



US 20160051054A1

(19) **United States**(12) **Patent Application Publication**
CHOI(10) **Pub. No.: US 2016/0051054 A1**(43) **Pub. Date: Feb. 25, 2016**(54) **FOLDABLE CHAIR WITH STRAP**(71) Applicant: **Campvalley (Xiamen) Co., Ltd.**,
Xiamen (CN)(72) Inventor: **Kwan Jun CHOI**, Xiamen (CN)(73) Assignee: **Campvalley (Xiamen) Co., Ltd.**,
Xiamen (CN)(21) Appl. No.: **14/832,338**(22) Filed: **Aug. 21, 2015**(30) **Foreign Application Priority Data**

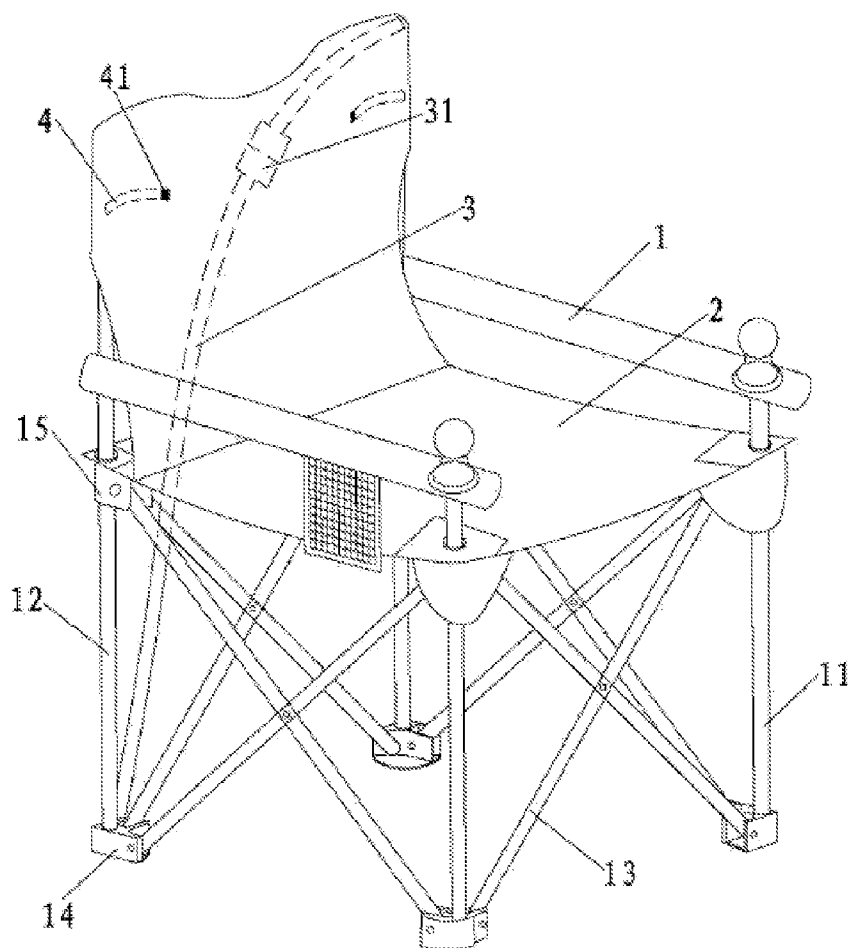
Aug. 22, 2014 (CN) 201420476731.9

Publication Classification(51) **Int. Cl.****A47C 4/52** (2006.01)**A47C 4/28** (2006.01)(52) **U.S. Cl.**CPC .. **A47C 4/52** (2013.01); **A47C 4/286** (2013.01)

(57)

ABSTRACT

A portable foldable chair includes a frame, a fabric attached to the frame, and a strap. The frame includes supporting rods including two front and two back-rest rods, bases provided at bottoms of the front and back-rest rods, pivoting seats provided on the front and back-rest rods, and pairs of crossing rods disposed between two adjacent supporting rods. A pair of crossing rods includes two crossing rods pivotally coupled to each other. Each crossing rod in one pair has a lower end pivoted to the base provided at the bottom of one supporting rod, and an upper end pivoted to the pivoting seat provided on the adjacent supporting rod. The strap has one end fixedly attached to the base of one back-rest rod and the other end fixedly attached to the chair fabric in proximity to a top of the other back-rest rod.



