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(54) **Title:** MOTORIZED GOLF TROLLEY FOR THE COMBINED TRANSPORT OF AN USER AND A BAG OF GOLF CLUBS

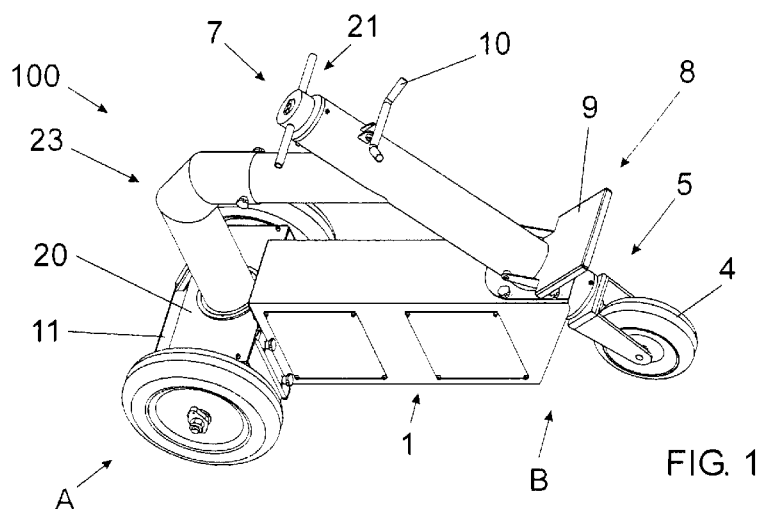


FIG. 1

(57) **Abstract:** Motorized golf trolley for the combined transport of at least a person and at least a bag of golf clubs, of the type comprising: a seat (11) apt to accommodate and to bear at least an user; a housing (8) apt to accommodate at least a bag of golf clubs; a steering mechanism (5); and a control element (7) connected to the steering column (6), which allows the user to drive the trolley (100) while walking or on board of the same.

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MOTORIZED GOLF TROLLEY FOR THE COMBINED TRANSPORT OF AN USER AND A BAG OF GOLF CLUBS

TECHNICAL FIELD OF THE INVENTION

- 5 The present invention relates to the technical field of motorized trolleys for the transport of bags containing golf clubs.

DESCRIPTION OF THE BACKGROUND ART

10 The game of golf is practiced on large green areas of plains, hills or mountains. A golf course can be variable dimensioned; a single fairway comprising only one hole can extend several hundred metres, therefore accomplishing the 18 holes can imply long walks, during which golfers have to bring their heavy and cumbersome bag of golf clubs with them.

15 The bag of golf clubs can be carried over one's shoulder or can be carried on a suitable trolley, which has to be dragged by the golfer; in both cases however, transporting the bag of golf clubs on the fairways of the golf course can be difficult and the golfer can get tired in advance.

20 To solve this drawback, the market has provided motorized trolleys, generally of electrical type, for transporting the bag of golf clubs. In this way, the golfer can drive the electrical trolley without fatigue, walking on the fairways of the golf course between the strokes.

25 Alternatively, golf courses supply hireable electrical vehicles (golf carts) for the transport of more golfers and their bags containing the golf clubs; in this case, the golfer goes across the fairways of the golf

course on board of the electrical vehicle.

Some golfers prefer walking on the golf course, in order for example to have a healthy walk, to enjoy the surrounding views and/or to feel in close contact with nature; these golfers do not find congenial the usage
5 of electrical vehicles, but they get tired while walking on the fairways of the golf courses even using the electrical trolleys for transporting the bag of golf clubs.

SUMMARY OF THE INVENTION

10 It is an object of the present invention to provide a newly designed motorized trolley for the combined transport of an user and one bag of golf clubs, which is able to meet the needs of this kind of golfers, who want to walk on the fairways of the golf course and when needed (for example in case of tiredness) can have a practical transport means at
15 their disposal.

Another object of the present invention is to provide a motorized trolley, which is reliable, functional, safe and compact and whose costs are relatively reduced with respect to the advantages, which it is intended to pursue.

20 Yet another object of the present invention is to provide a motorized trolley, which is practical and modular, so that the user can disassemble it in several separate modules in order to facilitate its transport, for example in a car.

Said above-mentioned objects are accomplished by means of a
25 motorized trolley for the combined transport of a person and a bag of golf clubs, of the type comprising: said motor; a supply of said motor;

rolling members driven by said motor, said trolley being characterized in that it comprises: a seat apt to accommodate and to bear at least an user; a housing apt to accommodate at least a bag of golf clubs; a steering mechanism, comprising the steering column; and a control
5 element, actively connected to said steering column, the control element allowing said at least one user to drive said trolley while walking or on board of the same.

