongs, and when one lifts the green fork up, individual grass stems are correspondingly lifted up to nearly a vertical disposition.

[0010] One can say that one thereby administers a

type of "first aid" which results in that the grass stems can be restored. In most cases, such first aid is successful, and no marks are left as a result of the balls impact upon the green.

Summary of the invention

[0011] The present invention is concerned with a new solution for retaining a "green fork" for a user, so that it no longer needs to lie in a pocket in trousers or a jacket of the user, but can have a firm location in connection with the user's other golfing equipment.

[0012] The apparatus pursuant to the present invention is distinguished by features which are recited in a post-characterizing portion of presently pending claim 1. Preferred embodiments of the invention are defined in dependent claims 2 to 8.

Description of the diagrams

[0013] The invention will now be described with reference to the following diagrams wherein:

Figure 1A is an illustration of a green fork in a typical disposition as seen directly from above:

Figure 1B is an illustration of the fork seen from

a side view:

are illustrations of a ball marker which Figures 2a, 2b

is used to mark an impact of a ball onto

a green;

Figure 3 is an illustration of an example of a se-

lection marker which is usually con-

temporarily employed;

is an illustration of the present inven-Figure 4

> tion itself, namely a selection marker which comprises suitable depressions for positioning of the aforementioned

ball marker and green fork; and

is an illustration of a cross-section of Figure 5

> a marker sheet pursuant to the invention, the illustration being along a dotted line 36 included in Figure 4.

Description of embodiments of the invention

[0014] The invention will be described with reference to Figure 1 which shows a green fork 10. The fork 10 is a flat broad fork form including a head 12 (as a holding part), a trunk 14 and two extending prongs 16, 18 which between them define a gap 20. This instrument is used to lift up the grass on the green in a manner as elucidated in the foregoing.

10

20

40

45

50

55

[0015] Figure 2 is an illustration a typical marker in the form of a round block **22** which is used to mark where the golf ball falls to a standstill on the green. Often the ball is removed quickly for accommodating a next player, and there is laid down a marker on the grass to show a position to where the ball should be returned afterwards. The thickness of the green fork 10 and the ball marker is optionally in a range of 1 mm to 5 mm, all depending upon how large they are in horizontal cross-section.

[0016] Figure 3 is an illustration of a typical marker sheet 30 which is used in many situations for marking golf equipment, when they are placed in carry bags, suitcases or similar. The marker sheet **30** is a half-rounded form and shown here, but optionally can be rectangular, completely round or have other unique forms/appearances. Moreover, the marker sheet **30** optionally has a thickness in a range of 1 mm to 5 mm.

[0017] In the Figures, there is shown a tab 32 having a hole 34 wherethrough a strap or similar to a bag can pass, such that the marker sheet 30 is coupled to the golf player's bag, or other equipment which is used in a golfing range. Such marker sheets are also susceptible to being fastened permanently to an equipment bag with adhesive, or releasable with help of a Velcro® system.

[0018] Figure 4 is an illustration of the invention itself. The marker sheet is fabricated with a depression **40** into which the green fork **10** is susceptible to be being pressed and stored there until there is a need for it.

[0019] It is envisaged that the depression **40** has a similar contour as the green fork **10**. Figure 5 is an illustration of a cross-section along the line **36** in Figure 4 in order to illustrate the depression **40**. A green fork **10** is indicated using a dashed line.

[0020] Beneficially, the green fork 10 has a similar extent sideways in relation to the depression 40 extent sideways, so that the green fork 10 is susceptible to being pressed down by fingers for enabling it to be placed correspondingly into the depression 40. In other words, there is used a press fit between the green fork 10 and the marker sheet 30. In order that the golf player should be able to take the green fork 10 out, the green fork 10 is formed with some ear-shaped depressions 33 and 35 respectively, into which the user is able to put his/her fingertips in order to gain access to the marker sheet's edge and pull it up over the depression 40. It is also possible that the marker sheet 30 comprises a small round through-penetrating finger hole 37 which is used to allow fingers to push up the green fork 10 from the depression

[0021] In Figure 6, there is shown an alternative to taking out the whole green fork 10 from the depression 33 and thereby separating it from the depression 33, so that the head end 12 of the green fork 10 is susceptible to being hinged as denoted by 39 (see both Figures 5 and 6) from an inside of the depression 40. The Figures 5 and 6 illustrate that the fork 10 is pushed up and is swung in an arc of the hinge 39. The hinge 39 is susceptible to being formed by the end of the green fork 10 material

being thinner so that it forms a weakened part which is used as a bendable region between the parts of the fork parts and head part. They can therewith be more easily mutually bent via the thinner part.

[0022] The ball marking ears 22 shown in plan view and side view in Figures 2a and 2b are susceptible in a corresponding manner to being provided for depression 50 as shown in Figure 4. Moreover, this depression 50 has a depression ear 41 which is used for setting fingers down into and flicking up the sheet-formed ball marker 22.

