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(54) **Bicycle packing device**

(57) A bicycle packing device includes a base (1) with multiple pairs of slots (13) defined therethrough for front wheels (51) and rear wheels (52) of bicycles (5) respectively engaged therewith. Two positioning bars (2) are located on two ends of the base and each top flange (22) and a lower flange (21). Each flange has a

plurality of notches (222) for receiving the front wheels and the rear wheels of the bicycles. A plurality of posts (3) each have a first end thereof extending through the positioning bars and being engaged with the base, and a top (4) is connected to respective second ends of the posts.

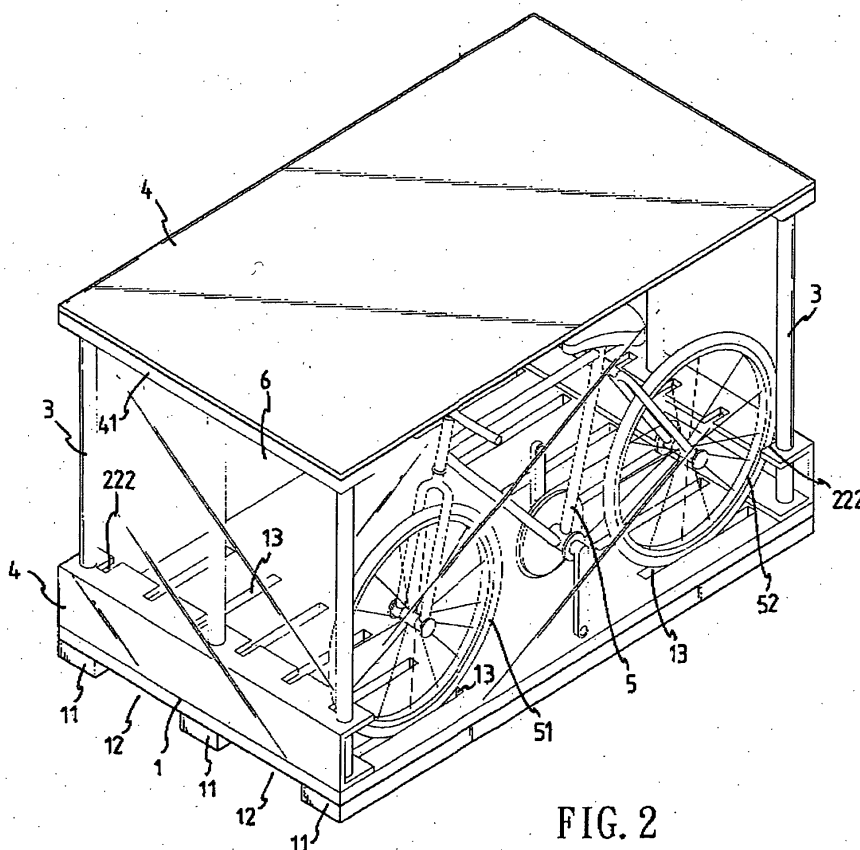


FIG. 2

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Description

FIELD OF THE INVENTION

[0001] The present invention relates to a packing device for receiving at least one bicycle therein and the device is able to be assembled within a short period of time.

BACKGROUND OF THE INVENTION

[0002] A conventional way to transport bicycles is to pack the bicycle one by one in a box assembled by several wood boards. The bicycle can be positioned in the box and the boxes are able to be piled up so as to occupy less room. However, it takes time and labor to put the bicycles in the boxes one by one. A skilled person takes about 30 to 50 minutes to position a bicycle in the box. The boxes are then broken when the bicycle are to be taken from the boxes. The wood boards are heavy and costly. Besides, extra tools such as stapling guns are required to assemble the wood boards to be a box.

SUMMARY OF THE INVENTION

[0003] The present invention relates to a bicycle packing device which comprises a base with pairs of slots defined therethrough and two positioning bars on tow ends of the base and each have notches so that the front wheels and the rear wheels are engaged with the slots and the notches. A plurality of posts each have a first end thereof extending through the positioning bars and engaged with the base. A top is connected to respective second ends of the posts.

[0004] The primary object of the present invention is to provide a bicycle packing device made of paper board and is easily to be assembled. The average positioning time for putting a bicycle in the bicycle packing device is about 3-5 minutes.

[0005] The present invention will become more obvious from the following description when taken in connection with the accompanying drawings which show, for purposes of illustration only, a preferred embodiment in accordance with the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006]

Fig. 1 is an exploded view to show the bicycle packing device of the present invention;
Fig. 2 is a perspective view to show a bicycle is received in the bicycle packing device of the present invention, and
Fig. 3 is a perspective view to show two bicycle packing devices of the present invention are piled up.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0007] Referring to Figs. 1 and 2, the bicycle packing device of the present invention comprises a base 1 with several pairs of slots 13 defined therethrough so that the front wheels 51 and the rear wheels 52 of bicycles 5 are engaged with the slots 13 as shown in Fig. 2.