BRIEF DESCRIPTION OF THE DRAWINGS

10 The features of the invention, not emerging from the preceding description, will be better highlighted in the following, according to the claims and by means of the appended drawings, in which:

- figure 1 shows a prospective view of the motorized trolley according to the present invention;

15 - figures 2, 4 show the trolley of figure 1, in a front and top view respectively, some portions having been omitted to better highlight other ones;

- figure 3 shows the trolley of figure 1 in a cross-sectional schematic view.

20

DESCRIPTION OF PREFERRED EMBODIMENTS

With reference to the appended figures, the motorized trolley according to the present invention is indicated in its entirety by the general reference number 100 and comprises: a not shown motor, for example
25 of electrical type, which is arranged in a case 20 provided in the rear

portion A of the trolley 100; a battery supply, not shown as well, arranged for example in the housing compartment of the central box-type portion 1 of the trolley 100; two motive wheels 2, 3 rotated by the electrical motor and arranged in the rear portion A of the trolley 100, at
5 the sides of the case 20: a front wheel 4 arranged in the front portion B of the trolley 100; a steering mechanism 5 connected to the front wheel 4, comprising a steering column 6; a control element 7 connected to the steering column 6, comprising a handlebar 21; a housing 8 apt to accommodate the bag of golf clubs (not indicated), which comprises a
10 support 9 to place the bag of golf clubs and a hook 10 to stably hold the same bag placed on the support 9; and a seat 11 apt to accommodate and to bear an user, arranged in the rear portion A of the trolley 100.

The steering column 6 is inclined and comprised in a tubular protection element 22. The trolley 100 comprises also a tubular stiffening element
15 23, which connects the tubular protection element 22 to the case 20 of the motor.

In the shown example, the seat 11 is a footboard supported by the frame of the trolley 100 and movable between two positions, that is to say a retracted position in which the footboard 11 is arranged at least
20 partially beneath the case 20 (position not shown in the figures) and a taken out position E (see for example figure 4) in which the footboard 11 projects from the profile of the trolley 100 to receive an user standing on the same. The footboard 11 can be moved manually by the user or can be electrically driven by means of a second not shown
25 electrical motor.

The control element 7 comprises also a not shown control panel to control regulating means (not shown as well) of the electrical motor power, in order to modulate the running speed of the electrical trolley

100; in the following, for simplicity, it is supposed to replace the control panel with suitable means integrated in the handlebar 21.

The inventive motorized trolley 100 can be used in two distinct ways.

5 Firstly, the user is on board of the trolley 100, resting on the footboard 11 which is in the taken out position E: the handlebar 21 and the control means are so positioned to allow the user to easily and safely drive the trolley 100. In this way, the electrical trolley functions as an electrical vehicle for the transport of the golfer and his bag of golf clubs.

10 Secondly, the user drive the motorized trolley 100 (the position of the footboard 11 can be both taken out and retracted) walking laterally to the trolley 100 itself; the specific and compact configuration of the trolley 100 in its entirety allows the user to drive the same easily and without difficulties by means of the handlebar 21 and the control means integrated therein. From a functional point of view, this second way of
15 usage is equivalent to that of a conventionally designed electrical trolley, intended only for the transport of the bag of the golf clubs, as the golfer walks across the fairways of the golf course.

The present invention is advantageous in that it provides a motorized trolley for the combined transport of a person and a bag of golf clubs,
20 which solves the drawbacks reported in the beginning, satisfying successfully the prefixed aims; combined transport of a person and a bag of golf clubs suggests therefore the possibility to use the motorized trolley 100 according to the two above-mentioned ways, to allow the transport of the golfer and his bag of golf clubs (first way of usage) or of
25 the bag of golf clubs alone (second way of usage).

Therefore, the motorized trolley 100 is very versatile and suitable to meet the needs of a remarkable number of golfers; by way of example,

in fact, the golfer can begin the round of golf walking on the fairways (second way of usage of the trolley 100); then, for example, he can get on board of the trolley 100, because of tiredness, and drive it as an electrical vehicle (first above-described way of usage) for at least a portion of the round. The inventive trolley 100 is therefore a valid help for the golfer, as it allows him to enjoy his round of golf in a relaxing way, since the golfer can get on board of the trolley or drive it while walking at any time and without difficulties.

The present invention is also advantageous in that it provides a reliable, safe, functional, compact, motorized trolley, which is little cumbersome and whose costs are relatively reduced with respect to the attained advantages.