[0023] An advantageous alternative is shown in Figure 7 wherein there is shown that the bottom has a yet deeper depression on its left end, namely immediately underneath the leg16 of the green fork 10. When the green fork 10 is deployed in position, there is an "empty volume" 62 under the underside of the green fork 10 and down to the bottom of the depression 60. By way of example, in order to grip onto the legs16 of the green fork 10 using one's fingers, the head 12 is flipped up in an arc and the user grabs the head 12 and takes the green fork 10 out of the marker sheet 30.

[0024] The marker sheet 30 is susceptible to stay accessibly attached and is operable to be separated when the green fork 10 is to be used. The marker sheet 30 optionally, moreover, has a freely selected form. It can be round, oval, triangular, rectilinear and all other alternative plan forms. The thickness of the marker sheet 30 is beneficially in a range of about 3 mm to 5 mm. The depression has a depth down from the sheet's upper side with the same thickness as the green fork 10 which can be of a size in an order of 1 mm to 3 mm, depending upon the thickness of the sheet 30.

[0025] As an alternative to the solution where the back of the tag is adapted for the piece 30 by press adaptation, there can be provided a magnetic arrangement at the bottom of the depression and in the underside of the green fork 10. In such a case, the bottom of the depression comprises a magnet, the green fork 10, or at least a part thereof, is fabricated from magnetic material, such as a thin magnetic steel material such as a steel piece. The green fork 10 is susceptible, moreover, to being fabricated from any suitable material, metal, plastics material, wood or composite material. The green fork 10 can thereby be clicked into place in the depression and is easy to remove again. It is therefore and itself not necessary for there to be a precise pressure fit retention thetebetween.

Claims

 An apparatus for a green fork for management of grass in a region impacted by falling golf balls, wherein the green fork comprises a head portion adapted for being held by fingers, and a stem with two or more prongs for servicing said grass,

characterized in that

the green fork is adapted to permanent or releasable retention in a marker sheet for golf equipment, **in that** the green fork is deployable between an active user state and a passive storage state in the marker sheet.

5

2. An apparatus according to claim 1, characterized in that the green fork is adapted to be secured into a depression in the marker sheet which has a profile which substantially matches a profile of the green fork

3. An apparatus according to claim 2, **characterized** in **that** the depression and the profile of the green fork/circumference is disposed so that the green fork is securable within the depression by way of a press fit.

1

4. An apparatus according to claim 3, **characterized** in **that** the depression in the marker sheet comprises a number or depression ears (33, 35), into which a user of the apparatus is able to put his/her fingertips in order to access a corner of the marker sheet and pull the green fork out of the depression (40).

20

5. An apparatus according to claim 3, **characterized** in that a bottom of the marker sheet (30) comprises a penetrating hole (37) such that a user's finger is able to flip the pressure fit adapted green fork (10) out of the depression.

30

6. An apparatus according to claim 1, **characterized in that** the green fork is fastened into the depression by assistance of a magnetic element.

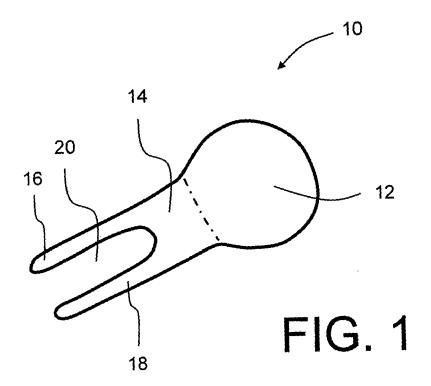
35

7. An apparatus according to claim 1, **characterized** in **that** the green fork is securely fastened to the marker sheet via an hinge element (39, Figs. 5 & 6) to the inside of the depression (40), whereby the green fork (10) is operable to swing about the hinge element (39) in an arc from a passive storage position and up for a deployed position.

40

8. An apparatus according to claim 1, characterized in that a bottom of the depression has a yet deeper depression in its left-hand end, namely directly beneath the prongs (16) of the green fork (10), when the green fork is disposed in position with an empty region (62) under an underside of the green fork and down to the bottom of the depression (60), whereby the prongs (16) of the green fork are operable for the head (12) to be flipped up by finger force, and the user is then able to grip the head and remove the green fork (10) out of the marker sheet (30).