[0008] Two positioning bars 2 are located at two ends of the base 1 and each of the positioning bars 2 has a top flange 22 and a lower flange 21. Each of the top flanges 22 has a plurality of notches 222 which are located in alignment with the pairs of slots 13. Therefore, the front wheels 51 and the rear wheels 52 of the bicycles 5 are further positioned by being engaged with the notches 222. Three first holes 221 and three second holes 211 are respectively defined through the top flange 22 and the lower flange 21.

[0009] Three posts 3 each have a first end thereof extending through the first holes 221 and the second holes 211 of the positioning bars 2, the holes 10 in the base 1, and being engaged with three rails 11 located on a bottom of the base 1. The three rails 11 are parallel with each other and grooves 12 are defined between the rails 11. The grooves 12 are convenience for the fork lifter to raise the device.

[0010] A top 4 with two reinforcement bars 41 connected to a bottom of the top 4 and the second ends of the posts 3 extend through the reinforcement bars 41 and are connected to the top 4.

[0011] A transparent fabric 6 may wrap around the device so that the bicycles in the device can be seen. As shown in Fig. 3, the flat top 4 and the base 1 allow the device to be piled up for convenience of transportation.

[0012] All the items of the bicycle packing device mentioned above are made of paper boards which are light in weight and environment friendly.

[0013] While we have shown and described the embodiment in accordance with the present invention, it should be clear to those skilled in the art that further embodiments may be made without departing from the scope of the present invention.

Claims

1. A bicycle packing device comprising:

a base with pairs of slots defined therethrough;
two positioning bars located on two ends of said base and each having a plurality of notches defined therein which are located in alignment with said pairs of slots;
a plurality of posts each having a first end thereof extending through said positioning bars and engaged with said base, and
a top connected to respective second ends of said posts.

2. The device as claimed in claim 1 further comprising a plurality of rails connected to a bottom of said base and grooves defined between said rails.
3. The device as claimed in claim 1 further comprising reinforcement bars connected to a bottom of said top and said posts engaged with said reinforcement bars.
4. The device as claimed in claim 1 wherein each of said positioning bars has a top flange and a lower flange, each of said top flanges having said notches defined therein.