Yet another advantage of the invention is to provide a motorized trolley which can be disassembled in several separate modules, to allow an easy transport of the disassembled trolley, for example, in cars of middle-small dimensions; disassembling and assembling the motorized trolley are particularly easy operations and therefore the user is able to perform them without using particular means.

Those expert in the art will note that the guide element 7 can be configured also in different ways, for example as a guide bar (not shown) of determined length, actively connected to the steering column 6, provided with a handle in which are integrated the means regulating the running speed of the trolley 100.

According to a not shown variant, the footboard 11 is fixed in the taken out position E and supports a seat.

It is to be précised that the inventive trolley can be configured according to a not shown embodiment for the combined transport of more than a

user and bags of golf clubs. In such a case, by way of example, the trolley 100 can be designed with greater side dimensions, for example providing greater dimensioned footboard 11 and support 9 for the bags.

Another embodiment (not shown) does not provide the central box-type portion 1; in such a case the batteries are integrated in the tubular protection element 22, which is so dimensioned to contain them, in order to optimize the distribution of the weights of the trolley 100 (motor in the rear portion A, batteries in the front portion B).

It is intended that the preceding description is purely exemplary and not limiting, therefore possible practical-applicative variations are intended to fall into the protective scope of the invention, as above-described and defined by the following claims.

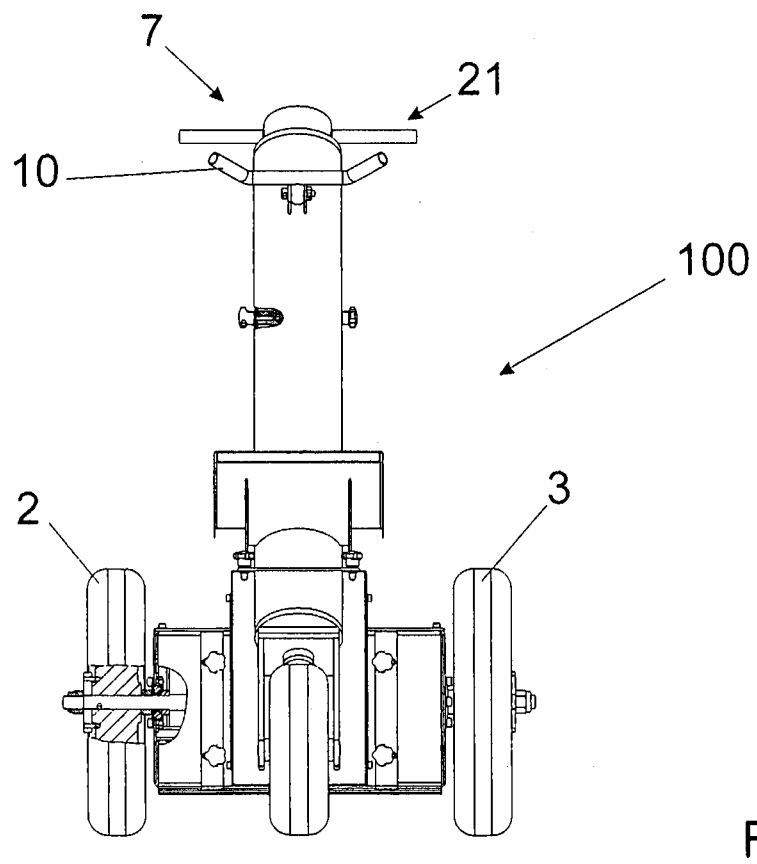
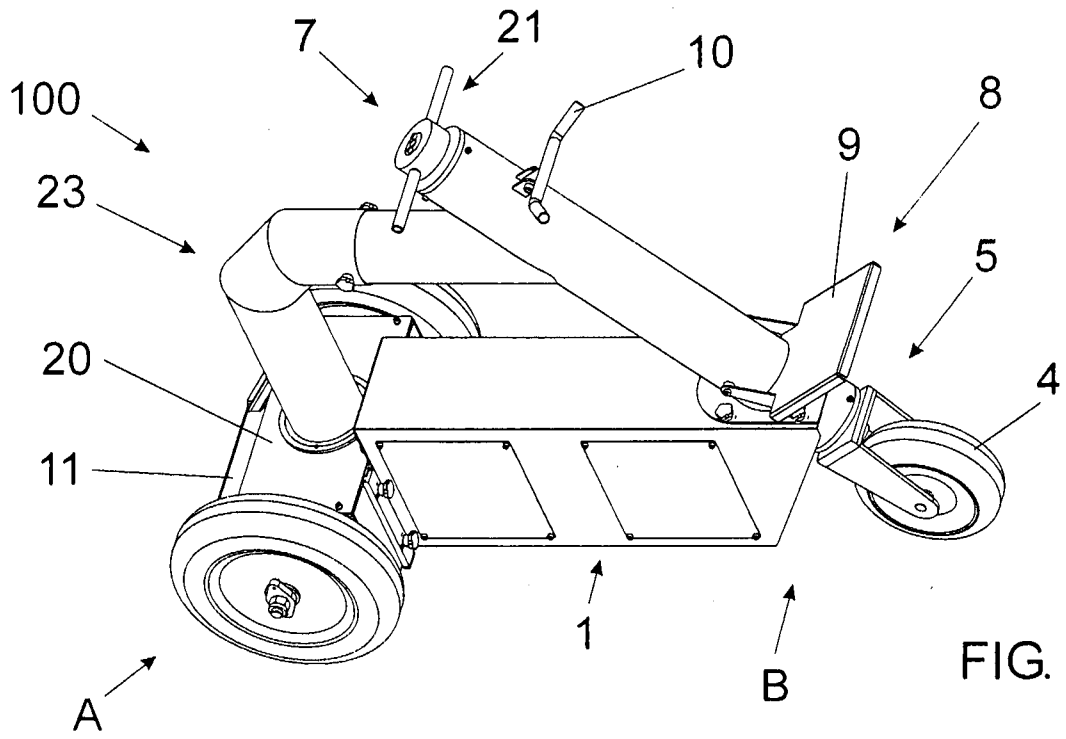
CLAIMS

