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(54) **DISK HOLDING STRUCTURE**

(57) **ABSTRACT**

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A disk holding structure for holding disks includes a base which has a main body and an anchor portion coupling with the main body. The main body has a plurality of connecting pleated portions extended from two sides to form an extensible holding area. The holding area has a confining portion on an outer end. The anchor portion has a positioning portion insertable between the confining portion and the pleated portions to form an anchoring relationship. At least one holding pouch is provided on the main body through a coupling means between two corresponding pleated portions. The holding pouch has an open trough to hold the disks. The folding and pleated structure thus formed can be fabricated at a lower cost. The extensible holding area can reduce carrying and holding space.

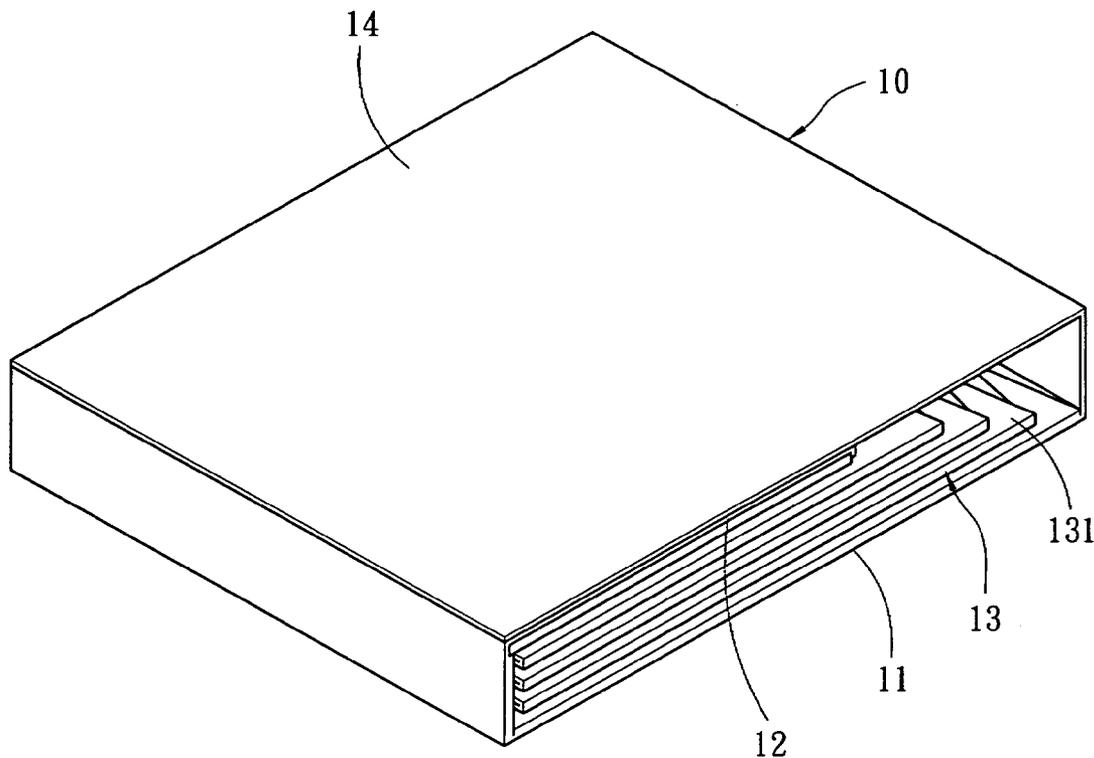
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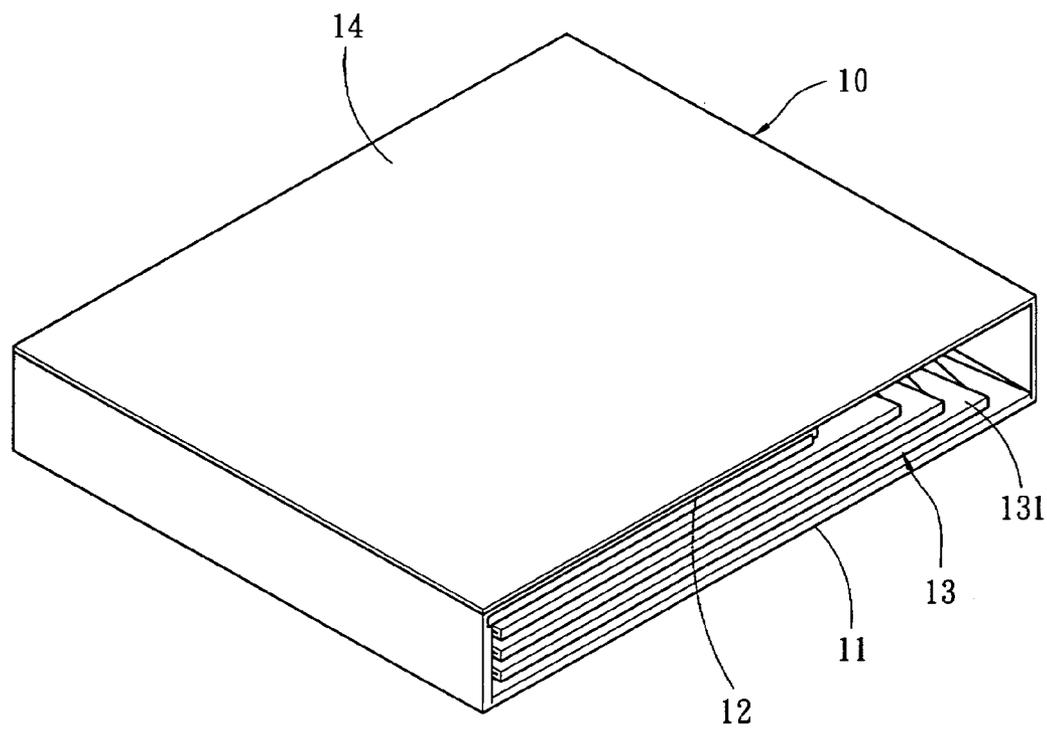


