

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 March 2002 (28.03.2002)

PCT

(10) International Publication Number
WO 02/24282 A2

(51) International Patent Classification⁷: **A63B 55/00**

(21) International Application Number: PCT/ZA01/00147

(22) International Filing Date:
17 September 2001 (17.09.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2000/5014 20 September 2000 (20.09.2000) ZA

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

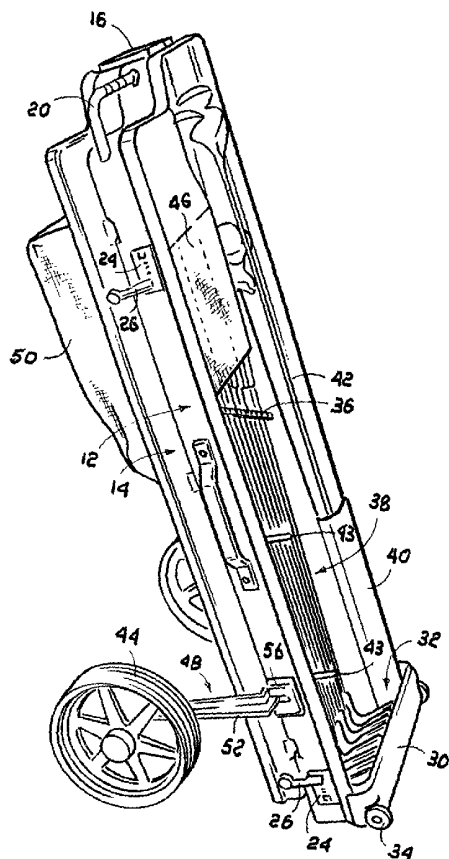
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

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(54) Title: GOLF EQUIPMENT CASE



(57) Abstract: This invention relates to a golf equipment case which is convertible into a hand drawn trolley. The case comprises an elongated base tray having a base and upstanding side and end walls, a closure member for the base tray, a hinge arrangement which hingedly attaches an edge of the base tray to the closure member and is adapted to enable the closure member to be swung about the hinge arrangement between a first position of operation in which it closes the base tray and a second position in which its outer surface faces the outer surface of the base of the base tray, means for locking the closure member to the base tray in both of its operable positions, at least one holder for releasibly holding golf clubs in a flat array in the base tray and a carry handle on the outer surface of the case.



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

GOLF EQUIPMENT CASE

FIELD OF THE INVENTION

This invention relates to a case for storing and transporting golf equipment and more particularly, but not exclusively, to such a case which is convertible into a wheeled hand
5 drawn trolley for transporting the equipment during a game on a golf course.

BACKGROUND TO THE INVENTION

Golf clubs and other equipment which is necessary for the game of golf are generally housed in either a shoulder carry bag or a collapsible hand drawn trolley.

Both the equipment golf bag and trolley are bulky and so require significant storage
10 space in a dwelling, motor vehicle, aircraft and the like. When a golf bag or trolley is stored for transportation, for example in a hold of an aircraft or in a motor vehicle trunk, the clubs are exposed to damage or destruction by other goods which are placed or dropped on them.

Additionally, the clubs and other equipment in conventional bags or trolleys are insecure
15 against theft and, to minimise the theft problem, are often located in lockable bags for public transport. The lockable bags are easily opened by means of a knife and offer no protection to the clubs against impact damage.

OBJECT OF THE INVENTION

It is the object of this invention to provide a golf equipment case which will minimise if
20 not eliminate the problems mentioned above in connection with conventional golf bags and trolleys and which is convertible into a hand drawn trolley.

SUMMARY OF THE INVENTION

A golf equipment case according to the invention comprising an elongated base tray having a base and upstanding side and end walls, a closure member for the base tray, a hinge arrangement which hingedly attaches an edge of the base tray to the closure member and is adapted to enable the closure member to be swung about the hinge arrangement between a first position of operation in which it closes the base tray and a second position in which its outer surface faces the outer surface of the base of the base tray, means for locking the closure member to the base tray in both of its operable positions, at least one holder for releasibly holding golf clubs in a flat array in the base tray and a carry handle on the outer surface of the case.

