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(54) Furniture

(57) Disclosed is a furniture, which includes a top frame (1), a bottom frame (2), an endless inner supporting frame, spaced between the top frame (1) and the bottom frame (2), a plurality of strip members (3) arranged around and supported on the periphery of the endless

inner supporting frame each having a top end fastened to a respective oblique bottom mounting hole of the top frame (1) and a bottom end fastened to a respective oblique top mounting hole of the bottom frame (2), and a cord member (4) securing the strip members (3) to the endless inner supporting frame.



EP 1 969 969 A1



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Description

BACKGROUND OF THE INVENTION

1. Field of the Invention:

[0001] The present invention to furniture and more particularly to such a furniture that has its body formed of strips members.

2. Description of the Related Art:

[0002] Manu materials including stones, glass, wood, plastics, stainless steel, and etc., are used to make tables, chairs, cabinets and many other different furniture. A wooden furniture shows an antique sense of beauty that attracts people to buy. There are known furniture having a meshed body structure and a framework supporting the meshed body structure. The meshed body structure is formed of wooden or bamboo strips by means of a weaving technique and then bonded or nailed to the framework. The wearing procedure is complicated, requiring much labor and time. Therefore, these conventional meshed body structure type furniture are commonly expensive.

SUMMARY OF THE INVENTION

[0003] The present invention has been accomplished under the circumstances in view. According to one aspect of the present invention, the furniture comprises a top frame, the top frame having a plurality of oblique bottom mounting holes arranged along a border area thereof; a bottom frame, the bottom frame having a plurality of oblique top mounting holes arranged along a border area thereof; at least one endless inner supporting frame spaced between the top frame and the bottom frame; a plurality of strip members respectively connected between the top frame and the bottom frame and extending around and supported on the at least one endless inner supporting frame, the strip members each having a top end respectively fastened to the oblique bottom mounting holes of the top frame and a bottom end respectively fastened to the oblique top mounting holes of the bottom frame; and at least one fastening member that secures the strip members to the at least one endless inner supporting frame.

[0004] According to another aspect of the present invention, the at least one endless inner supporting frame can be made having an outer diameter greater than the top and bottom frames to support the strip members in an outwardly curved status. Alternatively, the at least one endless inner supporting frame can be made having an outer diameter smaller than the top and bottom frames to support the strip members in an inwardly curved status [0005] According to still another aspect of the present invention, the top and bottom frame and the at least one endless inner supporting frame can be made having a

circular or rectangular profile, or any of a variety of shapes.

[0006] According to still another aspect of the present invention, the at least one fastening member each can be a cord member.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007]

FIG. 1 is a perspective view of a furniture in accordance with a first embodiment of the present invention.

FIG. 2 is a perspective view of a furniture in accordance with a second embodiment of the present invention.

FIG. 3 is a sectional view taken along line A-A of FIG. 2.

FIG. 4 is similar to FIG. 2, but showing the furniture equipped with only one endless inner supporting frame.

FIG. 5 is a top view of FIG. 2.

FIG. 6 is a sectional plain view of a part of the furniture in accordance with the second embodiment of the present invention.

FIG. 7 is a perspective view of a furniture in accordance with a third embodiment of the present invention.

FIG. 8 is a sectional plain view of a part of the furniture in accordance with the third embodiment of the present invention.

FIG. 9 is a cross sectional view of a furniture in accordance with a fourth embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EM-BODIMENT

[0008] Referring to FIG. 1, a furniture in accordance
 with a first embodiment of the present invention is shown comprising a top frame 1, a bottom frame 2, at least one, for example, two endless inner supporting frames (not shown) arranged at different elevations between the top frame 1 and the bottom frame 2, a plurality of arched strip

⁴⁵ members (for example, bamboo strips) **3** connected between the top frame **1** and the bottom frame **2** and attached to the periphery of each endless inner supporting frame, and fastening members, for example, cord members **4** that secure the arched strip members **3** to the

⁵⁰ endless inner supporting frames. According to this embodiment, the top frame **1** is a rectangular open frame, and the bottom frame **2** is a flat frame plate. The arched strip members **3** each have a top end respectively inserted into a respective obliquely extending bottom mounting hole (not shown) of the top frame **1** and a bottom end respectively inserted into a respective oblique top mounting hole (not shown) of the bottom frame **2**. When installed, the arched strip members **3** are respectively

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curved outwards. Further, a table board **6** may be supported on the top frame **1** so that the furniture can be used as a table. After removal of the table board **6**, the furniture is used as a storage container for keeping things.