Fig. 1

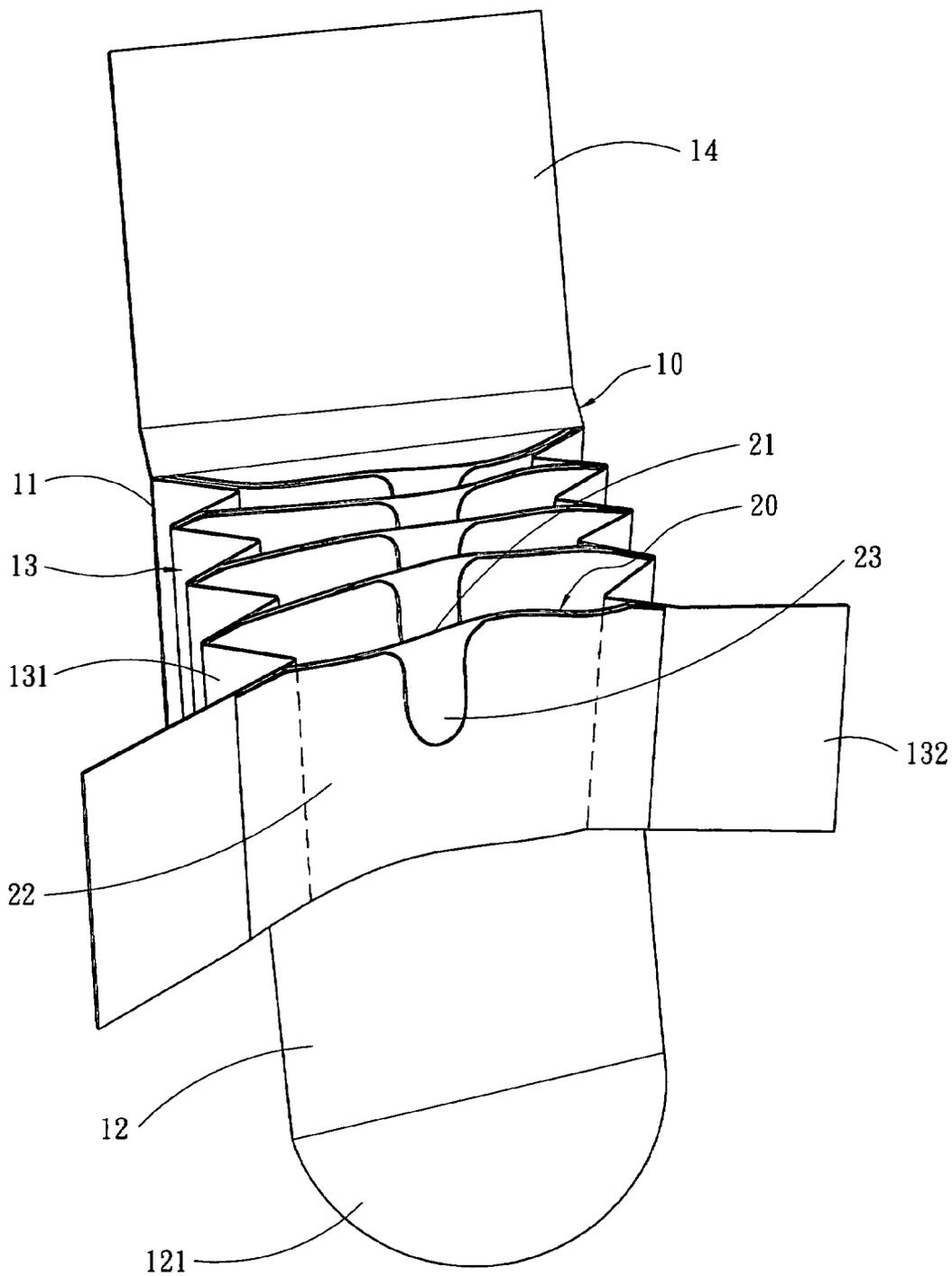


Fig. 2

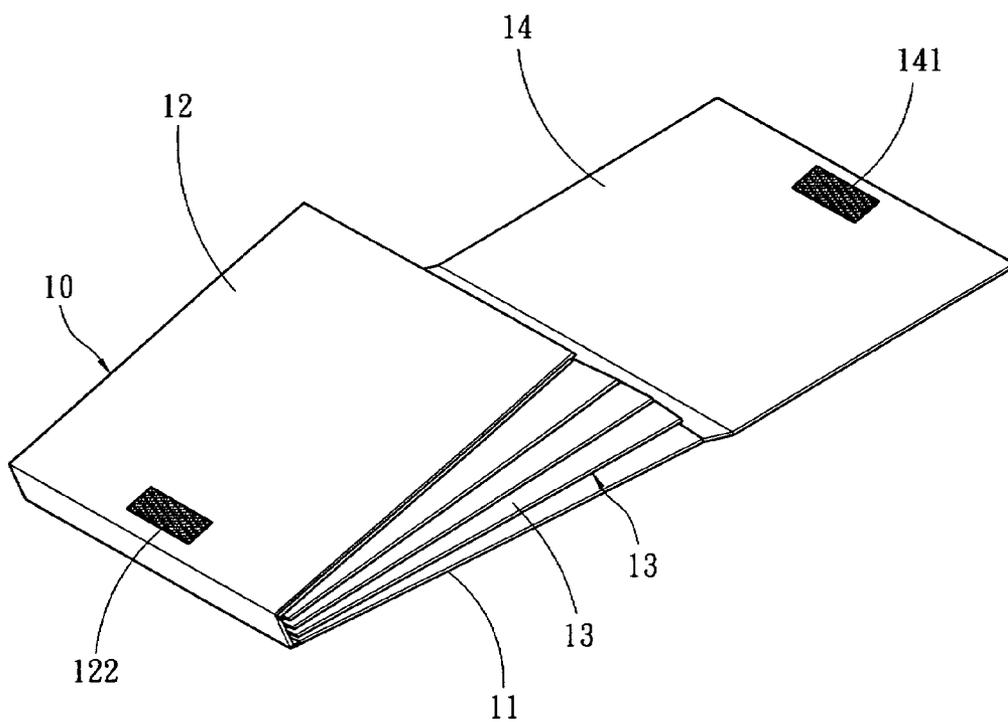


Fig. 3

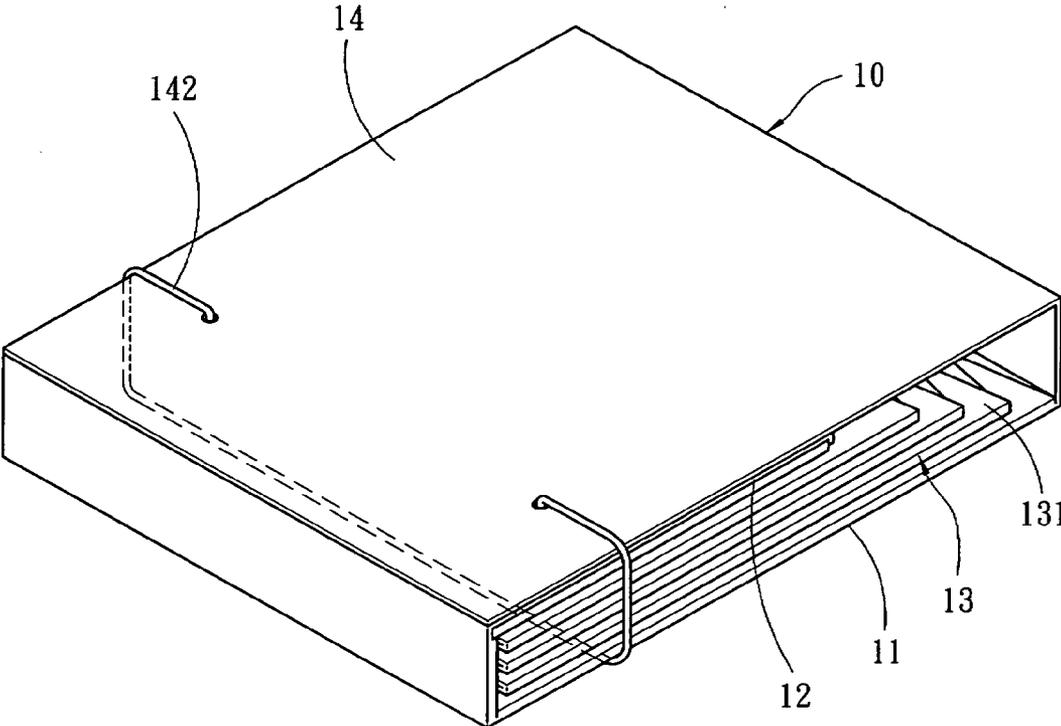


Fig. 4

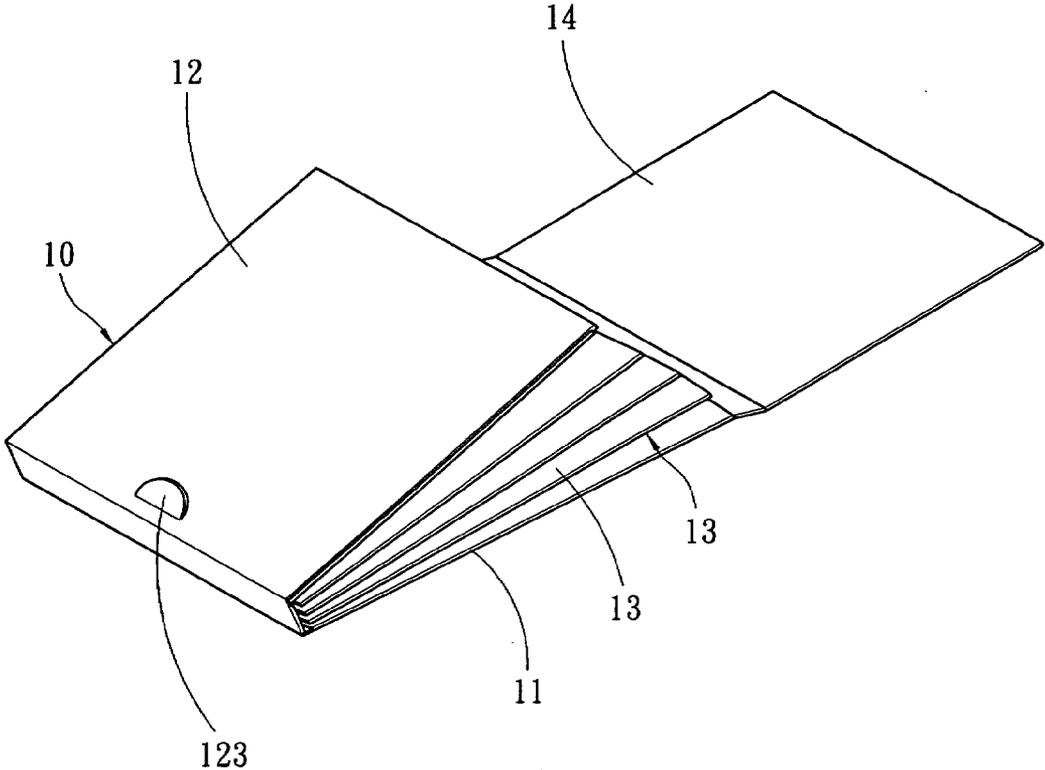


Fig. 5

DISK HOLDING STRUCTURE

FIELD OF THE INVENTION

[0001] The present invention relates to a disk holding structure and particularly to a disk holding structure fabricated through a folding and pleating process.

BACKGROUND OF THE INVENTION

[0002] With constant advance of technology, these days many people have owned a lot of optical disks. Take multimedia for instance, as a prolific of video products have been introduced, many people now see movies at home rather than go to the movie theaters. With the video player becomes more popular and displaying quality improved, demand for onsite feeling increases, and home theater video set has been developed.

[0003] In response to consumer's requirements, movie production and storage also require higher quality. Nowadays, the conventional magnetic tapes and video tapes have mostly being replaced by CD, VCD and DVD. These video optical disks not only provide a higher picture quality, but also are more compact and easier to store, and can be stored at a longer time period.