The closure member may be a tray having a base and upstanding side and end walls with the edges of at least its side walls engaging with those of the base tray when the closure member is in its first position of operation.

The base tray and closure member are preferably made from an adequately rigid plastics material.

The base of the base tray and the tray closure member may carry spaced fluted stiffening formations which extend in the long direction of and over a substantial proportion of the length of the case.

Preferably the closure member locking means is adapted to lock the closure member to the tray in both its first or second positions of operation relatively to the base tray.

The locking means may comprise a keyed catch arrangement on each of the opposite side walls, transversely opposite each other, of a first of the trays and an elongated

latch arm which is rotatably mounted at one end on each of the side walls of the second tray at positions in which formations at their free ends are engageable with a catch arrangement on the first tray in both positions of operation of the closure member.

5 The base tray and the closure member may, in the first position of operation of the closure member, be recessed from an end of the case to provide a composite handle recess at the end of the case and the case may include a handle which is fixed to the case to bridge the recess.

10 The end of the base tray, opposite the handled end of the case, may include two wheels which are spaced from each other and are journaled for rotation in and project from recesses in the base of the tray.

Preferably the inner surface of the case includes formations for releasibly locating trolley wheels in the case.

The case may include means for storing wheel arms for the trolley wheels.

15 The side walls of the base tray may each carry, adjacent the end wall of the tray opposite the handled end, a formation in which a wheel arm, having a trolley wheel which is rotatably engaged with it, is releasibly engageable to enable the case, with the closure member in its second position of operation, to be used as a hand drawn golf equipment trolley.

BRIEF DESCRIPTION OF THE DRAWINGS

20 An embodiment of the invention is now described by way of example only with reference to the drawings in which :

FIGURE 1 is a perspective view from above and two sides of the golf equipment case of the invention,

FIGURE 2 is a plan view of the case of Figure 1 shown opened on a flat surface,

FIGURE 3 is a fragmentary partially exploded perspective view of a corner of the case and a wheel for converting the case into a golf trolley,

FIGURE 4 is a perspective view of the case of Figures 1 to 3 shown converted into its golf trolley configuration, and

FIGURE 5 is a fragmentary perspective view of one of the locks for locking the case.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The golf equipment case 10 of the invention is shown in Figures 1 and 2 to include a base tray 12, a closure tray 14 and a hinge arrangement 16 which movably connects the case trays together.

Both of the trays 12 and 14 have upstanding side walls which are stepped at their outer edges to be overlapping and engaging with each other in the closed position of the case as illustrated in Figure 1.

The trays 12 and 14 are moulded from an adequately rigid plastics material such as ABS and the bases of both trays are fluted as shown in the drawings further to strengthen the case against torsional twisting and bending. The term "rigid material" is, in this specification, to be taken to mean material which when moulded into the shape of the case trays 12 and 14 has sufficient stiffness to retain its moulded shape and is not

easily deformable or susceptible to damage by the degree and type of impact to which the case would be exposed in normal use.

The hinged short edges of the trays 12 and 14 are recessed into the trays from approximately the longitudinal centre line of the trays to an outer side wall of each of the trays as best seen in Figure 2. In the closed condition of the case, as shown in Figure 1, the tray recesses form a composite case recess 18 which is bridged by a pulling handle 20 which is fixed to the base tray 12. The base tray additionally carries on one of its long side walls, a carry handle 22.

The hinge arrangement 16 consists of a plate which is connected by means of a hinge which extends along each of its long edges to one of the case trays. The purpose of the hinge arrangement is to enable the two case trays to be folded from a first closed position as shown in Figure 1 through the open position shown in Figure 2 and into the position shown in figure 4 in which the two trays are in a back to back abutting configuration and open to the outside of the now folded case.