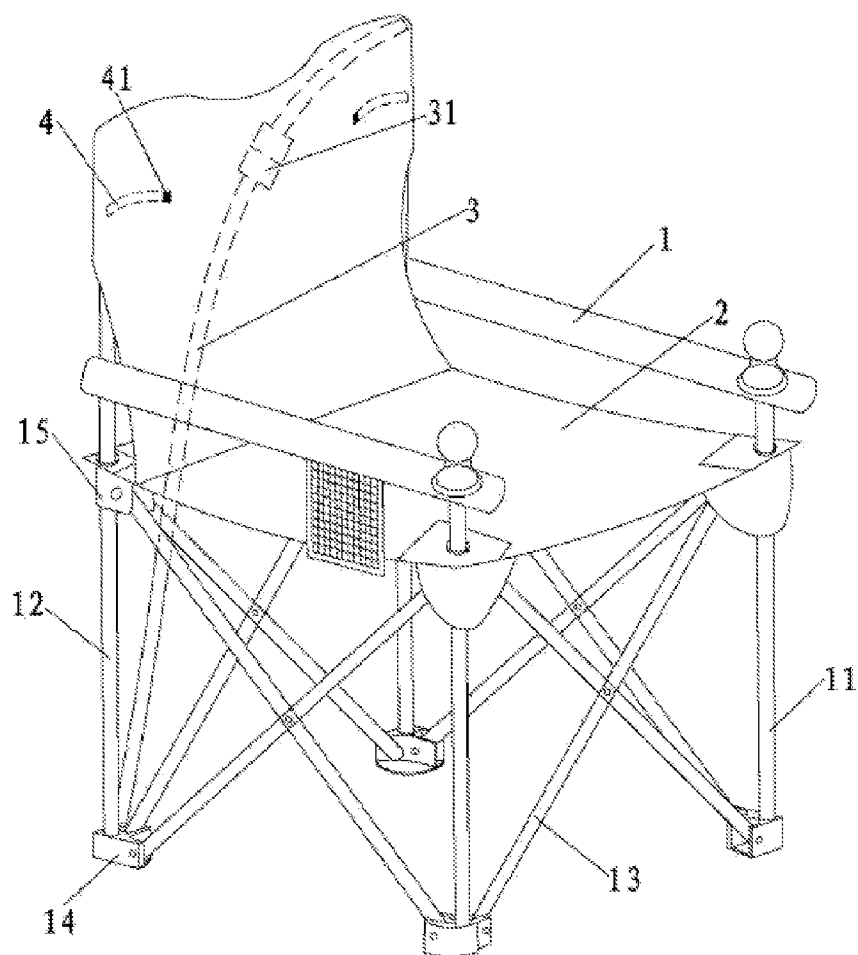


FIG. 1

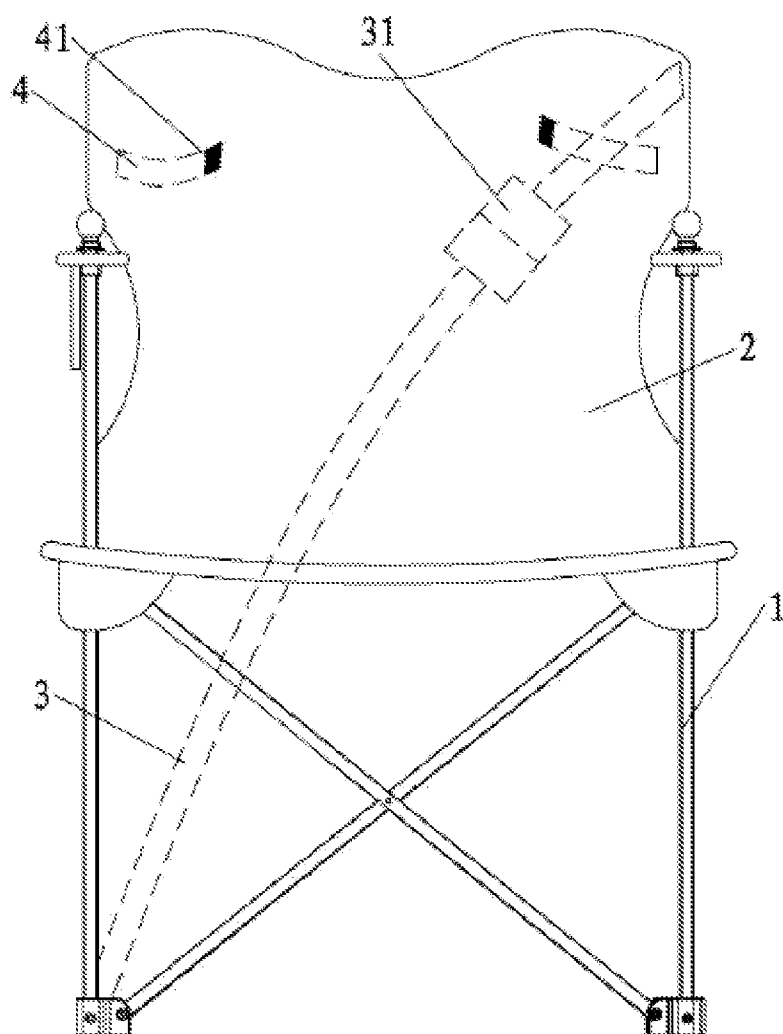


FIG. 2

FOLDABLE CHAIR WITH STRAP**CROSS-REFERENCE TO RELATED APPLICATION**

[0001] The present application claims priority of Chinese Utility Model Application Number CN 201420476731.9 filed Aug. 22, 2014, the entire contents of which applications are incorporated herein for all purposes by this reference.

FIELD OF INVENTION fines The present invention relates to a foldable chair, and in particular, relates to a portable foldable chair that is easy to carry.

DESCRIPTION OF RELATED ART

[0002] Folding furniture, especially folding chairs, which can be carried outside and is convenient in storage and transport, are widely popular with customers and manufacturers. Since the conventional folding chairs are of metal or plastic structures, all the components are pivoted by shafts and pins to compose connecting rods with a linkage action, and all the components may be completely collapsed into a bundle of rods and put into a carry bag whose opening end can be tied up for easy carrying, storage and transport. At the same time, for the convenience of carrying the packed folding chair around, people usually equip the carry bag with a backpack so that they can carry the bag on back to free their both hands.

[0003] Since the carry bag for the folding chair is independent from the folding chair, after unpacking the folding chair, the carry bag is not in use or no longer needed, and needs to be kept somewhere. When people want to carry the folding chair outside or store and transport the folding chair, they need to find the carry bag, which is inconvenient in use and the carry bag may be lost.

[0004] The Chinese Utility Model No. ZL200820119744.5 has disclosed a foldable leisure chair, which includes a fold-away chair body and a foldaway soft belt. The chair body includes a support frame, seat cloth, and backrest cloth, wherein the seat cloth and the backrest cloth are connected on the support frame. One end of the foldaway soft belt is connected to the front part of the left side of the seat cloth, and the other end bypasses the backrest and is connected to the front part of the right side of the seat