

US 20120024650A1

### (19) United States

# (12) Patent Application Publication Tong

(10) **Pub. No.: US 2012/0024650 A1**(43) **Pub. Date:** Feb. 2, 2012

#### (54) LUGGAGE CASE

(76) Inventor: **Joy Tong**, BOCA RATON, FL (US)

(21) Appl. No.: 12/848,189

(22) Filed: Aug. 1, 2010

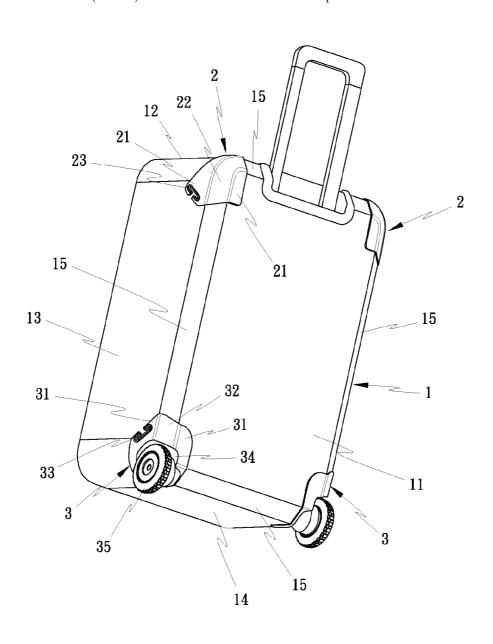
#### **Publication Classification**

(51) **Int. Cl.**A45C 5/14 (2006.01)

A45C 13/00 (2006.01)

(52) **U.S. Cl.** ...... **190/18 A**; 190/124 (57) **ABSTRACT** 

A luggage case includes a main body, a pair of first protective units disposed on two upper corners of a rear face of the main body and a pair of second protective units disposed on two lower corners of the rear face of the main body. Each first protective unit includes three connected plates and has a first chamfer face corresponding to an upper edge and one of two side edges of the rear face of the body. Each second protective unit includes three connected plates and has a second chamfer face corresponding to a lower edge and one of the two side edges of the rear face of the body. The upper edge, the lower edge and the two side edges of the rear face of the main body has a first curved face corresponding to the first chamfer face and the second chamfer face. The luggage case of the present invention can prevent hit and wear and be assembled simply.