The trays 12 and 14 carry four locks as best shown in Figures 4 and 5. The locks each include combination locks 24 which are mounted in spaced pairs on each of the long side walls of the base tray 12 and locking arms 26 which are mounted opposite the locks 24 on the closure tray 14. The locking arms 26 are rotatable about their mounting plates with their free ends being upwardly and downwardly movable on spherical connections with studs on the mounting plates. The arms 26 are upwardly biased to the position, shown in Figure 5, by a spring acting between the mounting plates and the arms. The rotatability of the lock arms 24 enable the cases of the trays 12 and 14 to be locked together in both their Figure 1 and 4 positions. The corner edges of each of the

trays include recesses 28 for the location of strapping should this be required on the closed case.

The closure tray of the case, as shown in Figure 2, is a little shorter in length than the base tray 12 with the base tray including an integral cover 30 across its lower end remote from the handled end of the tray which compensates for the shorter length of the closure tray and which defines a pocket 32 which extends across the left hand end of the tray as shown in Figure 2. The cover 30 is recessed at its outer ends with small suitcase type wheels 34 journaled for rotation in and projecting from the recesses and on which the closed case is supported while being pulled over a smooth surface by means of the handle 20. The tray additionally includes a strip 36 which is made from rubber or a like resilient material and which includes spaced re-entrant grooves in which the shafts of golf club irons 38 are releasibly engageable. The heads of the clubs, as shown in Figure 4, are located in the pocket 32 at the end of the tray. A second vertical pocket 40 is located in the base tray clear of the golf irons 38 for holding longer golf clubs such as the woods 42. The base of the tray, between the iron positions, carries two upstanding studs 43 on which trolley wheels 44 are releasibly located. The base tray further includes a bag 46 which is made from a robust flexible material which is fixed along its right hand edge in Figure 2 to the base of the tray and which carries arms 48 for the wheels 44.

The closure tray 14 carries one or more bags 50 for golfing items such as shoes, gloves, rain clothing, sweaters, golf tees, balls and the like. The tray, in this embodiment of the invention additionally includes suitable clips and holders for an umbrella 51.

With the case fully equipped with the necessary golf equipment, as described above, the case is closed as shown in Figure 1. The case, in this embodiment of the invention, has a length of 1,200mm, a width of 400mm and a total height of 110mm. From these dimensions it will be appreciated that the golf equipment case of the invention will take up far less storage space than either a conventionally equipped golf bag or folded hand drawn trolley. For example two or three fully equipped cases of the invention would take up no more space in the trunk of a motor vehicle than would normally be occupied by a fully equipped golf bag or folded hand drawn golf trolley. Similarly, the case is imminently suitable for airline travel without fear of loss of or damage to the equipment in the case.

To use the case as a hand drawn trolley on a golf course the case is opened with the closure member 14 being folded over and around the hinge arrangement 16 to bring the base of the closure tray into back to back contact with the base of the base tray 12. The arms 26 of the locks are rotated through 180° and the lock arms are again locked to the locks 24, as shown in Figure 4, to again lock the case trays together and now open to the outside of the case. The wheels 44 and wheel arms 48 are removed from the base tray and the wheels are engaged with axles on the arms as illustrated in Figure 3. The wheel arms 48 each include, as shown in Figures 3 and 4, an outwardly facing rib 52 and an inwardly directed flange 54. The side walls of the base tray 12 carry reinforced wheel arm engagement socket arrangements 56 into which the upper ends of the arms 48 are slid with their ribs 50 located in a slot in the socket arrangement 56 as shown in the partially exploded view in Figure 3. The flange 54 on each of the wheel arms is clamped between the two case trays when the trays are locked together and serves to

resist torsional loads applied to the wheel arms in use of the trolley on rough terrain or while being pulled up or down a step or steps.