cloth; when the foldaway soft belt is lifted, acting force is generated to fold the chair body and the soft belt can function as braces. However, the foldable soft belt of the foldable leisure chair is arranged in parallel to the seat of the chair, and vertical to the length direction of the bundle of rods after the folding chair is folded, and when carrying the bundle of rods on back, the bundle of rods stay horizontally, which is inconvenient to carry on back. In addition, after the folding chair is folded but have not been carried on back, the folding chair may easily open spontaneously, which is also inconvenient in use.

[0005] Given the above background, there is a need in the art for an improved foldable chair that is easy to carry and use.

[0006] The information disclosed in this Background section is only for enhancement of understanding of the general background of the invention and should not be taken as an acknowledgement or any form of suggestion that this information forms the prior art already known to a person skilled in the art.

SUMMARY OF INVENTION

[0007] The present invention is directed to a portable and foldable chair that has a simple structure and is easy to carry.

[0008] In various aspects, a portable foldable chair includes a chair frame, a chair fabric attached to the chair frame and a strap. In some aspects, the chair frame include: a plurality of supporting rods including two front rods and two back-rest rods; a plurality of bases provided at bottoms of the two front rods and the two back-rest rods; a plurality of pivoting seats provided on the two front rods and the two back-rest rods; and a plurality of pairs of crossing rods disposed between two adjacent supporting rods, wherein a pair of crossing rods include two crossing rods pivotally coupled to each other, and each crossing rod in the pair of crossing rods has a lower end pivoted to the base provided at the bottom of one supporting rod, and an upper end pivoted to the pivoting seat provided on the adjacent supporting rod. The strap has one end fixedly attached to the base of one back-rest rod and the other end fixedly attached to the chair fabric in proximity to a top of the other back-rest rod.

