



US011931633B2

(12) **United States Patent**
Reimers et al.

(10) **Patent No.:** **US 11,931,633 B2**
(45) **Date of Patent:** ***Mar. 19, 2024**

(54) **RIDEABLE GOLF BAG CART/CYCLE**

B62K 19/46 (2006.01)
B62J 50/20 (2020.01)

(71) Applicant: **Eric W. Reimers**, Missoula, MT (US)

(52) **U.S. Cl.**

(72) Inventors: **Eric W. Reimers**, Missoula, MT (US);
Michael J. Deden, Missoula, MT (US);
Dale H. Truett, Missoula, MT (US)

CPC **A63B 55/61** (2015.10); **B60R 3/002**
(2013.01); **B60R 9/08** (2013.01); **B60R 25/04**
(2013.01); **B60R 25/20** (2013.01); **B62H 5/08**
(2013.01); **B62J 11/00** (2013.01); **B62J 17/08**
(2013.01); **B62J 99/00** (2013.01); **B62K 11/02**
(2013.01); **B62K 11/14** (2013.01); **B62K 19/46**
(2013.01); **A63B 2055/601** (2015.10); **A63B**
2055/602 (2015.10); **A63B 2210/50** (2013.01);
B62J 50/20 (2020.02); **B62K 2204/00**
(2013.01)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(58) **Field of Classification Search**

CPC ... **A63B 55/60**; **A63B 55/61**; **A63B 2055/601**;
A63B 2055/602; **B60R 9/08**; **B62D 61/02**
See application file for complete search history.

(21) Appl. No.: **17/838,341**

(22) Filed: **Jun. 13, 2022**

(65) **Prior Publication Data**

US 2022/0305357 A1 Sep. 29, 2022

(56) **References Cited**

U.S. PATENT DOCUMENTS

Related U.S. Application Data

(63) Continuation of application No. 16/423,080, filed on May 27, 2019, now Pat. No. 11,358,042.

(60) Provisional application No. 62/677,315, filed on May 29, 2018, provisional application No. 62/677,332, filed on May 29, 2018.

2,614,477 A * 10/1952 Habenicht A01G 20/12
172/170

2,908,510 A 6/1957 Lossau
3,247,923 A 4/1966 Cornell
3,605,929 A 9/1971 Rolland
3,648,795 A 3/1972 Moulton
(Continued)

(51) **Int. Cl.**

A63B 55/60 (2015.01)
B60R 3/00 (2006.01)
B60R 9/08 (2006.01)
B60R 25/04 (2013.01)
B60R 25/20 (2013.01)
B62H 5/08 (2006.01)
B62J 11/00 (2020.01)
B62J 17/08 (2020.01)
B62J 99/00 (2020.01)
B62K 11/02 (2006.01)
B62K 11/14 (2006.01)

Primary Examiner — Minnah L Seoh

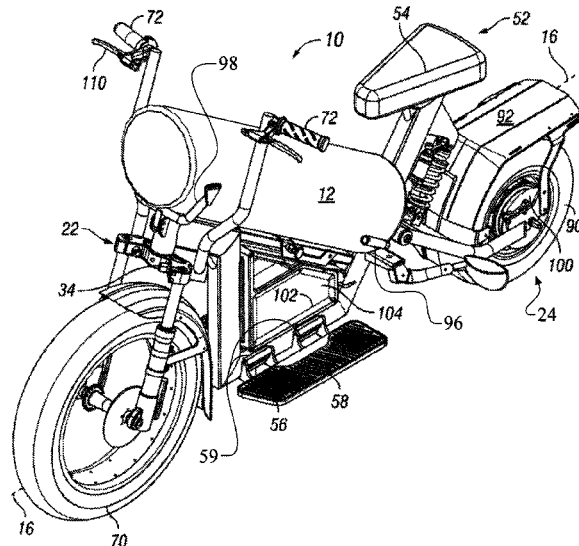
Assistant Examiner — Michael R Stabley

(74) Attorney, Agent, or Firm — Dawsey Co. LPA; David J. Dawsey

(57) **ABSTRACT**

A rideable golf cycle adapted to transport a rider and a golf bag for use on a golf course. The cycle includes a frame and a seat, a front wheel and steering components, a rear wheel, an inclined bag support structure extending between the legs of the rider, and a motor/control subassembly.

26 Claims, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

| | | | | | | | |
|-----------|-----|---------|----------------|--------------|------|---------|-------------|
| 3,777,836 | A | 12/1973 | Riza | 8,308,178 | B2 | 11/2012 | Hoerdum |
| 3,979,136 | A | 9/1976 | Lassiere | 8,365,850 | B2 | 2/2013 | Gal |
| 4,874,055 | A | 10/1989 | Beer | 8,490,732 | B2 | 7/2013 | Sugimoto |
| 5,265,695 | A | 11/1993 | Piazzzi | D745,843 | S | 12/2015 | Wuttig |
| 5,277,267 | A | 1/1994 | Tiffany | 9,199,147 | B2 | 12/2015 | Azizi |
| 5,328,193 | A | 7/1994 | Shiew | 9,339,431 | B2 | 5/2016 | Menard |
| 5,697,464 | A * | 12/1997 | Gojak | 9,550,540 | B1 | 1/2017 | Wang |
| | | | B62M 6/60 | 10,016,666 | B2 | 7/2018 | Reimers |
| | | | 180/209 | 10,179,624 | B1 | 1/2019 | ODonnell |
| 5,697,467 | A | 12/1997 | Gojack | 10,189,529 | B1 | 1/2019 | Wang |
| 5,899,284 | A | 5/1999 | Reimers | 11,260,935 | B2 | 3/2022 | Reime |
| 6,139,032 | A | 10/2000 | Hartman | 11,358,042 | B2 | 6/2022 | Reimers |
| 6,659,208 | B2 | 12/2003 | Gaffney | 2008/0023236 | A1 | 1/2008 | Falkiner |
| 7,086,491 | B2 | 8/2006 | Matte | 2010/0206652 | A1 | 8/2010 | Kielland |
| 7,537,076 | B2 | 5/2009 | Falkiner | 2016/0052464 | A1 | 2/2016 | Wadey |
| 7,631,715 | B2 | 12/2009 | Falkiner | 2017/0254137 | A1 | 9/2017 | Peck |
| 7,690,390 | B2 | 4/2010 | Hopkins | 2017/0327084 | A1 * | 11/2017 | Park |
| 8,091,749 | B2 | 1/2012 | Stautzenberger | 2018/0022411 | A1 | 1/2018 | Kistemaker |
| | | | | 2018/0056152 | A1 | 3/2018 | Reimers |
| | | | | | | | B60R 16/037 |