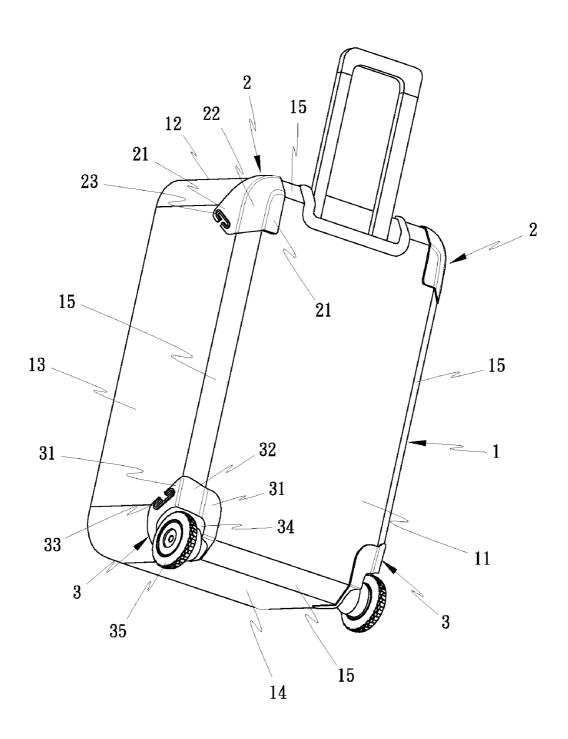


FIG. 1

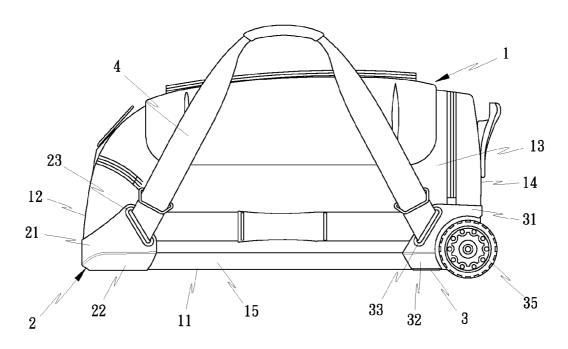
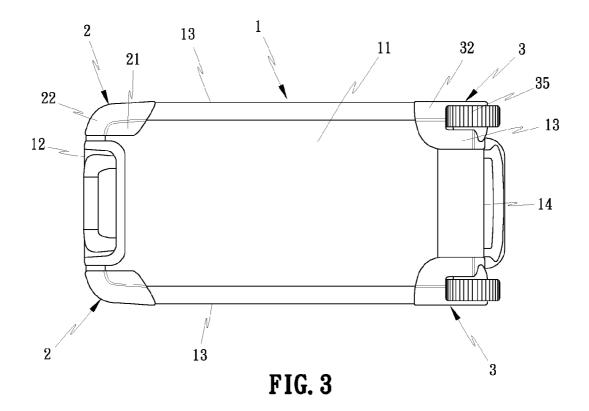


FIG. 2



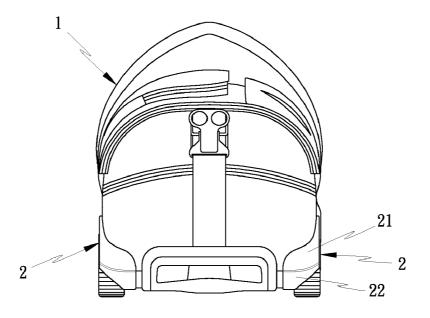


FIG. 4

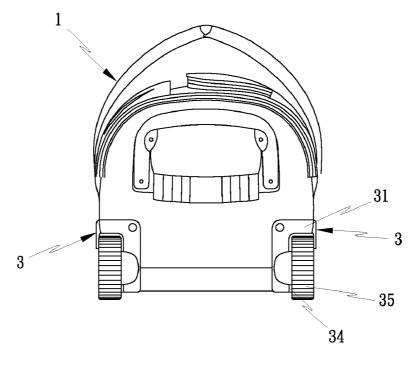


FIG. 5

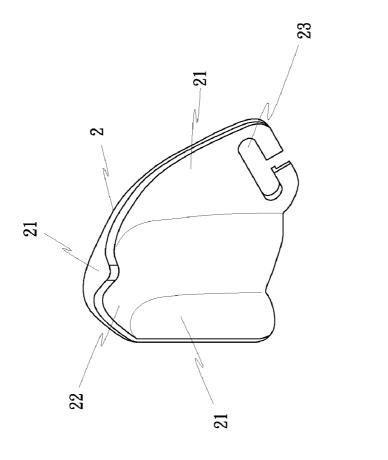
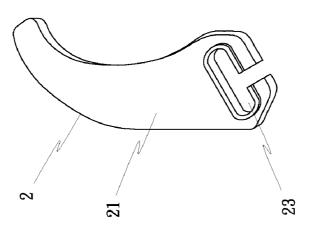
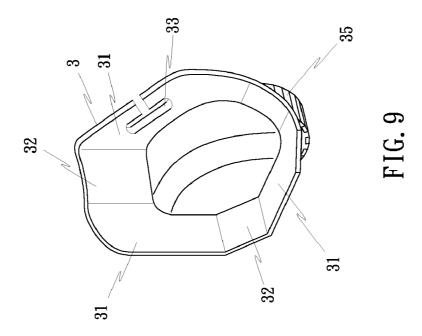
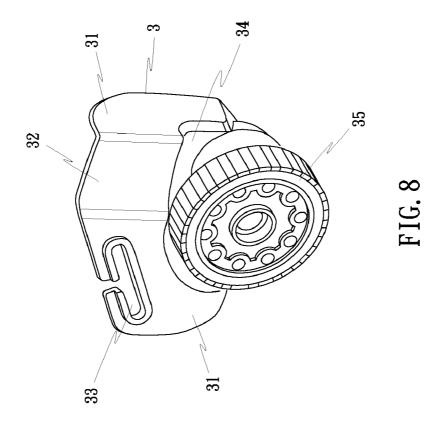
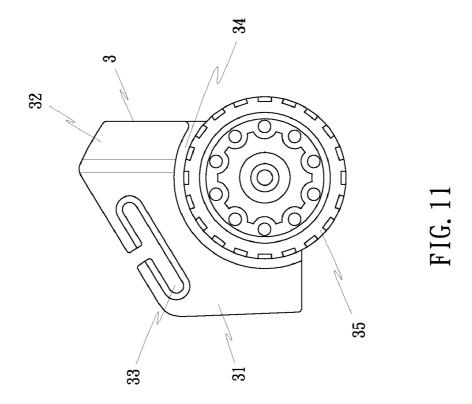