[0009] With the two ends of the strap respectively fixed to the bottom and the top of the two back-rest rods, the length direction of the strap coincides with the length direction of the bundle of rods when the foldable chair is folded. Consequently, the present invention provides a simple structure and is convenient to carry on back.

[0010] In an aspect, the strap includes two separable portions detachably connected to each other by a release buckle. Such a configuration allows the strap to be separated into two portions for the convenience of placing the strap after the foldable chair is unfolded, and allows the strap to be buckled up into one piece when in use or desired. Moreover, placing the foldable chair on back does not require lifting the foldable chair over the head and then loading it on the shoulder. Accordingly, the present invention is very convenient to use.

[0011] In some aspects, the portable foldable chair further includes: two tightening belts, each with one end fixedly attached to the chair fabric in proximity to the top of one of the two back-rest rods respectively, and a connecting component provided on the two tightening belts to connect the two tightening belts. Such a configuration prevents the foldable chair, after folded, from inadvertent unfolding.

[0012] In one aspect, the connecting component is a release buckle or a velcro®. In another aspect, the connecting component comprises a button formed on one tightening belt and a hole, matching with the button, formed on the other tightening belt.

[0013] The methods and apparatuses of the present invention have other features and advantages which will be apparent from or are set forth in more detail in the accompanying drawings, which are incorporated herein, and the following Detailed Description, which together serve to explain certain principles of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. 1 is a schematic perspective view illustrating an exemplary portable foldable chair of the present invention; and

[0015] FIG. 2 is a schematic front view illustrating an exemplary portable foldable chair of the present invention.

DETAILED DESCRIPTION

[0016] Reference will now be made in detail to various embodiments of the present invention(s), examples of which are illustrated in the accompanying drawings and described below. While the invention(s) will be described in conjunction with exemplary embodiments, it will be understood that present description is not intended to limit the invention(s) to those exemplary embodiments. On the contrary, the invention(s) is/are intended to cover not only the exemplary embodiments, but also various alternatives, modifications, equivalents and other embodiments, which may be included within the spirit and scope of the invention as defined by the appended claims.

[0017] With reference to FIG. 1 and FIG. 2, the portable foldable chair of the present invention includes a chair frame 1 and a chair fabric 2 attached to the chair frame 1. In some embodiments, the chair fabric 2 is the same as or similar to those in related art. The chair fabric 2 can be made of any suitable material including cloth, textile, and the like. In an embodiment, the chair fabric 2 is made of a one-piece chair fabric. In another embodiment, the chair fabric 2 is made of a number of pieces, such as a seat fabric and a back-rest fabric, separated or combined (e.g., stitched) together.

[0018] The chair frame 1 includes a plurality of supporting rods and a plurality of pairs of crossing rods. In some embodiments, the chair frame 1 includes four supporting rods consisting of two front rods 11 and two back-rest rods 12. A pair of crossing rods includes two crossing rods 13, which are crossed and pivotally coupled (e.g., hinged) to each other. One pair of crossing rods is arranged between two neighboring supporting rods. For example, in the embodiment as illustrated in FIG. 1, two crossing rods 13 (one pair) are arranged between the two front rods 11, between the two back-rest rods 12, and between each front rod 11 and its adjacent back-rest rod 12.

[0019] In some embodiments, a lower end of each crossing rod 13 is respectively pivoted to a base 14 provided at the bottom of the front rods 11 or the back-rest rods 12. An upper end of each crossing rod 13 is respectively pivoted to a pivoting seat 15 provided on the front rods 11 or the back-rest rods 12. As shown, in some embodiments, two crossing rods 13 are pivoted to each base 14 and each pivoting seat 15.

[0020] In some embodiments, the portable foldable chair of the present invention further includes a strap 3, the length of which is adjustable and can be determined according to the practical requirements and/or personal preference. In some embodiments, the strap 3 is a belt, a strip, a string, a rope, a chord or the like. In some embodiments, the strap 3 has one end fixedly attached to the base 14 of one back-rest rod 12 and the other end fixedly attached to the chair fabric 2 in proximity to the top of the other back-rest rod 12. It should be noted that the purpose of fixedly attaching the strap 3 to the chair fabric 2 is to facilitate the installation of the chair fabric 2 on the back-rest rod 12. Without interfering the installation of the chair fabric 2, in some embodiments, the strap 3 may be fixedly attached to the top of the back-rest rod 12 or to the rod body at a position in proximity to the top of the back-rest rod 12.