* cited by examiner

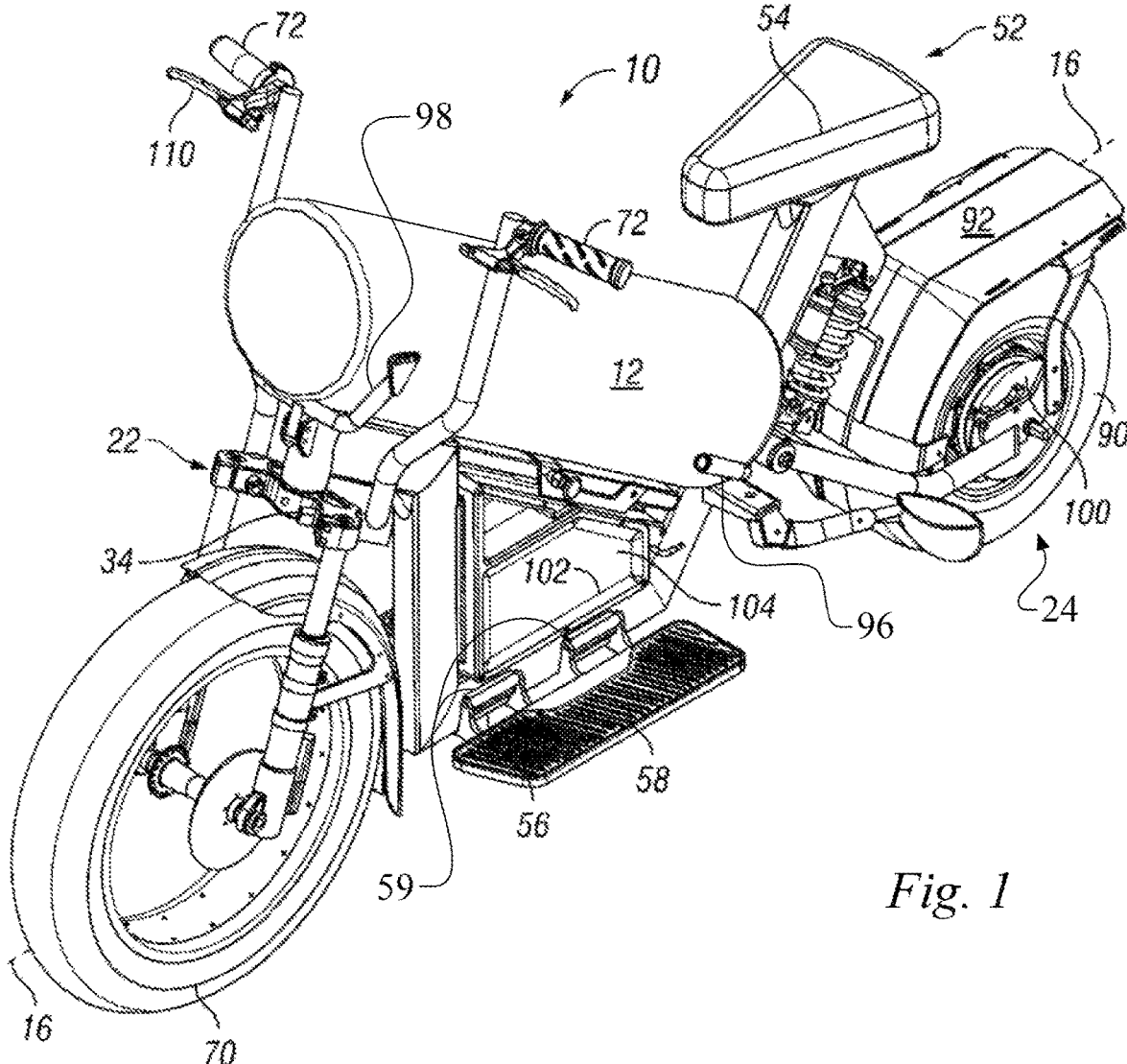


Fig. 1

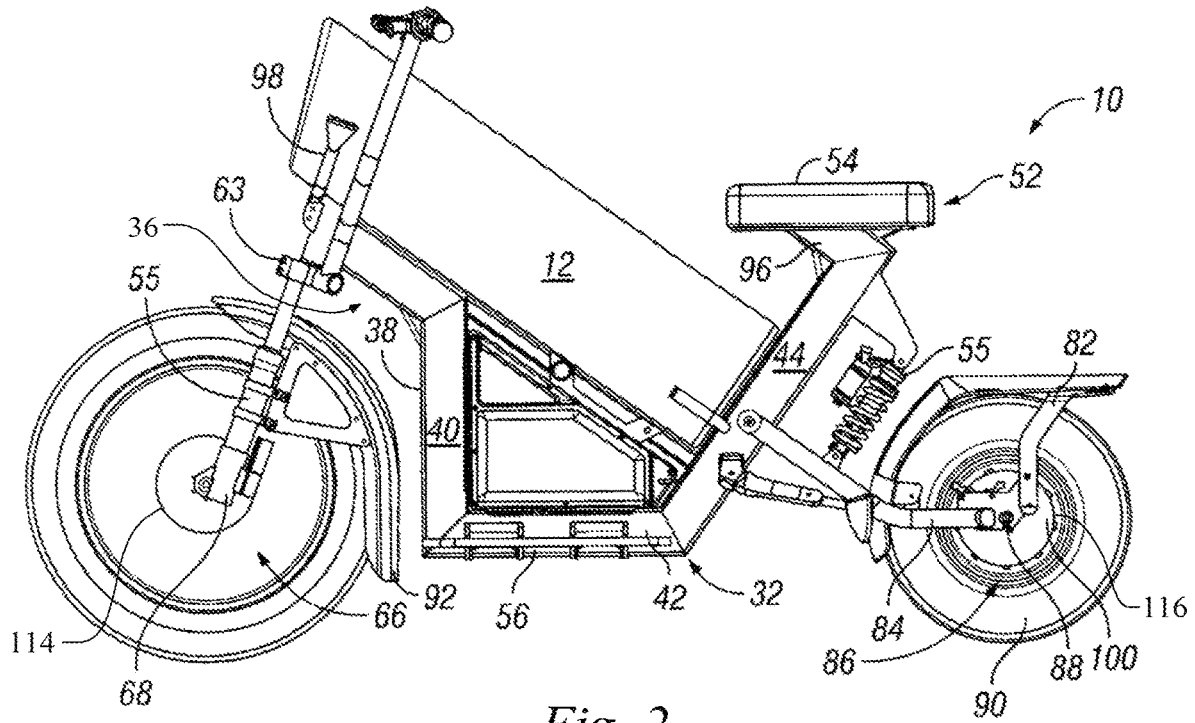


Fig. 2

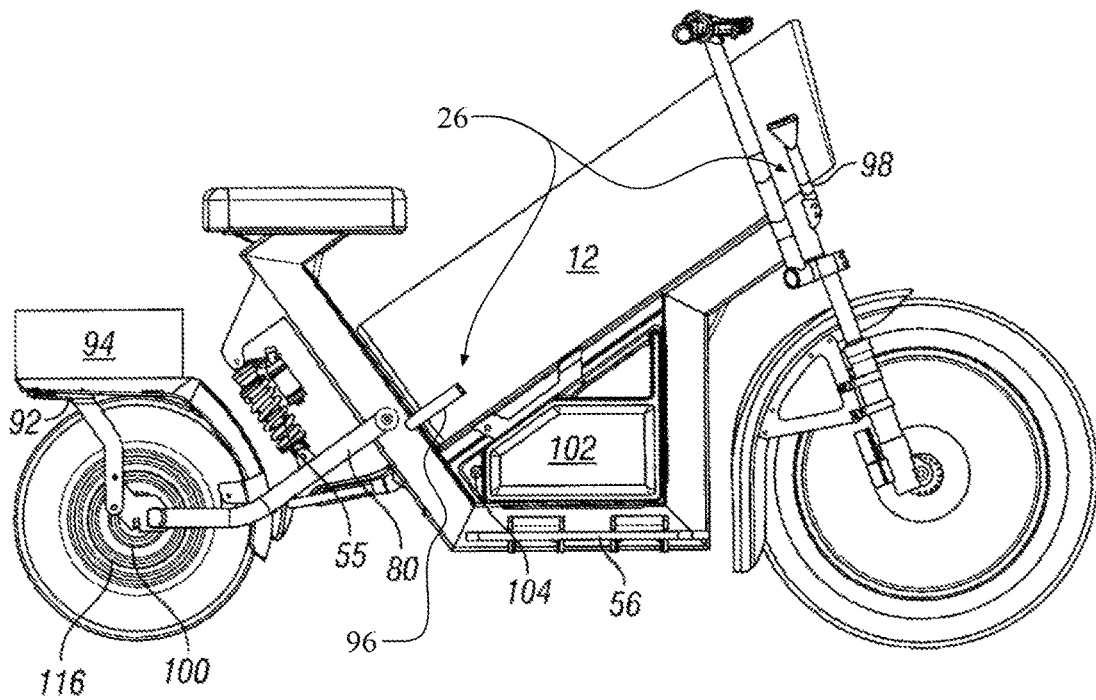


Fig. 3

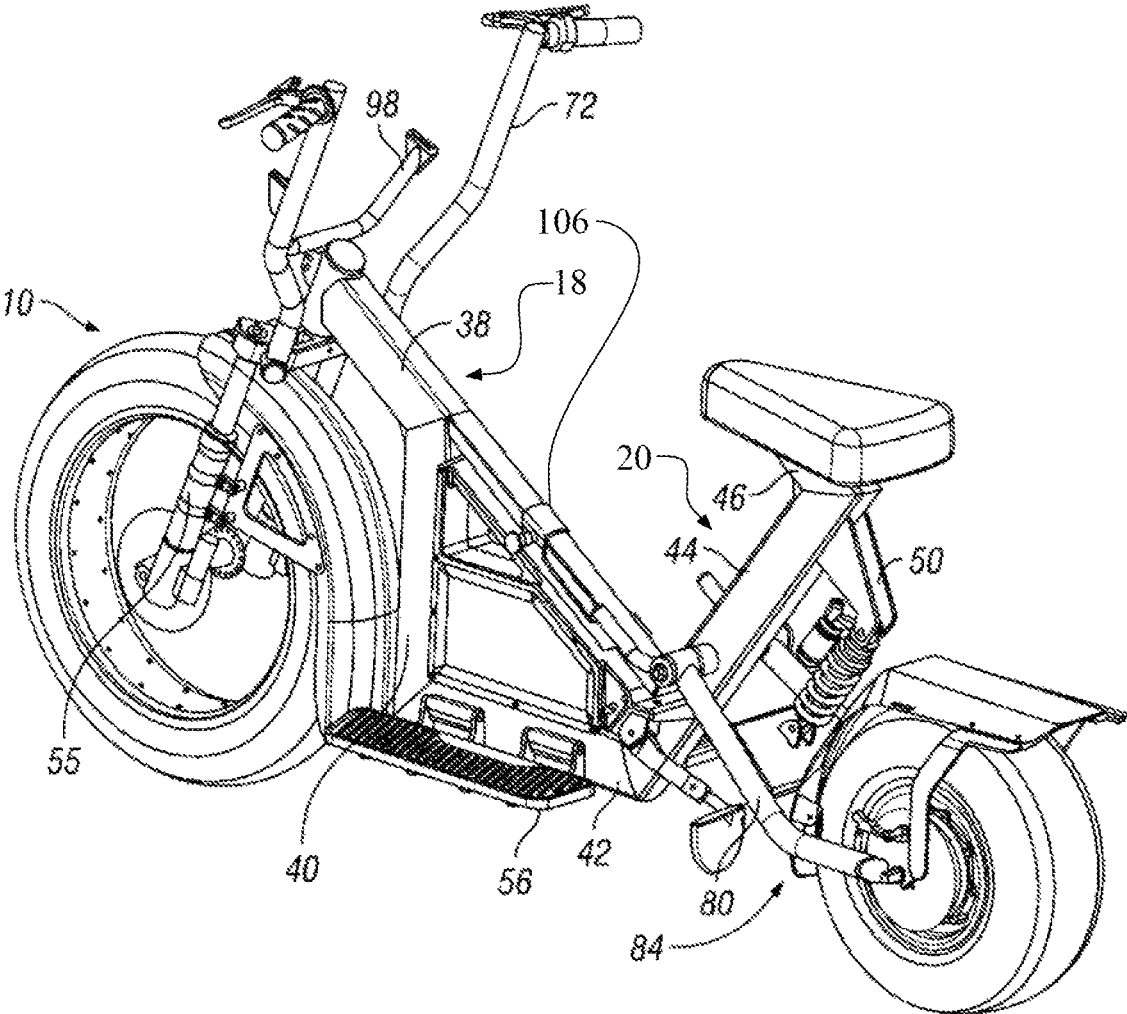


Fig. 4

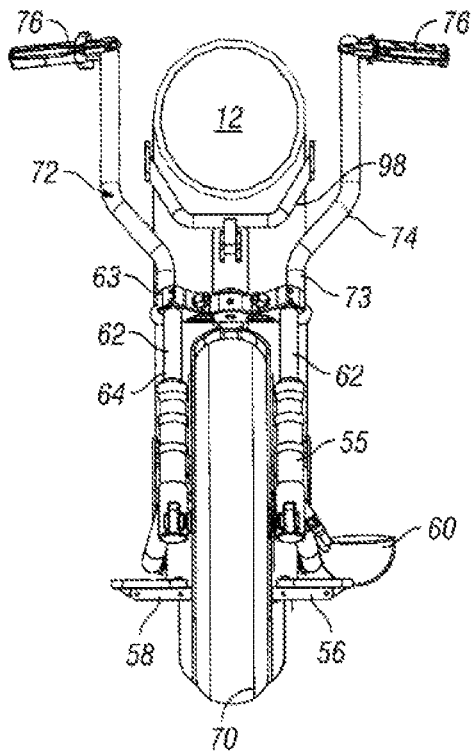


Fig. 5

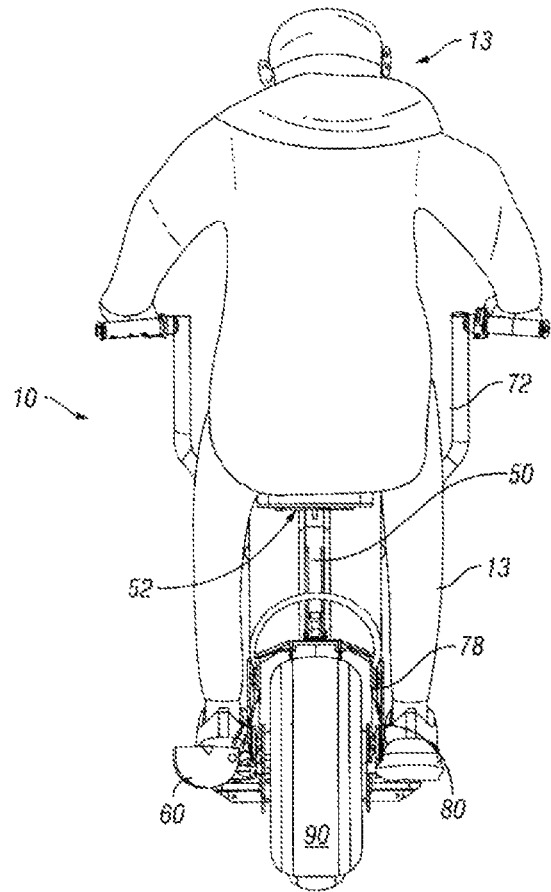


Fig. 6

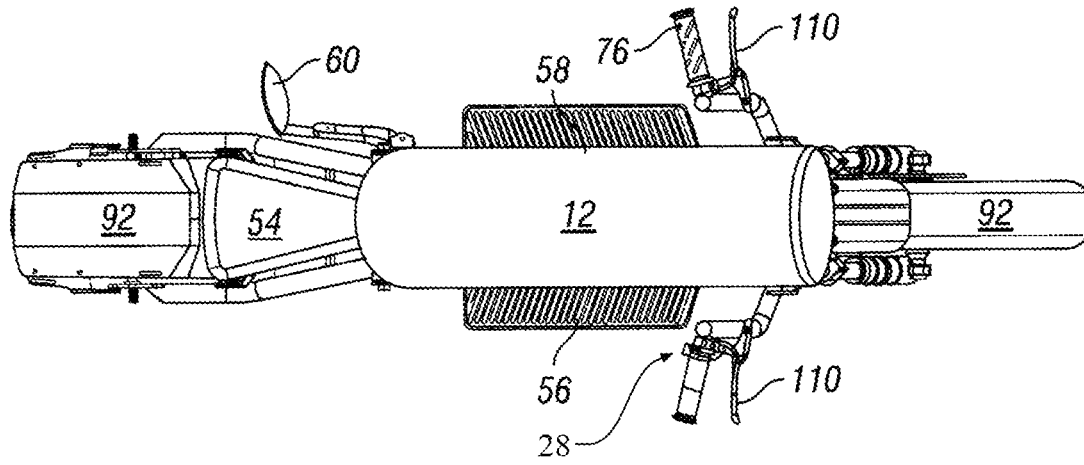


Fig. 7

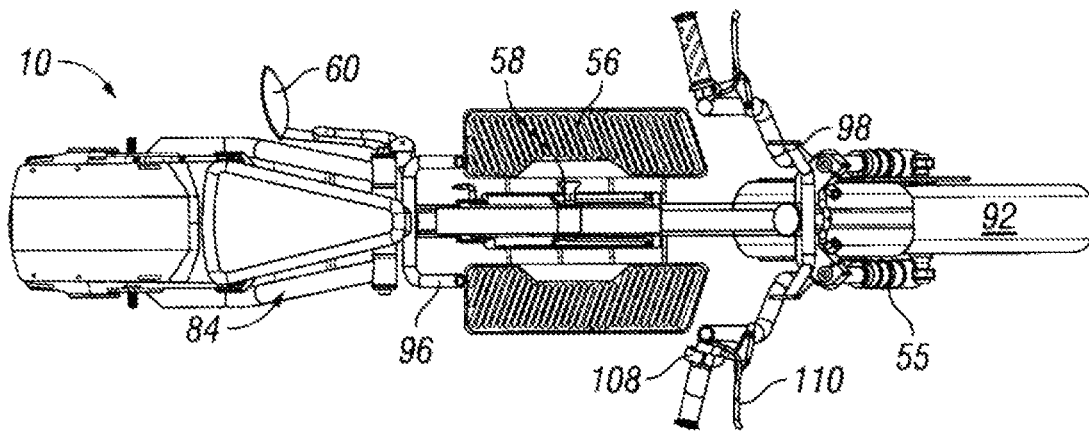


Fig. 8

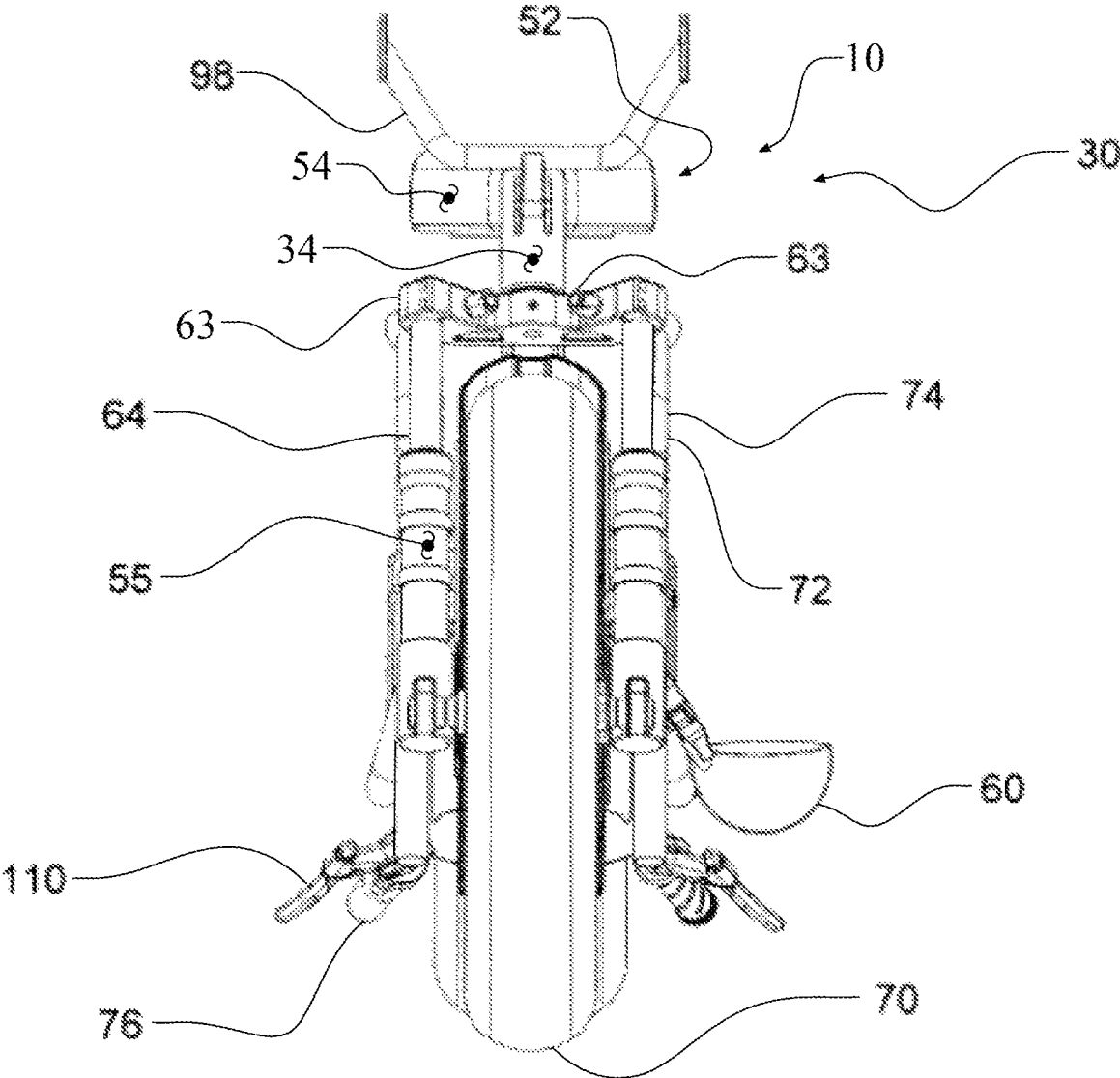


Fig. 9

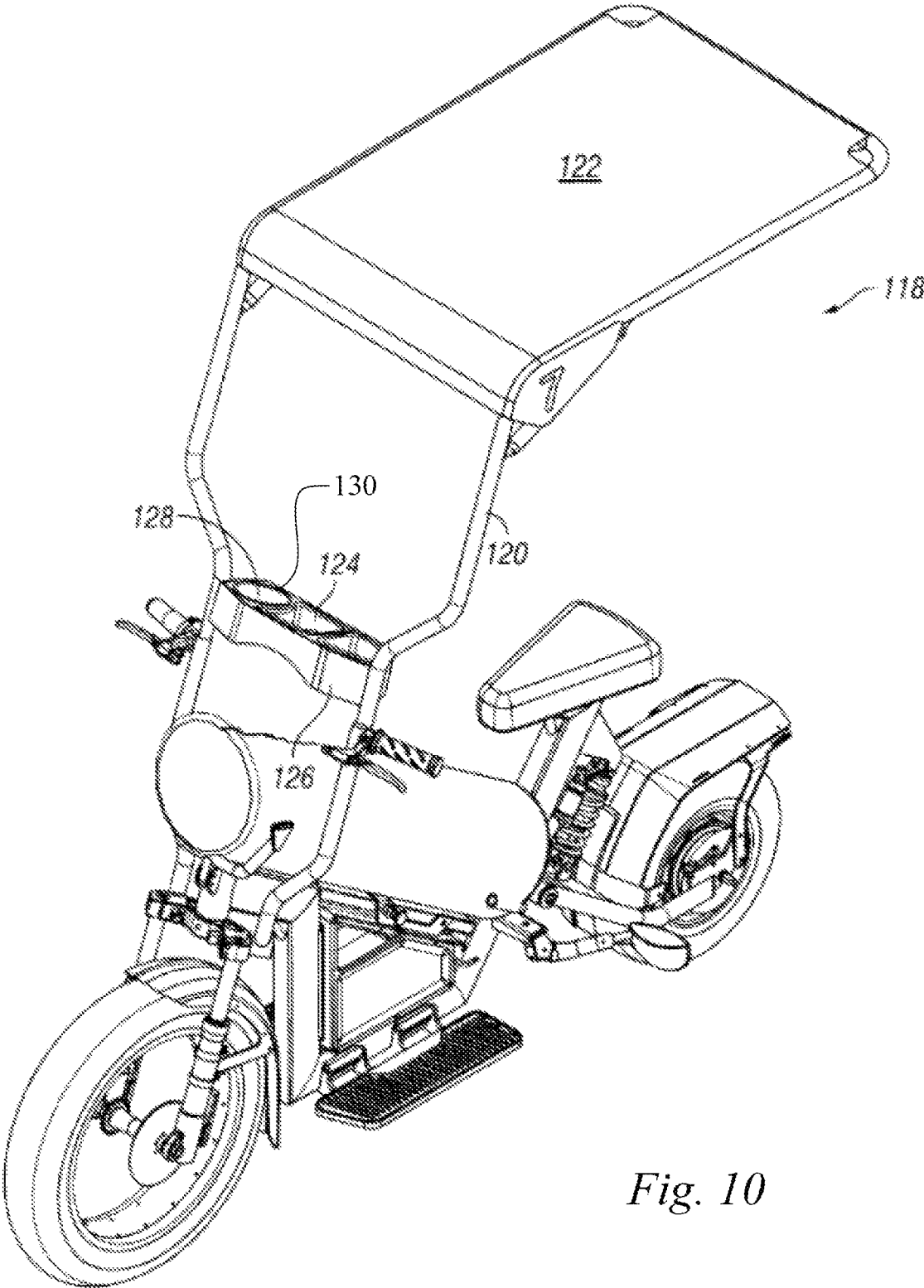


Fig. 10

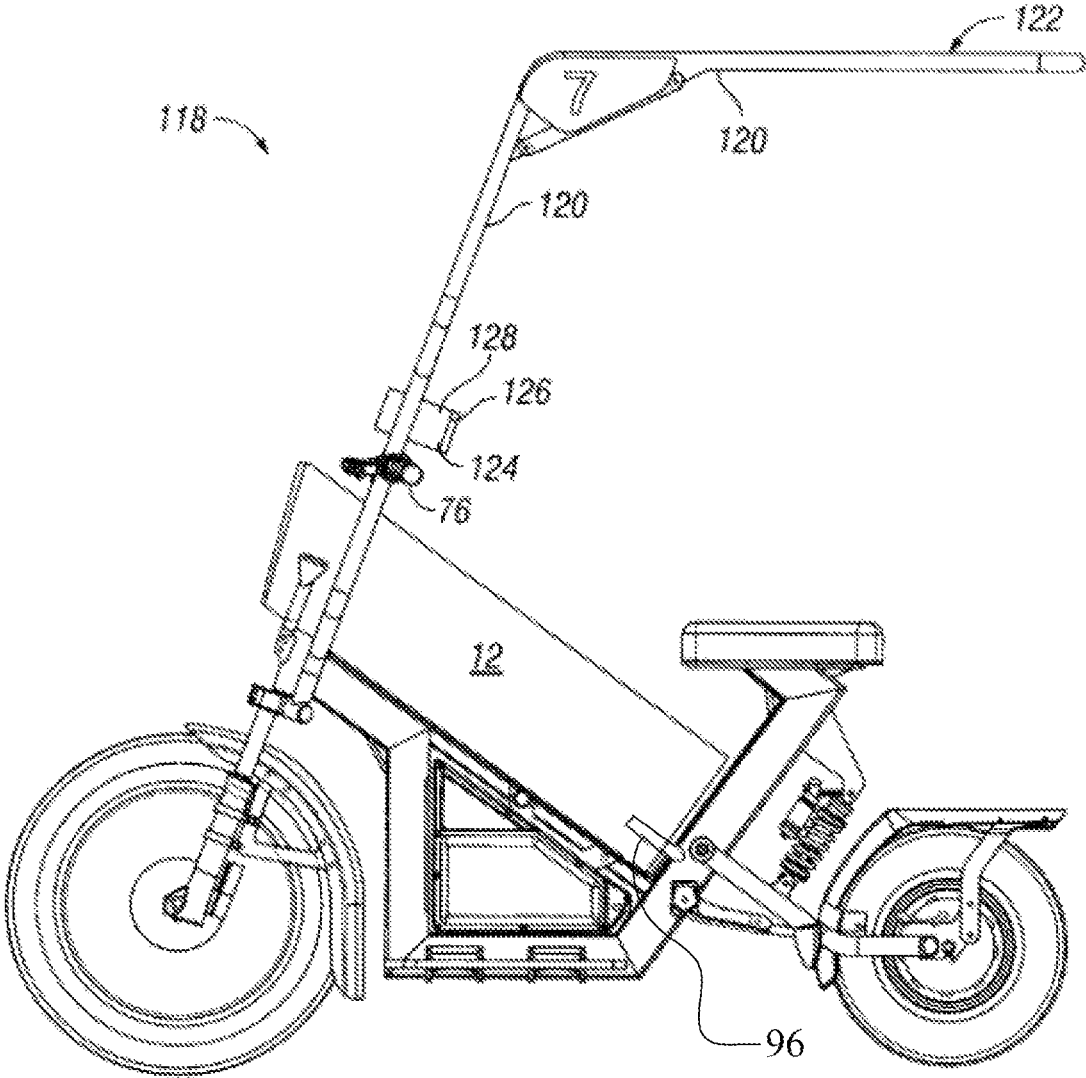


Fig. 11

RIDEABLE GOLF BAG CART/CYCLE

This application is a continuation of U.S. patent application Ser. No. 16/423,080, filed on May 27, 2019, which is a non-provisional application, claiming priority from U.S. provisional applications No. 62/677,315 and 62/677,332 by the same inventors, filed 29 May 2018.