55



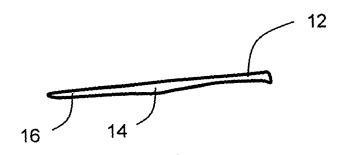
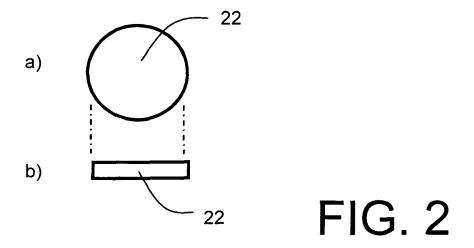


FIG. 1A



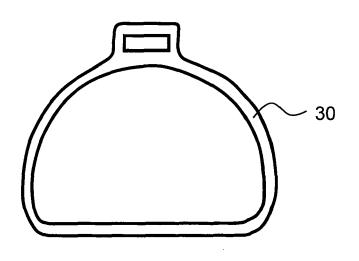
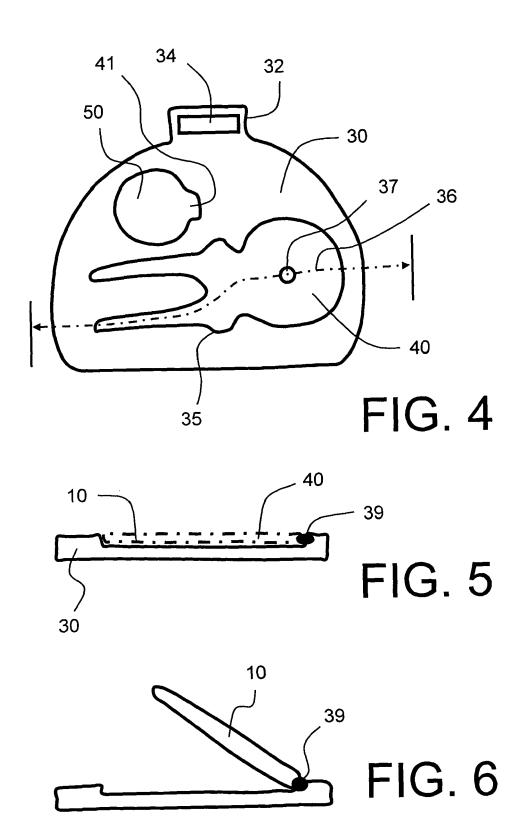


FIG. 3



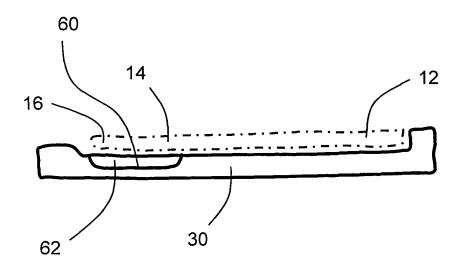


FIG. 7



EUROPEAN SEARCH REPORT

Application Number EP 08 01 8864

Category	Citation of document with ir of relevant passa	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Х	US 2004/237350 A1 (AL) 2 December 2004	LATHAM STEVE [US] ET (2004-12-02)	1-4	INV. A63B57/00
Υ	* figures 4,5,9 *		5,8	,
Х	GB 2 353 955 A (NEW [TW]) 14 March 2001		1-4	
Υ	* figures 1-3 *		5,8	
Х	US 4 736 877 A (CLA 12 April 1988 (1988 * figure 1 *		1,6	
Х	DE 201 20 243 U1 (S JOACHIM VO [DE]) 7 * figures *	CHOEN ANGERER HANS March 2002 (2002-03-07)	1,7	
Х	US 3 819 095 A (SNY 25 June 1974 (1974- * figures 1-3 *		1	
X	WO 2007/110007 A (A 4 October 2007 (200 * figures 1,2 *	TAIYAN JAMSHID [DE]) 17-10-04)	1	TECHNICAL FIELDS SEARCHED (IPC)
Υ	US 6 966 851 B1 (EN AL) 22 November 200 * paragraph [0010];		8	
Υ	US 2004/142773 A1 (22 July 2004 (2004- * paragraphs [0008]		5	
	The present search report has I	peen drawn up for all claims	1	
	Place of search	Date of completion of the search	1	Examiner
Munich		27 October 2009	Lu	ndblad, Hampus
<u> </u>	ATEGORY OF CITED DOCUMENTS	T : theory or princip		<u>.</u>
X : part Y : part docu	icularly relevant if taken alone icularly relevant if combined with anoti ument of the same category inclogical background	E : earlier patent do after the filing da	cument, but pub te in the application	lished on, or

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 08 01 8864

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

27-10-2009

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2004237350	A1	02-12-2004	NONE		
GB 2353955	Α	14-03-2001	NONE		
US 4736877	Α	12-04-1988	NONE		
DE 20120243	U1	07-03-2002	AU WO	2002358688 A1 03051469 A2	30-06-200 26-06-200
US 3819095	Α	25-06-1974	NONE		
WO 2007110007	Α	04-10-2007	NONE		
US 6966851	B1	22-11-2005	NONE		
US 2004142773	A1	22-07-2004	CA	2416579 A1	17-07-200

 $\stackrel{\circ}{\mathbb{L}}$ For more details about this annex : see Official Journal of the European Patent Office, No. 12/82