[0004] The conventional optical disk package boxes now on the market generally are made from plastics with a hard shell to contain one or two disks. While they can hold individual optical disks, they are bulky for storing a large quantity of movie or TV series. Holding is difficult. The box is easily broken. Incidental dropping also tends to crack or even shatter the box.

[0005] There is another type of package box made from soft plastics that is less likely to be shattered. It usually holds two optical disks in one box. It still occupies a great deal of space when holding a large quantity of disks is required. Throwing it away when no longer in use also causes the environmental pollution problem.

[0006] To remedy the aforesaid problems, a optical disk package box made from paper has been developed. But some of the paper-made package boxes are too gross and tend to deform by the weight of the optical disks when a great number of them are held. It cannot be used for a long period of time. Some are constructed like a chest to hold a plurality of optical disks. Such an approach often makes structure more complicated. As a result, fabrication and assembly are more difficult and production cost is higher. It also cannot be adjusted easily to suit varying quantity and does not have high quality appeal.

SUMMARY OF THE INVENTION

[0007] The primary object of the present invention is to provide a disk holding structure that is made by folding and pleating paper sheets or plastics to reduce fabrication and assembly costs, and also is more environmental friendly (especially the paper product).

[0008] Another object of the invention is to reduce the space for carrying and storing of disks.

[0009] To achieve the foregoing objects, one embodiment of the invention includes a base which has a main body and an anchor portion connecting to the main body. The main body has a plurality of connecting pleated portions extended from two sides to form an extensible holding area. The holding area has a confining portion on an outer end. The anchor portion has a positioning portion insertable between

the confining portion and the pleated portions to form an anchoring relationship. At least one holding pouch is provided connecting to two sides of the main body between two corresponding pleated portions through a coupling means. The holding pouch has an open trough to receive the disks. The holding structure thus formed can be fabricated at a lower cost. The extensible design of the holding area can greatly reduce the carrying and holding space.

[0010] The foregoing, as well as additional objects, features and advantages of the invention will be more readily apparent from the following detailed description, which proceeds with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a perspective view of an embodiment of the invention.

[0012] FIG. 2 is a schematic view of an embodiment of the invention.

[0013] FIG. 3 is a schematic view of a second embodiment of the invention.

[0014] FIG. 4 is a schematic view of a third embodiment of the invention.