TECHNICAL FIELD

The present invention relates generally to accessories for golfers and particularly to personal powered golf bag carts and methods for transporting golf bags and the golfer.

BACKGROUND ART

Although the purists in the golf community insist that the only way to properly play golf is to carry the golf bag, either personally or through the use of a caddy, many golfers prefer to use carts to transport the golf bags and associated equipment. While riding carts are required by many courses, a great number of players desire to gain at least some of the exercise benefits of more compact and efficient means of transporting themselves and their equipment during the round while avoiding the often higher costs of renting a multiplayer cart from the course. For this reason walking carts are popular, but a rideable personal cart would be even better for those who wish or need to limit their exertions.

For many years pull carts, usually two-wheeled, were the norm. However, powered options, such as electric bag carts are fairly popular and gyroscopic two wheeled units with room for a rider and bag have been introduced.

Nonetheless, demand continues for more compact, more stable, more convenient and lighter golf bag carts, particularly personal rideable powered carts.

DISCLOSURE OF INVENTION

Accordingly, it is an object of the present invention to provide a powered rideable golf bag cart for transporting a golf bag and rider in a highly stable manner.

Another object of the invention is to provide a rideable personal golf cart which does not cause meaningful damage to fairways and other “through the green” areas of golf courses.

A further object of the present invention is to provide a rideable cart system with convenient support of the golf bag between the legs of the rider.

Yet another object of the invention is to provide a rideable powered cart which has a minimal footprint.

Another object of the invention is to rideable powered golf cart which is steerable by the rider and has sufficient power to negotiate most golf course terrain.

Still another object of one alternate embodiment of the invention is to provide shade and some rain protection to the rider.

A further object of one embodiment of the present invention is to provide a single passenger riding golf bag cart which is adapted to partially collapse to a storage mode for transport or storage.

