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(54) **DISK STORAGE BARREL**

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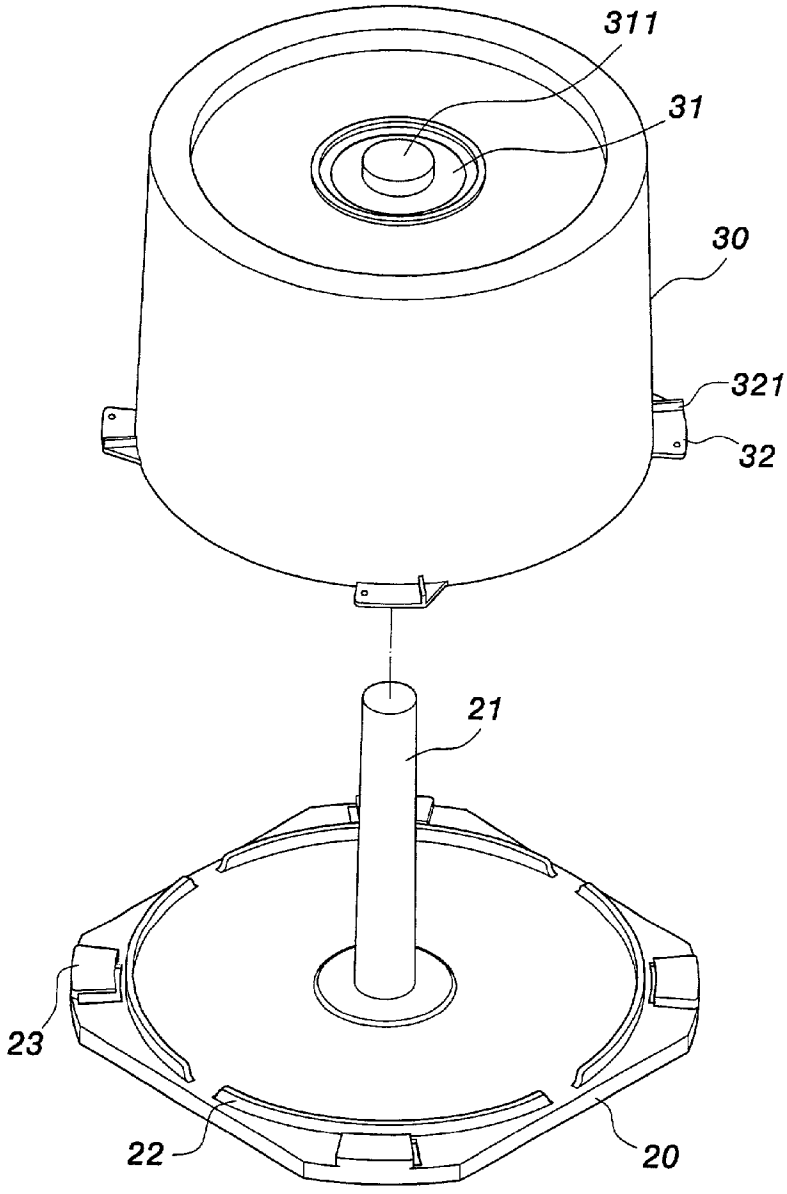
(57) **ABSTRACT**

A CD storage barrel includes a injunction molding plastic base and a barrel housing. The base and the barrel housing are integral form made. The barrel hosing engages with the base to form a CD storage barrel. Mostly important, the base is square corresponding to a square packaging box.