In its trolley configuration as shown in Figure 4 the case is pulled about on a golf course by the handle 20 in the same manner as any conventional golf trolley.

- 5 Should it be required to use the case on a club car the case in its Figure 4 configuration without the wheels or wheel arms is merely strapped to the rear of the car in the conventional manner with perhaps two of the cases being located side by side on the car.

CLAIMS

1. A golf equipment case [10] comprising an elongated base tray [12] having a base and upstanding side and end walls, and a closure member [14] for the base tray characterised in that the case includes a hinge arrangement [16] which hingedly
5 attaches an edge of the base tray [12] to the closure member [14] and is adapted to enable the closure member [14] to be swung about the hinge arrangement [16] between a first position of operation in which it closes the base tray [12] and a second position in which its outer surface faces the outer surface of the base of the base tray [12], means [24,26] for locking the closure member [14] to the base tray [12] in both of its operable
10 positions, at least one holder [36] for releasibly holding golf clubs [38] in a flat array in the base tray [12] and a carry handle [22] on the outer surface of the case [10].
2. A golf equipment case [10] as claimed in claim 1 wherein the closure member [14] is a tray having a base and upstanding side and end walls with the edges of at least its side walls engaging with those of the base tray [12] when the closure
15 member [14] is in its first position of operation.
3. A golf equipment case [10] as claimed in either one of claims 1 or 2 wherein the base tray [12] and closure member [14] are made from an adequately rigid plastics material.
4. A golf equipment case [10] as claimed in claim 3 wherein the base of the
20 base tray [12] and the tray closure member [14] carry spaced fluted stiffening formations which extend in the long direction of and over a substantial proportion of the length of the case [10].

5. A golf equipment case as claimed in any one of claims 2 to 4 wherein the closure member [14] locking means [24,26] is adapted to lock the closure member [14] to the base tray [12] in both its first or second positions of operation relatively to the base tray [12].

5 6. A golf equipment case [10] as claimed in claim 5 wherein the locking means [24,26] comprises a keyed catch arrangement [24] on each of the opposite side walls, transversely opposite each other, of a first of the trays [12,14] and an elongated latch arm [26] which is rotatably mounted at one end on each of the side walls of the second tray [12,14] at positions in which formations at their free ends are engageable
10 with a catch arrangement [24] on the first tray [12,14] in both positions of operation of the closure member [14].

7. A golf equipment case [10] as claimed in any one of claims 2 to 6 wherein the base tray [12] and the closure member [14], in the first position of operation of the closure member [14], are recessed from an end of the case to provide a composite
15 handle recess [18] at the end of the case and the case includes a handle [20] which is fixed to the case to bridge the recess [18].

8. A golf equipment case [10] as claimed in claim 7 wherein the end of the base tray, opposite the handled end of the case, includes two wheels [34] which are spaced from each other and are journaled for rotation in and project from recesses in
20 the base of the tray.

9. A golf equipment case [10] as claimed in either one of claims 7 or 8 wherein the inner surface of the case includes formations [43] for releasibly locating trolley wheels [44] in the case [10].

10. A golf equipment case [10] as claimed in claim 9 wherein the case [10]
5 includes means [46] for storing wheel arms [48] for the trolley wheels [44].

11. A golf equipment case [10] as claimed in claim 10 wherein the side walls of the base tray [12] each carry, adjacent the end wall of the tray opposite the handled end, a formation [56] in which a wheel arm [48], having a trolley wheel [44] which is rotatably engaged with it, is releasibly engageable to enable the case [10], with the
10 closure member [14] in its second position of operation, to be used as a hand drawn golf equipment trolley.