Briefly, one preferred embodiment of the present invention is a personal rideable golf cart/cycle having the general shape of a two wheeled cycle. The cart/cycle is generally symmetrical about a longitudinal plane and includes a plurality of compatible subassemblies, each providing important functions to the whole. The subassemblies (each also designated as an “sba”) include: a cycle frame subas-

sembly; a personal support subassembly; a front wheel/steering subassembly; a rear wheel subassembly; a bag support subassembly; and a motive/control subassembly. The user rides, steers, and controls the speed from a seat above approximately the front of the rear wheel. The golf bag and its contents golf bag are supported at an angle between the golfer’s legs, which extend downward to running boards (foot support plates) on either side of the frame. An electrical motor is powered by a battery mounted on the frame and is controlled by control elements mounted on the steering unit. Portions of the personal, bag support, and steering subassemblies are collapsible for convenient transport and storage.

Another equally preferred embodiment includes, in addition to the above features, a removable overhead canopy extending from the steering/handle to above the rider’s head and a console for carrying various accessories situated above the upper bag cradle and the golf bag.

An advantage of the present invention is that it provides a simple, relatively lightweight, and comfortable single user powered riding golf cart.

Another advantage of the invention is that it is bilaterally symmetrical and relatively thin such that multiple units may be parked in a smaller space than conventional riding carts.

Yet another advantage of the present invention is that the cycle structure provides a familiar and comfortable means of transport for the golfer and equipment around the golf course.

Still another advantage of the present invention is that it may be considered by many courses to be usable on the course, rather than restricted to cart paths, thus drastically aiding the comfort of the golfer and reducing the time taken to play a round of golf.

Another advantage of the present invention is that the partially collapsible aspects make it convenient for storage at a golf course and home and also for transport between locations.

A still further advantage of the present rideable golf bag cart/cycle invention is that no straps or similar restraints are necessary to keep the golf bag in place and provide easy access to the clubs during use.

Yet another advantage of the present invention is that the open frame of the bag support subassembly permits easy access to the pockets of the golf bag, so that the golfer may store and retrieve golf balls and accessories.

Another advantage of the present invention is that it provides the “feel” of a walking round, without the wear and tear on the golfer’s body.

An additional advantage of the present invention is that the golf bag is maintained along the centerline (longitudinal plane) so as to avoid disruption of the balance during use and steering.

Another advantage of the present advantage of the present invention is that the incline of the golf bag (between twenty and forty-five degrees) maintains the clubs in a stable and easily accessible orientation.

A further advantage of the invention is that it is economical to use as a rental unit by the golf course.

These and other objects and advantages of the present invention will become clear to those skilled in the art in view of the description of the best presently known mode of carrying out the invention and the industrial applicability of the preferred embodiment as described herein and as illustrated in the several figures of the drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

The purposes and advantages of the present invention will be apparent from the following detailed description in conjunction with the appended drawings in which:

3

FIG. 1 is a front left perspective view of the powered riding golf bag cart/cycle of the present invention, illustrating a golf bag carried thereon;

FIG. 2 is a left elevational view of the riding golf bag cart/cycle of the present invention, showing the golf bag;

FIG. 3 is a right elevational view of the riding golf bag cart/cycle of the present invention showing the golf bag;

FIG. 4 is a top rear left side perspective view of the present invention, shown without a golf bag;

FIG. 5 is a front elevational view of the presently preferred embodiment of the invention;

FIG. 6 is a rear elevational view of the riding golf bag cart/cycle of the present invention, showing a rider in phantom;

FIG. 7 is a top view of the invention, shown without a golf bag;

FIG. 8 is a bottom view of the preferred embodiment;

FIG. 9 is a front elevational view, showing the collapsed mode of the invention;

FIG. 10 is a front left perspective view of an alternate preferred embodiment of the invention; and

FIG. 11 is a right elevational view of the alternate embodiment.

BEST MODE FOR CARRYING OUT THE INVENTION

The present invention is a personal rideable golf bag cart in the form of a riding cycle used to transport the user along with golf bags loaded with golf clubs and accessories. The rideable golf bag cart/cycle is referred to by the general reference character 10 in the drawings and description. The rideable cart 10 may be used with various golf bags and may exist in multiple embodiments.

In one preferred embodiment of the invention illustrated in FIG. 1, the rideable cart 10 is shown in a perspective view as appropriate for transporting a typical golf bag 12 as well as a golfer/rider 13 (shown in phantom in FIG. 6). The cart/cycle 10 is generally symmetrical about a vertical (in normal operation) longitudinal plane 16.

The cart/cycle 10 may be thought of as having various principal assemblies or subassemblies (each sometimes referred to in shorthand as a "sba" herein) which operate together in order to function as an easy to use method of transporting a golf bag 12 and rider 13 on the rolling surfaces of a golf course and in other locations such as parking lots and storage facilities. The cart/cycle 10 is not ordinarily intended for use on public roads. The primary subassemblies include: a cycle/frame subassembly (sba) 18; a personal support sba 20; a front wheel and steering sba 22, a rear wheel sba 24, a bag support sba 26, and a motive sba 28. It is understood that some components of the invention interface with others and may be considered to be a part of more than one of the subassemblies. As discussed further below, some of the sbas have structures which allow them to be physically manipulated to create a collapsed/storage mode 30 having a lower and narrower aspect for transport and storage.

The cycle/frame subassembly 18 includes a convoluted frame tube 32, aligned within the vertical longitudinal plane 16, which mates together with a steering bracket 34 at the front of the cycle frame 18 to form a connection with the front wheel/steering sba 22. The frame tube 32 includes a number of component segments 36 extending continuously rearward from the steering bracket 34. The segments 36 are, from the front: a front angle segment 38 extending outward, rearward, and downward; an elongated down segment 40,

4

extending nearly vertically downward; a base segment 42 extending at a right angle (horizontally) to the down segment 40 and extending to the rear wheel sba 24; a rear segment 44 extending upward and rearward at about a forty five degree angle from the base segment 40; and an incline segment 46 extending forward and upward to connect with the upper portions of the personal support sba 20. A shock absorber bracket 50 extends rearward and downward from the upper portion of the rear segment 44 to provide an anchor for mating with the rear wheel sba 24.

The personal support sba 20 is an adjunct to the cycle frame sba 18. The personal support sba 20 includes a seat 52 having a cushion 54. The seat 50 is mounted on and above the incline segment 46. A shock absorber 55 extends from the shock absorber bracket 50 to connect with the rear wheel sba 24 to add comfort. The seat 52 and cushion 54 provide support for the golfer/rider 13 during use.

The personal support sba further includes a pair of includes a pair of running boards 56 pivotally attached on opposing sides of the base segment 42 in order to provide rest for the golfer's feet during use and to aid in mounting the cart/cycle 10. The running boards 56 are attached by a pair of board extensions 58 attached to the bottom of the base segment 42 near the midpoint thereof to extend outward. The board extensions 58 engage a pivot rod 59, upon which the running boards 56 can be rotated to an up position for compact use in the collapsed mode 30 or a down position for use while riding or mounting. A kickstand 60 is also provided on at least one side to prevent the cart/cycle 10 from tipping over when at rest.

The front wheel/steering subassembly 22 includes a front fork 62 pivotally mounted to depend from the steering bracket 34. The front fork 62 includes a fork bracket 63 pivotally connected to the steering bracket 34 and supports a pair of opposed fork arms 64 depending therefrom, each including a shock absorber 55. The fork arms 64 support a front wheel 66 on a front axle 68 extending between the lower extents of the opposing fork arms 64. The front wheel 66 has a substantial diameter and supports a front tire 70 having a moderately wide tread for traction while being pneumatic and relatively soft so as to avoid damaging the turf in use.

In the preferred embodiments 10 and 118 (FIGS. 10 and 11) the upper portion of the front wheel/steering sba 22 includes a set of handlebars 72 pivotally attached to the fork bracket 63 by pivot tubes 73 on either side. Each handlebar 72 is bent outwards to form a curved tube 74 pivotally extending above the respective pivot tube 73 in order to facilitate steering and turning without impacting the golf bag 12 which extends therebetween. The curved tube 74 extends upward to handle grips 76 for comfortable hand positioning and steering. The pivotal attachment of the handlebars 72 to the fork bracket 63 allows the handlebars 72 to pivot downward around the front 70 tire in the compact storage mode 30 (see FIG. 9). The curved tube 74 may also be rotated on the pivot tube 73 such that the handle grips 76 are aligned to be generally parallel with the front tire 70, thus minimizing net width in the collapsed storage mode 30.