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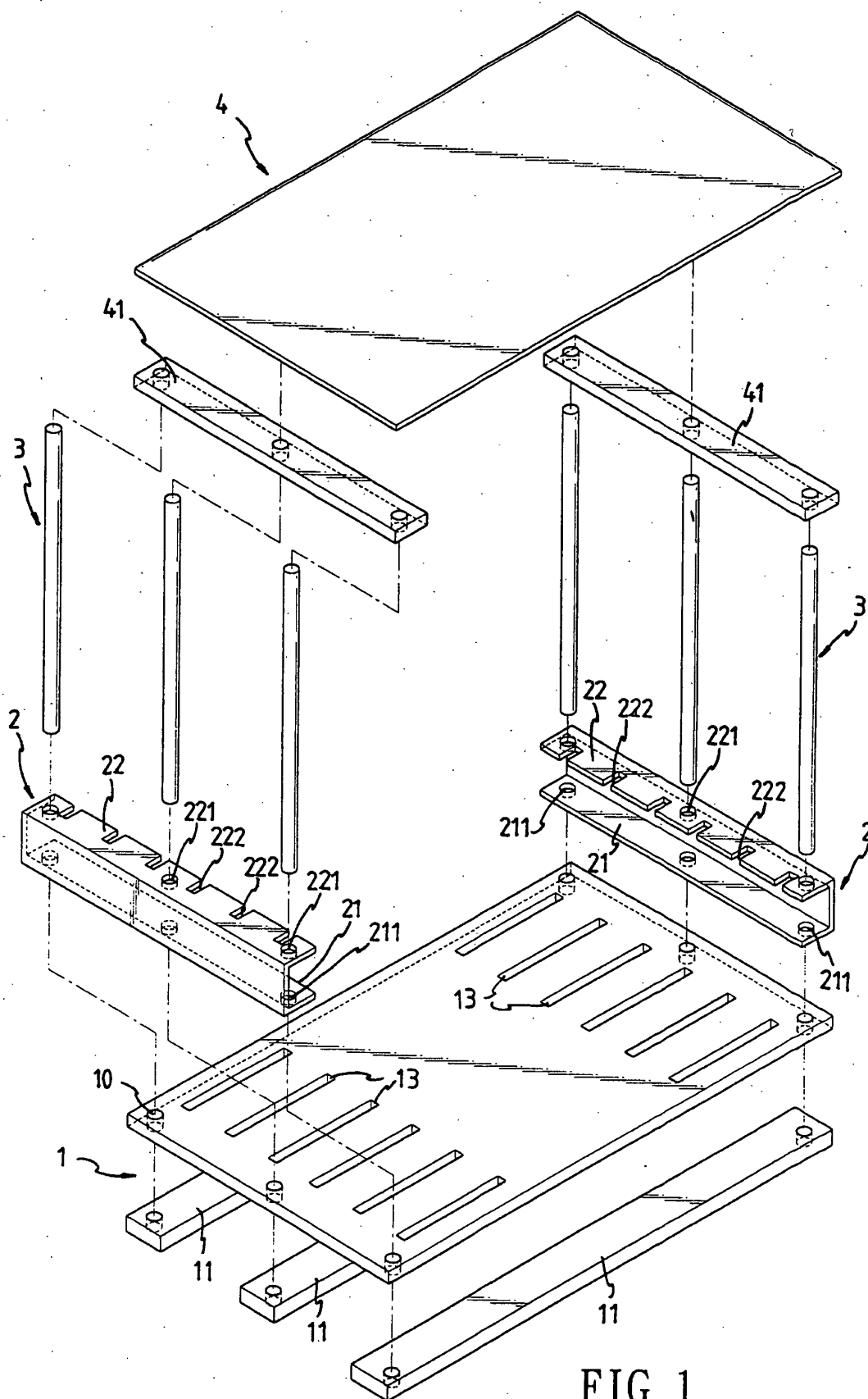
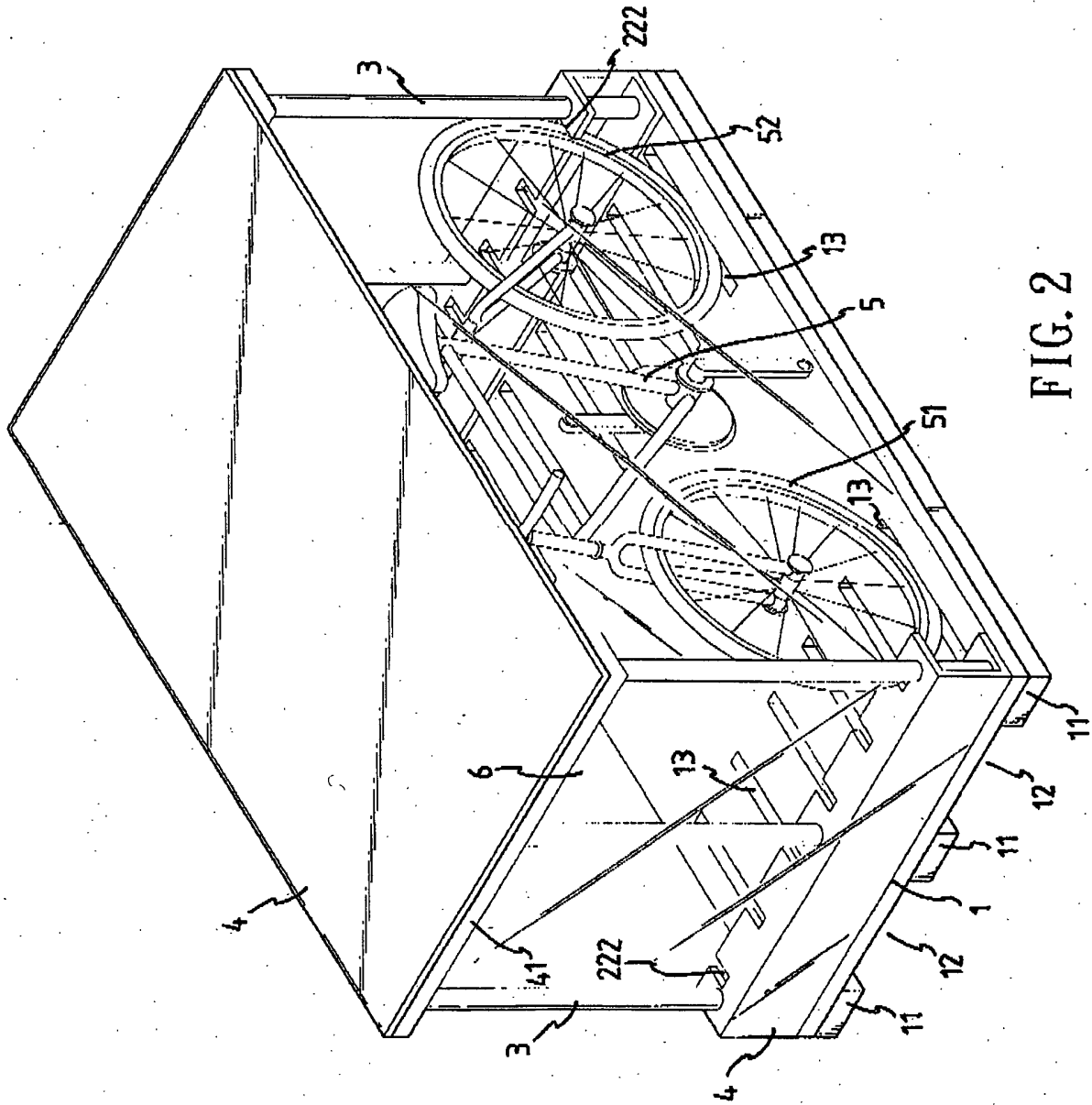