[0009] FIGS. 2~6 show a furniture in accordance with a second embodiment of the present invention. According to this embodiment, the furniture is shaped like a wine barrel. Similar to the aforesaid first embodiment of the present invention, the furniture according to this second embodiment a top frame 1, which has a plurality of oblique bottom mounting holes 11, a bottom frame 2, which has a plurality of oblique top mounting holes 21 corresponding to the obligue bottom mounting holes 11 of the top frame 1, at least one endless inner supporting frame 5 (for example, three endless inner supporting frames in FIGS, 2 and 3, or one endless inner supporting frame in FIG. 4) spaced between the top frame 1 and the bottom frame 2, a plurality of arched strip members 3 connected between the top frame 1 and the bottom frame 2 and attached to the periphery of each endless inner supporting frame 5, and at least one cord members 4 that secures the arched strip members 3 to the at least one endless inner supporting frame 5 respectively. According to this embodiment, the top frame 1 is an annular frame, and the bottom frame 2 is a circular frame plate. The arched strip members 3 have the respective top and bottom ends respectively fastened to the oblique bottom mounting holes 11 of the top frame 1 and the oblique top mounting hole 21 of the bottom frame 2. According to this embodiment, each endless inner supporting frame 5 has an outer diameter greater than the top frame 1 and the bottom frame 2. When assembled, the arched strip members 3 are respectively curving outwards. When assembled, the arched strip members 3 are respectively curving outwards, and therefore the furniture shows an outer diameter gradually reducing in reversed directions from the middle toward the top frame 1 and the bottom frame 2. [0010] FIGS. 7 and 8 show a furniture in accordance with a third embodiment of the present invention. This embodiment is substantially similar to the aforesaid second embodiment with the exception that each endless inner supporting frame (not shown) has an outer diameter smaller than the top frame 1 and the bottom frame 2. When assembled, the arched strip members 3 are respectively curving inwards, and therefore the furniture shows an outer diameter gradually increasing in reversed directions from the middle toward the top frame 1 and the bottom frame 2.

[0011] FIG. 9 is a cross sectional view of a furniture in accordance with a fourth embodiment of the present invention. According to this fourth embodiment, the endless inner supporting frame 5 is shaped like a peanut. The top and bottom frames of the furniture have a contour corresponding to the endless inner supporting frames. [0012] A prototype of furniture has been constructed with the features of FIGS. 1~9. The furniture functions smoothly to provide all of the features disclosed earlier. **[0013]** Although particular embodiments of the 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 invention. For example, straight strip members may be used and connected between the top frame and the bottom frame to substitute for the arched strip members. Accordingly, the invention is not to be limited except as by the appended claims.

Claims

1. A furniture comprising:

a top frame, said top frame having a plurality of oblique bottom mounting holes arranged along a border area thereof;

a bottom frame, said bottom frame having a plurality of oblique top mounting holes arranged along a border area thereof;

at least one endless inner supporting frame spaced between said top frame and said bottom frame;

a plurality of strip members respectively connected between said top frame and said bottom frame and extending around and supported on said at least one endless inner supporting frame, said strip members each having a top end respectively fastened to the oblique bottom mounting holes of said top frame and a bottom end respectively fastened to the oblique top mounting holes of said bottom frame; and at least one fastening member that secures said strip members to said at least one endless inner supporting frame.