The rear wheel subassembly 24 includes a rear fork 78 including a pair of rear fork arms 80 pivotally attached at proximal ends to the rear segment 44 of the frame sba 18 and extending downward and rearward therefrom. At least one of the rear fork arms 80 attaches to the shock absorber 55 by a connector 82 (see FIG. 2). A distal fork portion 84 of each rear fork 78 supports a rear wheel 86 on a rear axle 88. The rear wheel 86 is much smaller in diameter than the front wheel 66 and supports a rear tire 90. The rear tire 90 is wider

than the front tire **70** to provide good driving traction while minimizing impact on the turf of the course. The rear tire **90** may be inflatable or solid. A rear fender **92** attached to the rear fork arms **80** and over the upper portion of the rear tire **90**. An optional basket **94** may be mounted on top of the fender **92** to facilitate storage of the rider's possessions and accessories during use.

The bag support sba **26** is adapted to hold the golf bag **12** in place on the cart/cycle **10**. The golf bag **12** is supported at about a sixty degree vertical angle (thirty degree horizontal) with the club heads extending forward through the handlebars **72** and above the front wheel **66**. The base of the golf bag **12** rests against the rear segment **44** and upon a pair of bag bottom rods **96** which extend forward from the rear segment **44** to hold the bag bottom up and laterally in place. The bag bottom rods **96** serve as a cradle for the bag bottom. An upper bag cradle **98** is mounted on the steering bracket **34** to laterally cradle the upper part of the golf bag **12** and prevent the bag and clubs from interfering with the handle bars **72**. The upper bag cradle **98** is mounted on the frame **18** in such a manner that it is stationary with respect to the handlebars **72** and such that the golf bag **12** is maintained to be centered on the longitudinal plane **16** when the cart/cycle/cycle **10** is steered.

The motive/control sba **28** provides the power to move the cart/cycle **10** and the golfer **13** around the course. The presently preferred embodiments **10** and **118** utilize a rear wheel drive system with an electrical motor **100** and a rechargeable battery **102**. The electrical motor **98** is ordinarily a disc motor situated in the hub of the rear wheel **86**, but may drive the rear wheel by any of a variety of mechanisms, including a chain drive, or a belt drive. The battery **102** may be mounted at various locations on the cycle frame **18** but the preferred location, illustrated in the drawings, is within a battery cradle **104** mounted on the base segment **42**. A removable or hinged retaining bar **106** vertically restrains the battery **102** while facilitating easy removability for recharging.

In the preferred embodiment **10** the electrical motor **100** is powerful enough to propel the cart/cycle **10**, the rider **13**, and the golf bag **12** and contents around a golf course. For this reason it has to have enough power to climb steep hills and otherwise negotiate difficult terrain. In order to accomplish these purposes the motor **100** may have more power than is considered to be "street legal" in many jurisdictions. For these reasons the present embodiment of the cart/cycle **10** is not intended for use except on golf courses or private property.

The speed of the motor **100** (including "off" and "idle" will typically be regulated by the golfer by a control unit **108** usually mounted on one of the handlebars **72** adjacent to the handle grips **76**. A brake actuator **110**, also typically situated near a handle grip **74**, will control a brake applied to one or both of the front wheel **66** and the rear wheel **86**. The front brake **114** will typically be a conventional friction brake while a rear brake **116** may be a motor brake, a disc brake, or a friction brake.

An alternate embodiment **118** is illustrated in FIGS. **10** and **11**. This is basically an enhancement to the previously described invention and includes several components which increase rider comfort and enhanced utilities. All of the overlapping features of the enhanced embodiment **118** are essentially the same as the preferred embodiment **10** except as described below.

The alternate embodiment **118** includes a detachable canopy frame **120** which mounts on the handlebars **72** on both sides inward of the handle grips **76**. The canopy frame

120 upward and angles slightly rearward until it is significantly above the head of seated rider **13** and then bends rearward above the rider **13** to support a canopy **122** adapted to provide shade and some rain protection. The canopy frame **120** is relatively rigid and strong while the canopy **122** itself is typically an opaque fabric. It is noted that there is no extension providing rear support to the canopy frame **120** such that minimal impediment to the mounting and dismounting of the rider **13** occurs. Also, the canopy frame **120** and canopy **122** structure are optimized such that does not significant catch the wind and to minimally impact handling.

The canopy frame **120** also supports a console **124** which extends across the canopy frame **120** above the golf bag **12** and at approximately eye level to the rider **13**. The console **124** is adjustable to facilitate loading the golf bag **12**, either by sliding upward from its normal location of by pivoting out of the way so that it is easy to install and remove the golf bag **12** from the upper bag cradle **98**.

The console **124** provides a desired number of compartments **126** suitable for storing small items, holding a drink. The console **124** also supports a display screen **128** (typically touch screen) facing the rider such that GPS information may be utilized and also utilizes a login control **130**. The login control function of the display requires the (typically rental) user to: review and acknowledge safe riding instructions; agree to all terms and conditions; and validate prepayment before the control unit **108** is activated to allow powered movement. This streamlines interactions with the pro shop and allows the user to go directly to an unused unit to begin the round, this can be especially desirable to golfers who prepay greens fees and have established tee times. In a personally owned unit, these login controls **130** may be minimized or modified. Further, personally owned units may have a motor restriction in order to be "street legal".

The preferred embodiments **10** and **118** are primarily constructed of cast anodized aluminum for light weight and durability. The wheels **66** and **86** are formed of lightweight structural plastic with cushioned traction surfaces and may either be provided with solid hubs or spoke hubs. In some embodiments rubberlike friction surfaces are also provided to the front tire **70** and the rear tire **90**.

Many modifications to the above embodiment may be made without altering the nature of the invention. The dimensions and shapes of the components and the construction materials may be modified for particular circumstances or types of bags to be carried.

While various embodiments have been described above, it should be understood that they have been presented by way of example only, and not as limitations.

INDUSTRIAL APPLICABILITY

The rideable golf bag cart/cycle **10** (and **118**) of the present invention is intended for use primarily by golfers who desire maximum convenience and safety while transporting a golf bag and a rider during a round of golf. It is expected that these units will be optimal for rental uses at golf courses. The cart/cycle **10** is relatively lightweight. Like any cycle having two wheels, the cart/cycle **10** does require balancing by the rider **13** when in motion and tip-prevention by the kickstand **60** when not attended. The general symmetry of the cart/cycle **10** substantially aids in keeping the unit balance. The cart/cycle **10** also typically requires no straps or other fasteners to retain and support the golf bag **12** (although these may be optionally utilized), thus minimizing the amount of loose or dangling components and reducing effort.

For typical use, the rideable golf bag cart/cycle **10** will be in a rest position (collapsed mode **30**) with the motor **100** off and the kickstand **60** activated. The rider **13** (or a worker) will then slide the golf bag **12** bottom first to rest against and on the restraints defined by the rear segment **44** and the pair of bag bottom rods **96**. The upper portion of the golf bag **12** will rest against the upper bag cradle **98** which will provide vertical support and at least some lateral restraint. The golf bag **12** will then rest at about a thirty degree angle from horizontal and golf clubs will extend forward and upward over the front wheel **66** for easy access. The rider **13** will then (if desired) rotate the running boards **56** to the horizontal position and will mount the cart/cycle **10** to sit upon the seat **52**. The legs of the rider **13** will straddle the bottom extent of the golf bag **12** and extend downward to the running boards **56** in use.