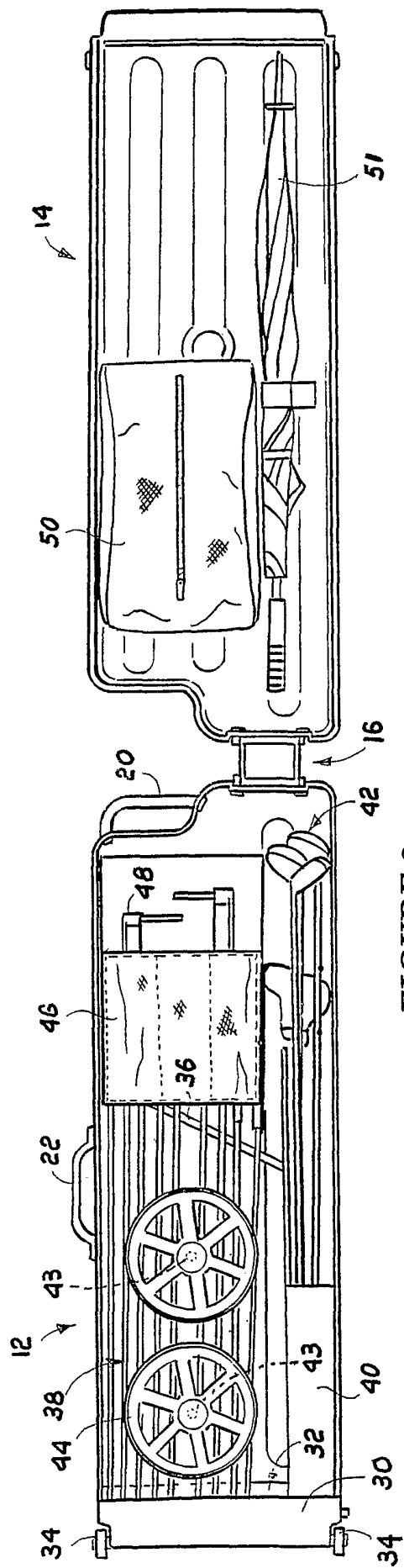


FIGURE 2

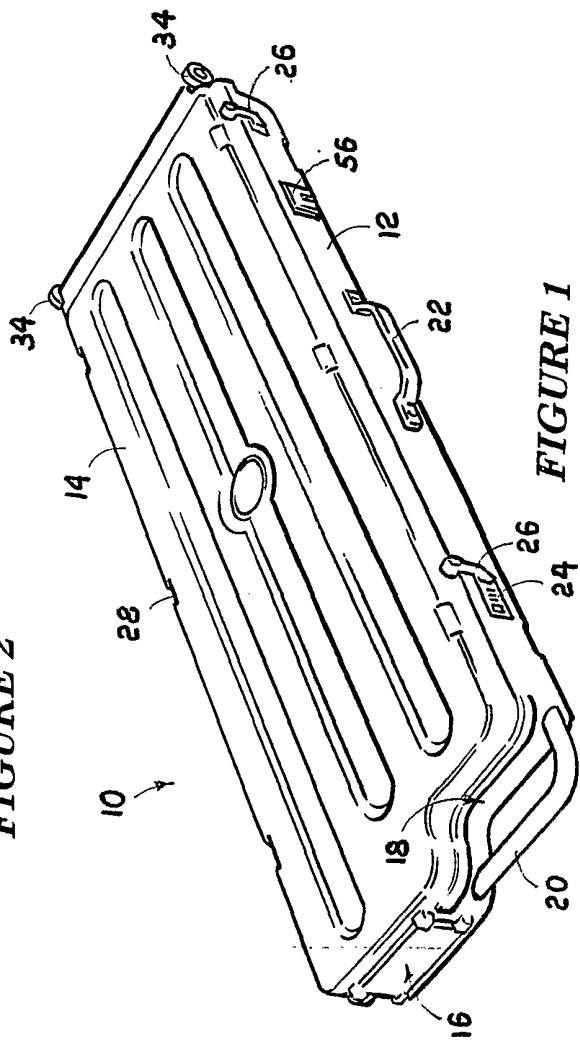


FIGURE 1