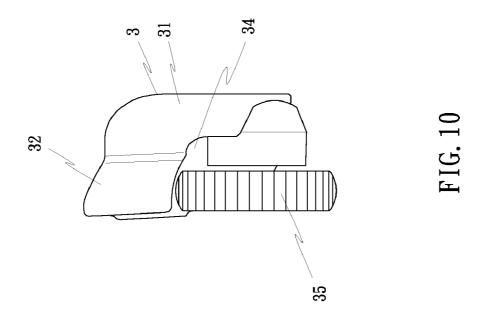
FIG. 7











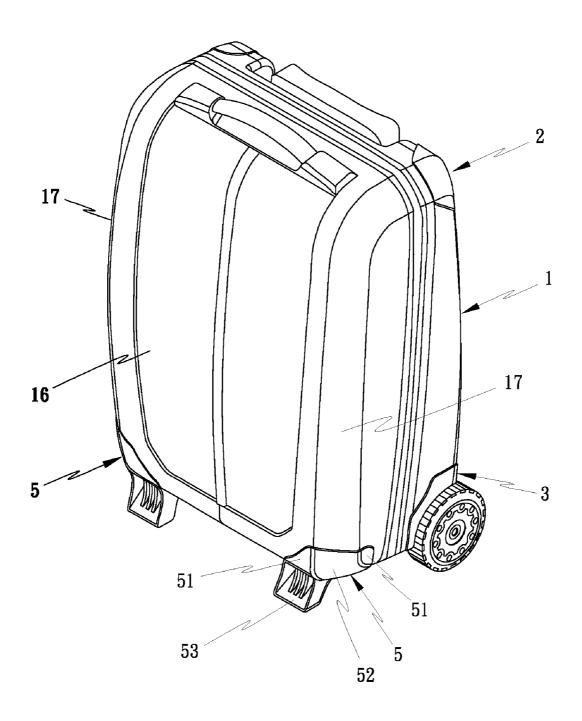


FIG. 12

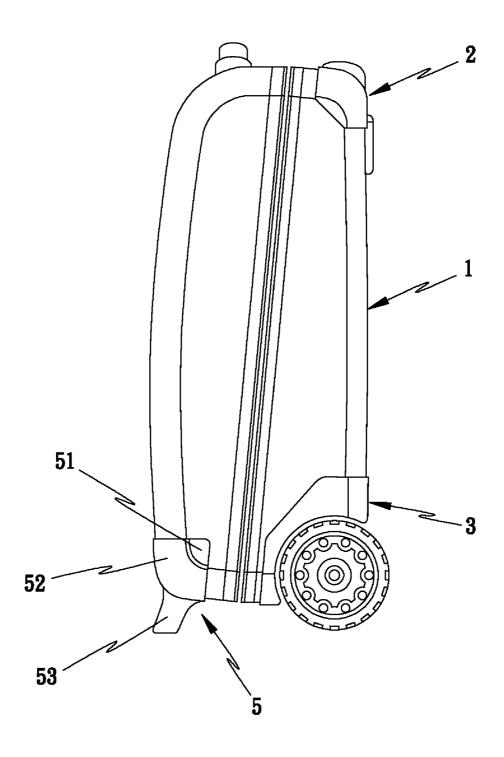


FIG. 13

#### LUGGAGE CASE

#### BACKGROUND OF THE INVENTION

[0001] (a) Field of the Invention

[0002] The present invention relates to a luggage case, and more particularly to a luggage case having protective units disposed on corners of the luggage case to prevent the luggage case from hit and wear.

[0003] (b) Description of the Prior Art

[0004] There are various luggage cases on the market. For example, a soft luggage case is made of textile fabric, which comprises a soft main body, a soft cover and a zipper to lock the main body and the cover. A hard luggage case is made of a plastic material by injection molding. The conventional luggage case has a hollow rectangular body with a right angle at each corner of the body. The corners of the luggage case are easy to hit or rub against other articles when the user draws or pulls the luggage case, which not only influences the pulling of the luggage case but also damages the appearance of the luggage case. Therefore, it is necessary to provide a protective structure to protect the edges and the corners of the luggage case.