[0021] In some embodiments, the strap 3 is provided with a fastener such as a release buckle 31 that enables the strap 3 to be separated into two portions. The release buckle 31 may be a common release buckle disclosed in related art, such as those attached to the strap of an ordinary school bag, and thus the detailed description of which is omitted. The installation

position of the release buckle 31 may be determined or adjusted according to the practical requirements or personal preference.

[0022] In some embodiments, the portable foldable chair of the present invention further includes a tightening belt 4. In one embodiment, the tightening belt 4 has an end fixedly attached to the chair fabric 2 in proximity to the top of the two back-rest rods 12 respectively. As used herein, the term “belt” is interchangeable with strap, string or the like. In another embodiment, the tightening belt 4 has an end fixedly attached to the back-rest rod 12. In some embodiments, the portable foldable chair of the present invention includes two or more tightening belts 4 connected by a connecting component 41 provided on the tightening belts 4. The length of the tightening belts 4 can be determined according to the practical requirements or personal preference. In some embodiments, the length of the tightening belts 4 is set such that an effective length of the two tightening belts 4 after connection is the same or substantially the same as the distance between the two back-rest rods 12 after the foldable chair is folded.

[0023] In some embodiments, the connecting component 41 of the present invention is a fastener such as a loop, a hook, a velcro®, or a release buckle similar to the release buckle 31 of the strap 3. In an embodiment, the connecting component 41 is of a button structure, which includes a button arranged on one tightening belt 4 and a hole, matching with the button, arranged on the other tightening belt 4.

[0024] In use, the foldable chair is folded into a bundle of rods, then the two tightening belts are connected by the connecting component 41 to prevent the foldable chair from inadvertent unfolding. Preferably, the release buckle 31 of the strap 3 is buckled up, and the foldable chair is ready for carrying on back, which is convenient in use.

[0025] For convenience in explanation and accurate definition in the appended claims, the terms “upper” or “lower”, “top” and “bottom”, and etc. are used to describe features of the exemplary embodiments with reference to the positions of such features as displayed in the figures.

[0026] The foregoing descriptions of specific exemplary embodiments of the present invention have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise forms disclosed, and obviously many modifications and variations are possible in light of the above teachings. The exemplary embodiments were chosen and described in order to explain certain principles of the invention and their practical application, to thereby enable others skilled in the art to make and utilize various exemplary embodiments of the present invention, as well as various alternatives and modifications thereof (e.g., arranging the tightening belt on the front rods 11). It is intended that the scope of the invention be defined by the Claims appended hereto and their equivalents.

What is claimed is:

1. A portable foldable chair, comprising:

a chair frame comprising:

- a plurality of supporting rods including two front rods and two back-rest rods;
- a plurality of bases provided at bottoms of the two front rods and the two back-rest rods;
- a plurality of pivoting seats provided on the two front rods and the two back-rest rods; and
- a plurality of pairs of crossing rods disposed between two adjacent supporting rods, wherein

a pair of crossing rods include two crossing rods pivotally coupled to each other, and
each crossing rod in the pair of crossing rods has a lower end pivoted to the base provided at the bottom of one supporting rod, and an upper end pivoted to the pivoting seat provided on the adjacent supporting rod;
a chair fabric attached to the chair frame; and
a strap having one end fixedly attached to the base of one back-rest rod and the other end fixedly attached to the chair fabric in proximity to a top of the other back-rest rod.

2. The portable foldable chair according to claim 1, wherein the strap includes two separable portions detachably connected to each other by a release buckle.

3. The portable foldable chair according to claim 1, further comprising:
two tightening belts, each with one end fixedly attached to the chair fabric in proximity to the top of one of the two back-rest rods respectively, and
a connecting component provided on the two tightening belts to connect the two tightening belts.

4. The portable foldable chair according to claim 3, wherein the connecting component is a release buckle or a velcro®.

5. The portable foldable chair according to claim 3, wherein the connecting component comprises a button formed on one tightening belt and a hole, matching with the button, formed on the other tightening belt.

6. The portable foldable chair according to claim 2, further comprising:

two tightening belts each with one end fixedly attached to the chair fabric in proximity to the top of the two back-rest rods respectively, and

a connecting component provided on the two tightening belts to connect the two tightening belts.

7. The portable foldable chair according to claim 6, wherein the connecting component is a release buckle or a velcro®.

8. The portable foldable chair according to claim 6, wherein the connecting component comprises a button formed on one tightening belt and a hole, matching with the button, formed on the other tightening belt.

* * * * *