FIG. 1



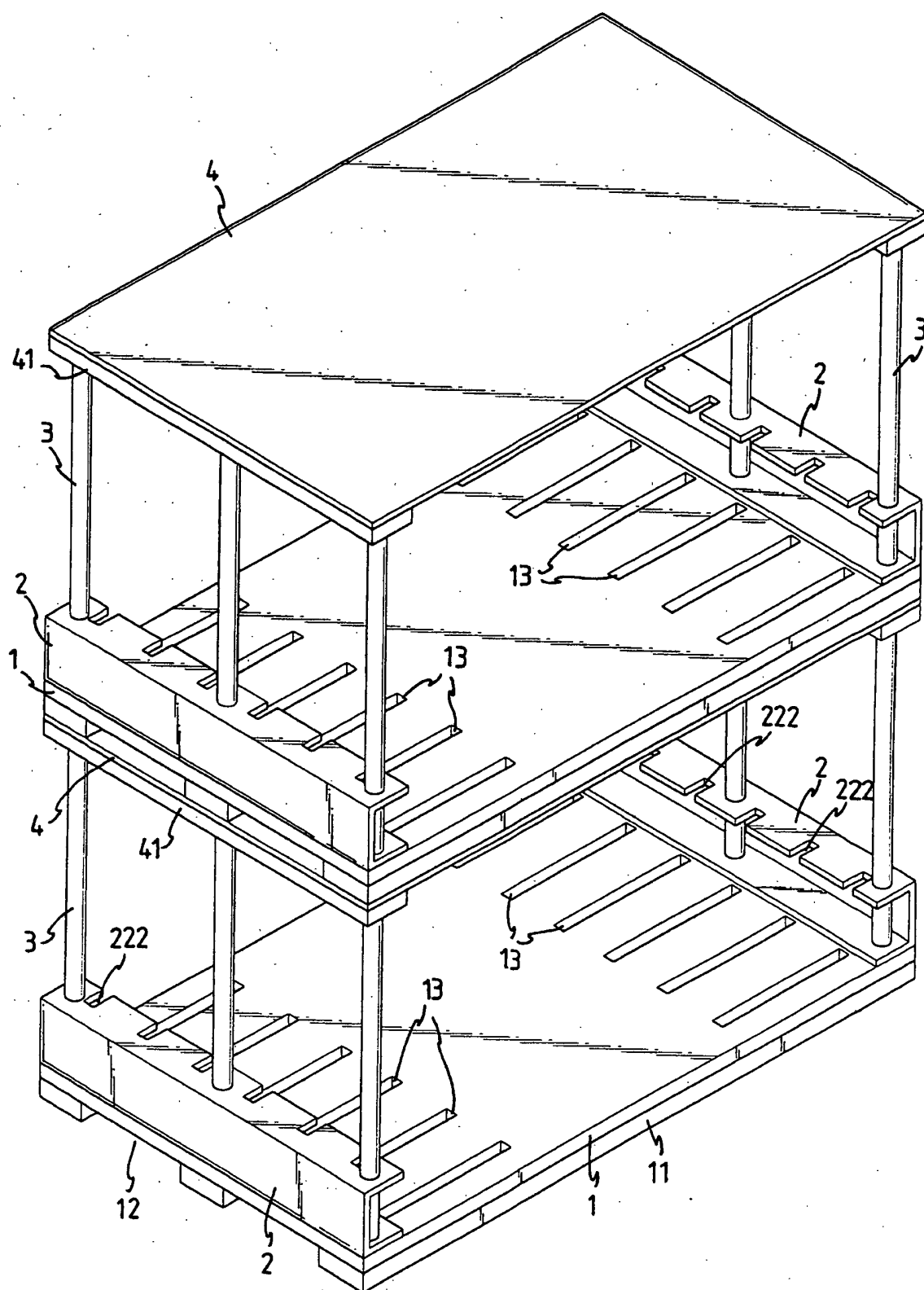


FIG. 3



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EUROPEAN SEARCH REPORT

Application Number
EP 02 00 4288

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 24 June 2002	Examiner Fournier, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 02 00 4288

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
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