[0015] FIG. 5 is a schematic view of a fourth embodiment of the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0016] Please refer to FIG. 1 for an embodiment of the invention. The disk holding structure of the invention aims to hold disks (not shown in the drawing). It mainly includes a foldable pleated base 10 made from, but not limited to, paper, plastics and the like. The base 10 has a main body 11 and an anchor portion 12 connecting to the main body 11 (also referring to FIG. 2). The main body 11 has a plurality of connecting pleated portions 131 on two sides that are extended outwards to form an extensible holding area 13. The holding area 13 further has a confining portion 132 on an outer end. The anchor portion 12 has a positioning portion 121 which is insertable between the confining portion 132 and the pleated portions 131 to form an anchoring relationship so that the confining portion 132 may be anchored through the positioning portion 121. A holding pouch 20 is provided and bonded to two sides of the main body 11 between two corresponding pleated portions 131. The holding pouch 20 includes a spacer 21 and an outer membrane 22 located on an outer side of the spacer 21. There is an open trough 23 formed between the spacer 21 and the outer membrane 22 to hold a disk. The outer membrane 22 is formed on each of two sides of the spacer 21 so that each holding pouch 20 has two sides to hold the disk to increase disk holding capacity. To facilitate fast searching and retrieval of the disks, any two neighboring pleated portions 131 in the holding area 13 may be formed at different heights. Thereby the holding pouches 20 located therein are structured at different heights in a layer manner to improve disk searching efficiency.

[0017] The main body 11 may also be coupled with an outer layer 14 to cover the surface of the anchor portion 12. The outer layer 14 has a first bonding portion 141 on an inner side corresponding to a second bonding portion 122 located on the anchor portion 12 to form an anchoring relationship (referring to FIG. 3). Another approach is threading a harness rope 142 through the outer layer 14 to harness the

main body **11** (referring to FIG. **4**) to form an anchoring and covering effect. Yet another approach is forming an opening **123** on the anchor portion **12** (referring to FIG. **5**) to be inserted by the outer layer **14** to form the anchoring relationship.

[0018] By means of the constructions set forth above, the disk holding structure of the invention can be made from paper or plastics. Fabrication and assembly are easier, and the cost is lower. It also is more environmental friendly. The extensible holding area **13** enables users to retrieve or hold disks easier. The carrying and storing space also can be greatly reduced.

[0019] While the preferred embodiments of the invention have been set forth for the purpose of disclosure, modifications of the disclosed embodiments of the invention as well as other embodiments thereof may occur to those skilled in the art. Accordingly, the appended claims are intended to cover all embodiments which do not depart from the spirit and scope of the invention.

What is claimed is:

1. A disk holding structure for holding disks, comprising: a base which has a main body and an anchor portion coupling with the main body, the main body having a plurality of connecting pleated portions extended from two sides to form an extensible holding area, the holding area having a confining portion on an outer end, the anchor portion having a positioning portion insertable between the confining portion and the pleated portions to form an anchoring relationship; and at least one holding pouch located on two sides of the main body through a coupling means corresponding to the pleated portions that has an open trough to hold the disks.

2. The disk holding structure of claim **1**, wherein the base is made from paper.

3. The disk holding structure of claim **1**, wherein the base is made from plastics.

4. The disk holding structure of claim **1**, wherein the coupling means is adhesive located between the holding pouch and the pleated portions.

5. The disk holding structure of claim **1**, wherein the holding pouch includes a spacer and an outer membrane located on an outer side of the spacer, the open trough being located between the spacer and the outer membrane.

6. The disk holding structure of claim **1**, wherein the main body further has an outer layer to cover the surface of the anchor portion.

7. The disk holding structure of claim **6**, wherein the outer layer is anchored on the anchor portion through a positioning means.

8. The disk holding structure of claim **7**, wherein the positioning means includes a first bonding portion located on an inner side of the outer layer and a second bonding portion located on the anchor portion corresponding to the first bonding portion.

9. The disk holding structure of claim **7**, wherein the positioning means includes a harness rope threading through the outer layer to harness the main body.

10. The disk holding structure of claim **7**, wherein the positioning means includes an opening formed on the surface of the anchor portion that is insertable by the outer layer to form the anchoring relationship.

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