[0005] In addition, the conventional luggage case comprises two wheels coupled to the bottom of the luggage case and foot pads to support the luggage case, so the luggage case can be pulled and placed steadily. However, the wheels, the foot pads and other parts are not an integral whole. For instance, they are not integrally formed with an anti-wear structure or the base of a pull rod, so the assembly of the luggage case is complicated due to many parts. This is not cost-effective.

#### SUMMARY OF THE INVENTION

[0006] The primary objective of the present invention is to provide a luggage case, which comprises first protective units and second protective units disposed on corners of a luggage case. The first and second protective units and a main body of the luggage case have chamber faces, preventing hit and wear.

[0007] A secondary objective of the present invention is to provide a luggage case, which has slots formed on the first and second protective units for insertion of a strap, so the first and second protective units can be used to connect the strap and the main body.

[0008] Another objective of the present invention is to provide a luggage case, which provides wheels coupled with the second protective units, so the luggage case can be assembled simply.

[0009] A further objective of the present invention is to provide a luggage case, which provides third protective units with support blocks to hold against the ground.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1 is a perspective view according to a first embodiment of the present invention;

[0011] FIG. 2 is a side view according to a second embodiment of the present invention;

[0012] FIG. 3 is a rear view according to the second embodiment of the present invention;

[0013] FIG. 4 is a top view according to the second embodiment of the present invention;

[0014] FIG. 5 is a bottom view according to the second embodiment of the present invention;

[0015] FIG. 6 is a perspective view of a first protective unit of the present invention;

[0016] FIG. 7 is another perspective view of the first protective unit of the present invention;

[0017] FIG. 8 is a perspective view of a second protective unit of the present invention;

[0018] FIG. 9 is another perspective view of the second protective unit of the present invention;

[0019] FIG. 10 is a front view of the second protective unit of the present invention;

[0020] FIG. 11 is a side view of the second protective unit of the present invention;

[0021] FIG. 12 is a perspective view according to a third embodiment of the present invention, and

[0022] FIG. 13 is a side view according to the third embodiment of the present invention.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0023] Embodiments of the present invention will now be described, by way of example only, with reference to the accompanying drawings.

[0024] As shown in FIG. 1 to FIG. 5, a luggage case according to a preferred embodiment of the present invention comprises a main body 1, a pair of first protective units 2 disposed on two upper corners of a rear face 11 of the main body 1, and a pair of second protective units 3 disposed on two lower corners of the rear face 11 of the main body 1.

[0025] As shown in FIG. 6 and FIG. 7, each first protective unit 2 comprises three connected plates 21 to wrap portions of the rear face 11, an upper face 12 and one of two side faces 13 of the main body 1. The three plates 21 are integrally formed with a plastic material to constitute the first protective unit 2. The first protective unit 2 further has a first chamfer face 22 corresponding to an upper edge and one of two side edges of the rear face 11 of the body 1. The first chamfer face 22 has an angle of 30 degrees to 45 degrees.

[0026] As shown in FIG. 8 and FIG. 11, each second protective unit 3 comprises three connected plates 31 to wrap portions of the rear face 11, a lower face 14 and one of the two side faces 13 of the main body 1. The three plates 31 are integrally formed with a plastic material to constitute the second protective unit 3. The second protective unit 3 further has a second chamfer face 32 corresponding to a lower edge and one of the two side edges of the rear face 11 of the body 1. The second chamfer face 32 has an angle of 30 degrees to 45 degrees.

[0027] As shown in FIG. 1 and FIG. 5, the upper edge, the lower edge and the two side edges of the rear face 11 of the main body 1 have a first curved face 15 corresponding to the first chamfer face 22 and the second chamfer face 32. The first curved face 15 has a preferred angle of 30 degrees to 45 degrees, so that all the edges of the rear face 11 of the luggage case are smooth.

[0028] When the luggage case of the present invention is placed with other articles together, the first protective units 2 and the second protective units 3 can prevent the corners of the main body 1 from being scrapped or damaged. Besides, when drawing and pulling the luggage case, the first chamfer face 22 of the first protective unit 2, the second chamfer face 32 of the second protective unit 3 and the first curved face 15 can avoid the luggage case from hitting other articles, so the luggage case can be pulled smoothly.