In order to move forward, the seated rider **13** will activate the control unit **108** to start the electric motor **100** and to select the speed of rotation of the rear wheel **86** to drive the cart/cycle **10** forward at the desired speed (see above for specific additional instructions to the alternate embodiment **118**) The brake actuator **110** will be used to activate either or both the front brake **112** and rear brake **116** to control speed and slow or stop the travel when needed (such as on downslopes or on reaching the destination location). The rider **13** will then dismount, activate the kickstand **60** (or lean the cycle **10** against an object such as a tree or bench), play the next stroke(s) and repeat the process to proceed to the next location.

When the round is over, the golfer simply: dismounts; activates the kickstand **60** (or parks in a designated spot which prevents tipping); and removes the golf bag **12** from the cart **10**: and rotates the handlebars **72** and the running boards **56** to the collapsed mode **30** for storage or transport.

The extreme convenience, ease of operation, relative compactness, and light weight of the inventive cart/cycle **10** and enhanced embodiment **118** make it a joy to own and use and a desirable accessory for any golfer who wishes to traverse the course without carrying the weight of the bag. The wide and relatively soft front tire **70** and rear tire **90** minimize disruption of the turf on the course and facilitate access to the areas of the course upon which powered units are permitted.

For the above, and other, reasons, it is expected that the collapsible rideable golf bag cart/cycle **10** of the present invention will have widespread industrial applicability. Therefore, it is expected that the commercial utility of the present invention will be extensive and long lasting.

We claim:

1. A motor driven rideable golf cycle for transporting a rider and a golf bag, comprising:

a cycle frame supporting a front wheel, a rear wheel aligned with the front wheel, and a seat substantially aligned with the front wheel and rear wheel, wherein the front wheel is larger in diameter than the rear wheel, and the rear wheel has a width greater than the front wheel;

a steering subassembly including a right handlebar and a left handlebar creating a void therebetween to receive a portion of the golf bag, wherein the right and left handlebars can be moved by the rider to steer the front wheel, and the steering subassembly includes a front fork pivotably attached to a steering bracket of the cycle frame, wherein the steering bracket is located (a) at an elevation above the front wheel, and (b) at a

front-back position that is forward of a rear edge of the front wheel and rearward of a front edge of the front wheel;

an electric motor for driving the rear wheel, the electric motor being controlled by a control subassembly operated by the rider; and

a bag support subassembly adapted to support the golf bag and positioned so that a portion of the golf bag is between the right handlebar and the left handlebar, which rotate relative to the golf bag, and including a bag top cradle with a portion located above an elevation of said seat, and partially surrounding a portion of the golf bag.

2. The golf cycle of claim 1, wherein the bag top cradle is stationary with respect to the handlebars.

3. The golf cycle of claim 1, further including a bottom bag cradle situated below the seat.

4. The golf cycle of claim 3, wherein an angle of incline from the bag bottom cradle to the bag top cradle is between twenty-five and forty-five degrees from horizontal.

5. The golf cycle of claim 1, wherein the front fork includes a fork bracket, a pair of opposed fork arms attached to the front wheel, and a shock absorber, wherein the front fork bracket is pivotably attached to the steering bracket.

6. The golf cycle of claim 1, wherein the front fork includes a fork bracket and a pair of opposed fork arms attached to the front wheel, wherein the front fork bracket is pivotably attached to the steering bracket, and the handlebars are individually attached to the fork bracket.

7. The golf cycle of claim 6, wherein each opposed fork arm includes a shock absorber.

8. The golf cycle of claim 6, wherein the right handlebar includes a right pivot tube section, and the left handlebar includes a left pivot tube section, wherein the right pivot tube section and the left pivot tube section are parallel to the fork arms.

9. The golf cycle of claim 8, wherein the right handlebar includes a right curved tube section, the left handlebar includes a left curved tube section, a separation distance between the right handlebar and the left handlebar varies with the right curved tube section and the left curved tube section increasing the separation distance from a first separation distance adjacent the fork bracket to a second separation distance that is greater than the first separation distance.

10. The golf cycle of claim 6, wherein the handlebars are individually and pivotably attached to the fork bracket such that they may be rotated forward and downward, away from the seat and cycle frame, into a collapsed position.

11. The golf cycle of claim 10, wherein in the collapsed position the right and left handlebars are rotated such that at least a portion of the right and left handlebars are substantially parallel with a portion of the pair of fork arms.

12. The golf cycle of claim 11, wherein the right handlebar includes a right handle grip, the left handlebar includes a left handle grip, and in the collapsed position the right and left handlebars are between the pair of fork arms and the seat, and the right and left handle grips are oriented toward the rear wheel.

13. The golf cycle of claim 1, further including a console attached to the handlebars, wherein the console rotates with the handlebars and entraps the golf bag between the handlebars.

14. The golf cycle of claim 13, wherein the console is attached to each handlebar and is location adjustable in order

to facilitate loading and unloading the golf bag to and from the bag support subassembly and adjust the size of the void between the handlebars.

15 15. The golf cycle of claim 13, wherein the console further includes a display screen facing the rider, the display screen showing information and having input capability for the rider to manipulate screen content.

16. The golf cycle of claim 15, wherein the display screen includes a login control requiring input from the rider in order to activate the motor and operate the cycle.

17. A motor driven rideable golf cycle for transporting a rider and a golf bag, comprising:

a cycle frame supporting a front wheel, a rear wheel aligned with the front wheel, and a seat substantially aligned with the front wheel and rear wheel, wherein the front wheel is larger in diameter than the rear wheel, and the rear wheel has a width greater than the front wheel;

15 a steering subassembly including a right handlebar and a left handlebar creating a void therebetween to receive a portion of the golf bag, wherein the right and left handlebars can be moved by the rider to steer the front wheel, and the steering subassembly includes a front fork pivotably attached to a steering bracket of the cycle frame, wherein the steering bracket is located (a) at an elevation above the front wheel, and (b) at a front-back position that is forward of a rear edge of the front wheel and rearward of a front edge of the front wheel;

20 an electric motor for driving the rear wheel, the electric motor being controlled by a control subassembly operated by the rider; and

a bag support subassembly adapted to support the golf bag and positioned so that a portion of the golf bag is between the right handlebar and the left handlebar, which rotate relative to the golf bag.

18. The golf cycle of claim 17, wherein the bag support subassembly includes a bag top cradle with a portion located above an elevation of a portion of the seat, and partially surrounding a portion of the golf bag.

19. The golf cycle of claim 17, wherein the bag support subassembly includes a bottom bag cradle situated at least partially below the seat, and wherein the bag support subassembly positions the golf bag at an angle of incline between twenty-five and forty-five degrees from horizontal.

20. The golf cycle of claim 17, wherein the front fork includes a fork bracket and a pair of opposed fork arms attached to the front wheel, wherein the front fork bracket is pivotably attached to the steering bracket, and the handlebars are individually attached to the fork bracket.

21. The golf cycle of claim 17, wherein the front fork includes a fork bracket and a pair of opposed fork arms attached to the front wheel, wherein the front fork bracket is pivotably attached to the steering bracket, and each opposed fork arm includes a shock absorber.

22. The golf cycle of claim 21, wherein the right handlebar includes a right curved tube section, the left handlebar includes a left curved tube section, a separation distance between the right handlebar and the left handlebar varies with the right curved tube section and the left curved tube section increasing the separation distance from a first separation distance adjacent the fork bracket to a second separation distance that is greater than the first separation distance.

23. The golf cycle of claim 22, wherein the handlebars are individually attached to the fork bracket.

24. The golf cycle of claim 23, wherein the right handlebar includes a right pivot tube section, and the left handlebar includes a left pivot tube section, wherein the right pivot tube section and the left pivot tube section are parallel to the fork arms.

25. The golf cycle of claim 24, wherein the handlebars are individually and pivotably attached to the fork bracket such that they may be rotated forward and downward, away from the seat and cycle frame, into a collapsed position.

26. The golf cycle of claim 24, wherein the handlebars are pivotably attached to the fork bracket such that they may be rotated into a collapsed position having at least a portion of the right and left handlebars are substantially parallel with a portion of the pair of fork arms.

* * * * *