1. Motorized trolley for the combined transport of at least a person and at least a bag of golf clubs, of the type comprising: said motor; a supply of said motor; rolling members (2, 3, 4) driven by said motor, said
5 trolley (100) being characterized in that it comprises: a seat (11) apt to accommodate and to bear at least an user; a housing (8) apt to accommodate at least a bag of golf clubs; a steering mechanism (5) comprising the steering column (6); and a control element (7), actively connected to said steering column (6), which control element (7) allows
10 said at least one user to drive said trolley (100) while walking or on board of the same trolley (100).
2. Trolley according to claim 1, characterized in that said control element (7) comprises a guide element (21) to steer said trolley.
3. Trolley according to claim 2, characterized in that said guide element
15 is a handlebar (21).
4. Trolley according to claim 1 or 2, characterized in that said control element (7) comprises means to control said motor functioning.
5. Trolley according to claim 1, characterized in that said seat (11) comprises at least a seat to sit thereon.
- 20 6. Trolley according to claim 1, characterized in that said seat (11) comprises a footboard, which can be moved between a retracted position, in which it is at least partially embedded in said trolley (100), and a taken out position (E), in which it projects from the profile of the trolley (100) to bear said at least one user.
- 25 7. Trolley according to claim 5 or 6, characterized in that said seat (11) is arranged in the rear portion (A) of said trolley (100).

8. Trolley according to claim 1 or 2, characterized in that said motor of said trolley (100) is electrical and in that said supply comprises one or more batteries.

9. Trolley according to claim 1, characterized in that said rolling
5 elements (2, 3, 4) comprise three wheels, two being rear motive wheels (2, 3) and one being a front wheel (4).

10. Trolley according to claim 1, characterized in that said housing (8) apt to accommodate at least a bag of golf clubs is arranged in the front portion (B) of said trolley (100).