[0029] As shown in FIG. 1, FIG. 2, FIG. 7 and FIG. 8, the first protective unit 2 has a slot 23, and the second protective unit 3 has a slot 33. The slots 23, 33 are disposed on the plates 21, 31 relative to the side face 13 of the main body 1. The slots 23, 33 can be inserted with a strap 4. Thus, the first protective unit 2 and the second protective unit 3 can be used to connect the strap 4 and the main body 1. As shown in FIG. 1, FIG. 2 and FIG. 8, the second protective unit 3 of the present invention further has a recess 34 at an outer side thereof for connecting with a rotary wheel 35, such that the second protective unit 3 and the wheel 35 are connected together, preventing the parts from scattering. The luggage case of the present invention can be assembled simply.

[0030] As shown in FIG. 1 and FIG. 2, the main body 1 of the present invention is a hollow rectangular case made of textile fabric, so that the soft main body 1 can be compressed. Alternatively, the main body 1 is a hollow rectangular case composed of hard plastic cases.

[0031] As shown in FIG. 12 and FIG. 13, the luggage case of the preferred embodiment of the present invention further comprises a pair of second protective units 5 on two lower corners of a front face 16 of the main body 1. Each third protective unit 5 comprises three connected plates 51 to wrap portions of the front face 16, the lower face 14 and one of the two side faces 13 of the main body 1. The three plates 51 are integrally formed with a plastic material to constitute the third protective unit 5. The third protective unit 5 further has a third chamfer face 52 corresponding to one of two side edges of the front face 16 and one of two side edges of the lower face 14 of the body 1. The third chamfer face 52 has an angle of 30 degrees to 45 degrees. The two side edges of the front face 16 and the two side edges of the lower face 14 of the main body 1 have a second curved face 17 corresponding to the third chamfer face 52. The second curved face 17 has a preferred angle of 30 degrees to 45 degrees, preventing hit and wear. [0032] As shown in FIG. 12 and FIG. 13, the third protec-

[0032] As shown in FIG. 12 and FIG. 13, the third protective unit 5 comprises a support block 53 to hold against the ground. The support block 53 is integrally connected with the third protective unit 5 to prevent the parts from scatting. The luggage case of the present invention can be assembled simply.

[0033] Although particular embodiments of the present invention have been described in detail for purposes of illustration, various modifications and enhancements may be made without departing from the spirit and scope of the present invention. Accordingly, the present invention is not to be limited except as by the appended claims.

What is claimed is:

- 1. A luggage case, comprising a main body, a pair of first protective units disposed on two upper corners of a rear face of the main body and a pair of second protective units disposed on two lower corners of the rear face of the main body; each of the pair of first protective units comprising three connected plates to wrap portions of the rear face, an upper face and one of two side faces of the main body and having a first chamfer face corresponding to an upper edge and one of two side edges of the rear face of the body; each of the pair of second protective units comprising three connected plates to wrap portions of the rear face, a lower face and one of the two side faces of the main body and having a second chamfer face corresponding to a lower edge and one of the two side edges of the rear face of the body; the upper edge, the lower edge and the two side edges of the rear face of the main body having a first curved face corresponding to the first chamfer face and the second chamfer face.
- 2. The luggage case as claimed in claim 1, wherein each of the pair of first protective units and the pair of second protective units has a slot for insertion of a strap.
- 3. The luggage case as claimed in claim 2, wherein each of the pair of second protective units is coupled with a rotary wheel.
- **4**. The luggage case as claimed in claim **3**, wherein the main body is a hollow rectangular case made of textile fabric.
- 5. The luggage case as claimed in claim 3, wherein the main body is a hollow rectangular case composed of hard plastic cases.
- 6. The luggage case as claimed in claim 1, further comprising a pair of second protective units on two lower corners of a front face of the main body, each of the pair of third protective units comprising three connected plates to wrap portions of the front face, the lower face and one of the two side faces of the main body and having a third chamfer face corresponding to one of two side edges of the front face and one of two side edges of the lower face of the body.
- 7. The luggage case as claimed in claim 6, wherein each of the pair of third protective units comprises a support block to hold against the ground.
- 8. The luggage case as claimed in claim 6, wherein the two side edges of the front face and the two side edges of the lower face of the main body have a second curved face corresponding to the third chamfer face.

\* \* \* \* \*