- **2.** The furniture as claimed in claim 1, wherein said top frame is an endless open frame.
- **3.** The furniture as claimed in claim 1, wherein said at least one endless inner supporting frame each has an outer diameter greater than said top frame and said bottom frame.
- **4.** The furniture as claimed in claim 1, wherein said at least one endless inner supporting frame each has an outer diameter smaller than said top frame and said bottom frame.
- 5. The furniture as claimed in claim 1, wherein said at least one endless inner supporting frame includes a plurality of endless inner supporting frames having different outer diameters.
- 6. The furniture as claimed in claim 1, wherein said top frame, said bottom frame and said at least one endless inner supporting frame have a circular profile.

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- 7. The furniture as claimed in claim 1, wherein said top frame, said bottom frame and said at least one endless inner supporting frame have a rectangular profile.
- **8.** The furniture as claimed in claim 1, wherein said strip members are straight strips.
- **9.** The furniture as claimed in claim 1, wherein said strip members are arched strips.
- **10.** The furniture as claimed in claim 1, further comprising a table board supported on said top frame so that the furniture is used as a table.
- **11.** The furniture as claimed in claim 1, wherein said top frame is flat plate member for sitting.
- 12. The furniture as claimed in claim 1, wherein said top frame is an open frame and said bottom frame is a 20 flat plate member for support storage items in the furniture.
- **13.** The furniture as claimed in claim 1, wherein said at least one fastening member each is a cord member. ²⁵

Amended claims in accordance with Rule 137(2) EPC.

1. A furniture comprising:

a top frame (1), said top frame (1) having a plurality of oblique bottom mounting holes arranged along a border area thereof;

a bottom frame (2), said bottom frame (2) having a plurality of oblique top mounting holes arranged along a border area thereof;

at least one endless supporting frame (5) spaced between said top frame (1) and said bottom frame (2);

a plurality of strip members (3) respectively connected between said top frame (1) and said bottom frame (2) and extending around and supported on said at least one endless inner supporting frame (5), said strip members (3) each having a top end respectively fastened to the oblique bottom mounting holes of said top frame (1) and a bottom end respectively fastened to the oblique top mounting holes of said bottom frame (2); and

at least one fastening member (4) that secures said strip members (3) to said at least one endless supporting frame (5);

characterized in that each of said at least one endless supporting frame (5) is disposed inwardly with respect to the plurality of strip members; wherein said top frame (1) is an open frame and said bottom frame (2) is a flat plate member for supporting storage items in the furniture.

- 2. The furniture as claimed in claim 1, wherein said at least one endless inner supporting frame (5) each has an outer diameter greater than said top frame (1) and said bottom frame (2).
- **3.** The furniture as claimed in claim 1, wherein said at least one endless inner supporting frame (5) each has an outer diameter smaller than said top frame (1) and said bottom frame (2).
- 4. The furniture as claimed in claim 1, wherein said at least one endless inner supporting frame (5) includes a plurality of endless inner supporting frames (5) having different outer diameters.
 - **5.** The furniture as claimed in claim 1, wherein said top frame (1), said bottom frame (2) and said at least one endless inner supporting frame (5) have a circular profile.
 - 6. The furniture as claimed in claim 1, wherein said top frame (1), said bottom frame (2) and said at least one endless inner supporting frame (5) have a rectangular profile.
- **7.** The furniture as claimed in claim 1, wherein said strip members (3) are straight strips.

8. The furniture as claimed in claim 1, wherein said strip members (3) are arched strips.

9. The furniture as claimed in claim 1, further comprising a table board (6) supported on said top frame (1) so that the furniture is used as a table.

10. The furniture as claimed in claim 1, wherein said at least one fastening member (4) each is a cord member.

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FIG. 1



FIG. 2



FIG. 3



FIG. 4



FIG. 5





FIG. 6



FIG. 7



FIG. 8



FIG. 9



European Patent Office

EUROPEAN SEARCH REPORT

Application Number EP 07 00 5322

	Citation of document with inc	lication, where appropriate	Relevant	CLASSIFICATION OF THE
Category	of relevant passag		to claim	APPLICATION (IPC)
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	Place of search	Date of completion of the search		Examiner
	The Hague	28 August 2007	Kus	, Slawomir
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EP 1 969 969 A1

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 07 00 5322

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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