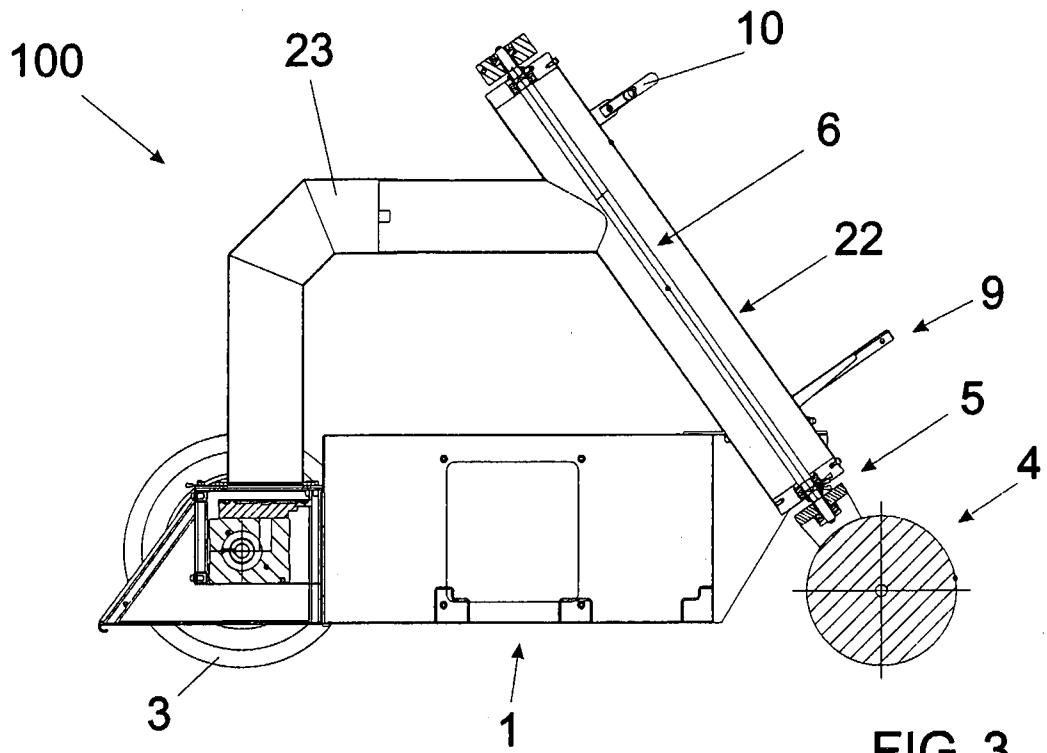


FIG. 3

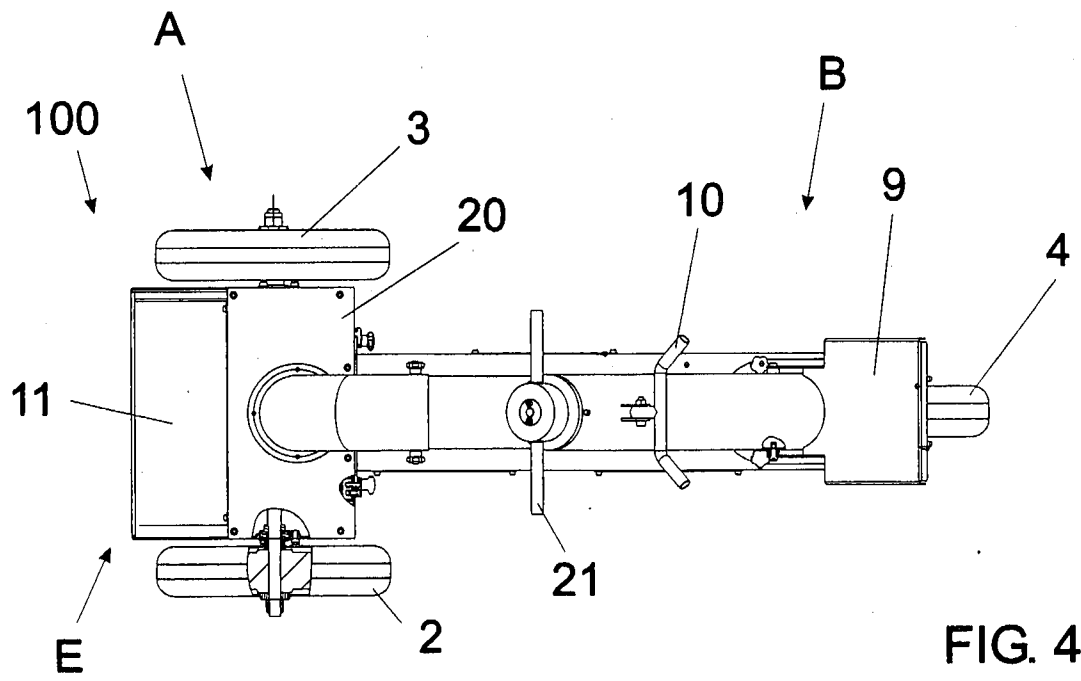


FIG. 4

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2008/000690

A. CLASSIFICATION OF SUBJECT MATTER INV. A63B55/08 B62D51/02		
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) A63B B62D		
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 practical, search terms used) EPO-Internal, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 848 504 A (OLSON JOHN H [US]) 18 July 1989 (1989-07-18) column 4, line 50 - column 5, line 27; figures 1-4 column 6, lines 3,4 -----	1-4,6-10
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.		
<input checked="" type="checkbox"/> See patent family annex.		
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A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document 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	Date of mailing of the international search report	
24 September 2008	02/10/2008	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Blondeau, Alain	

INTERNATIONAL SEARCH REPORT

International application No

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Information on patent family members

International application No PCT/IB2008/000690

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