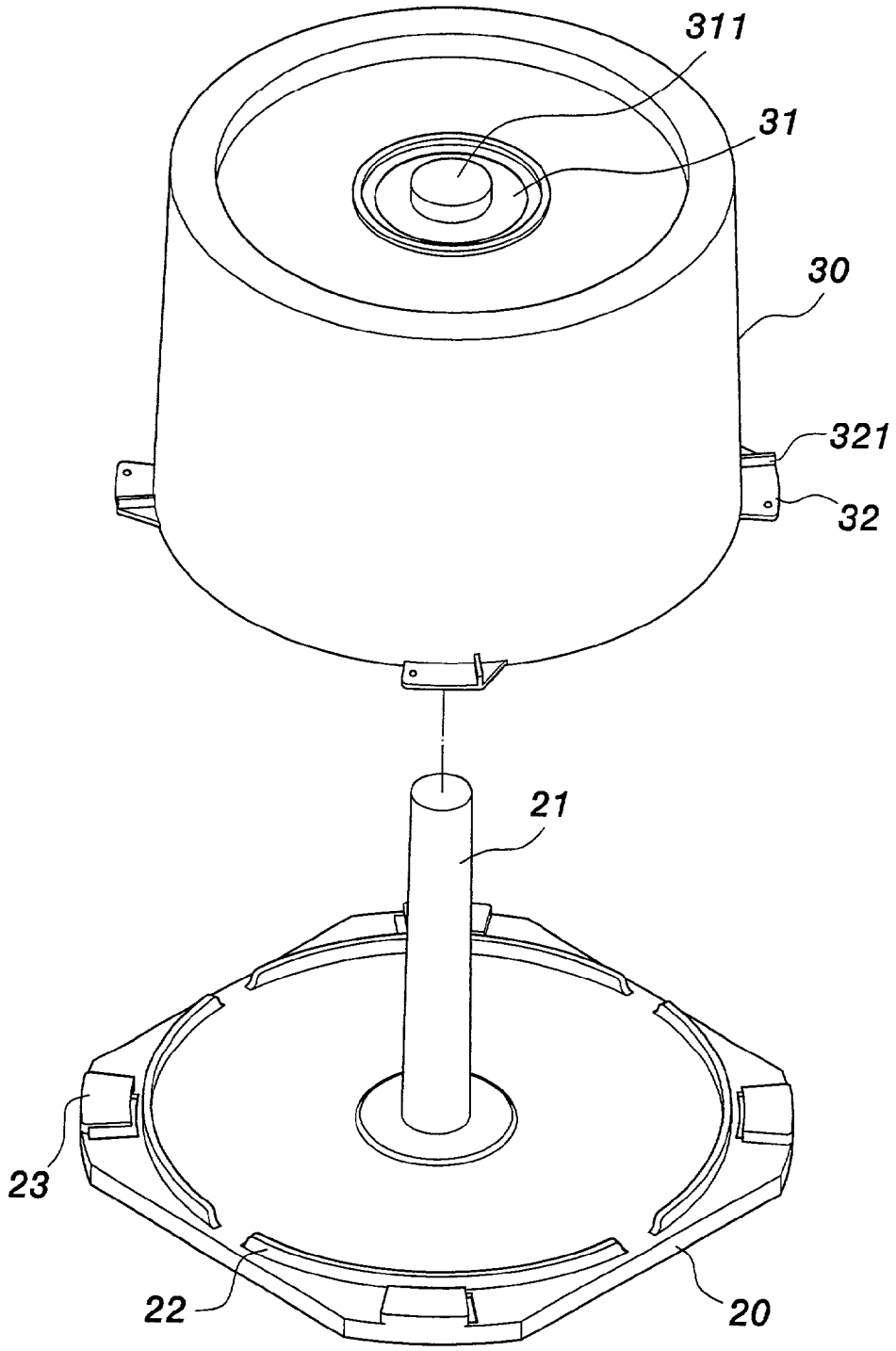


FIG. 1

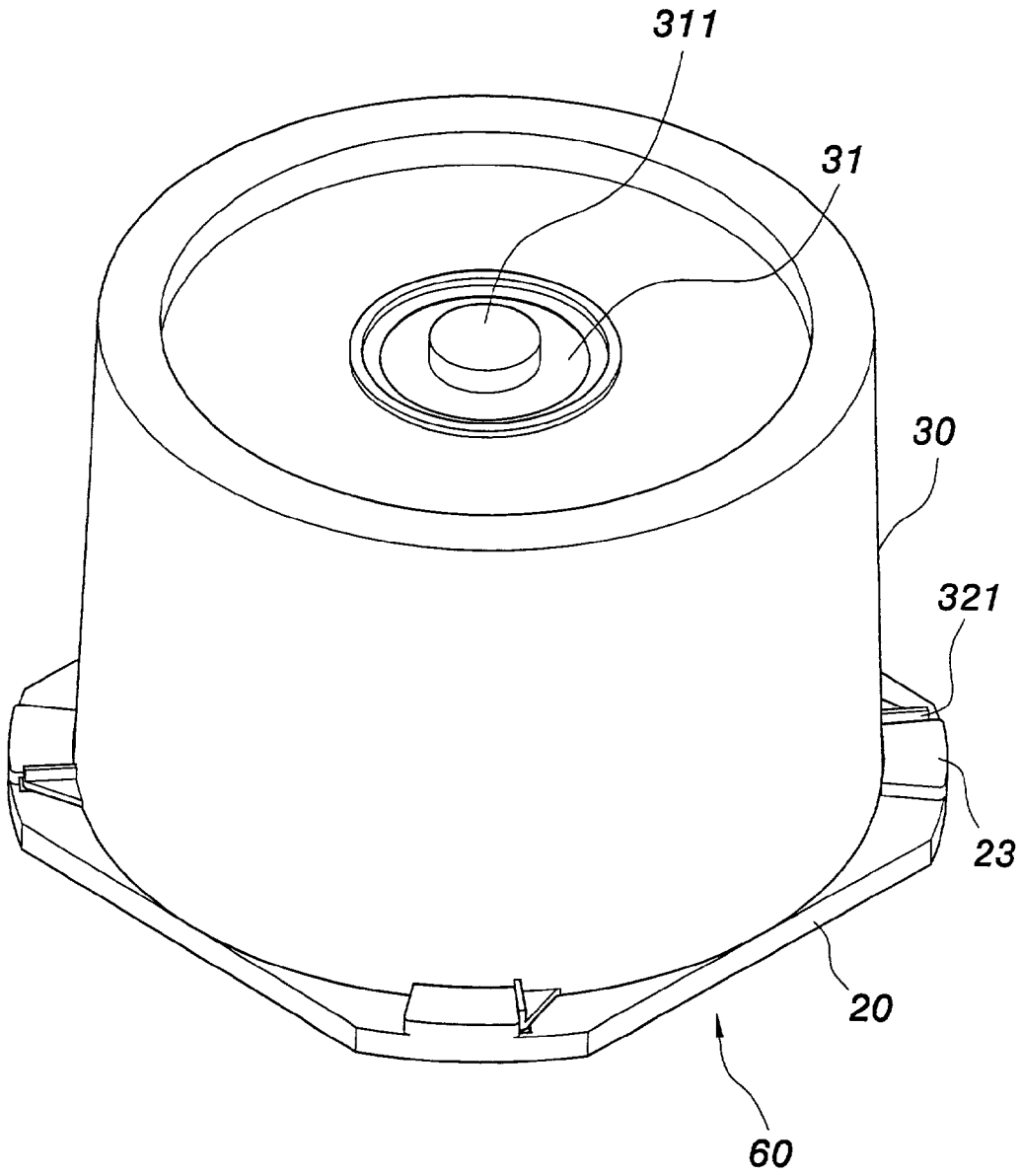


FIG. 2

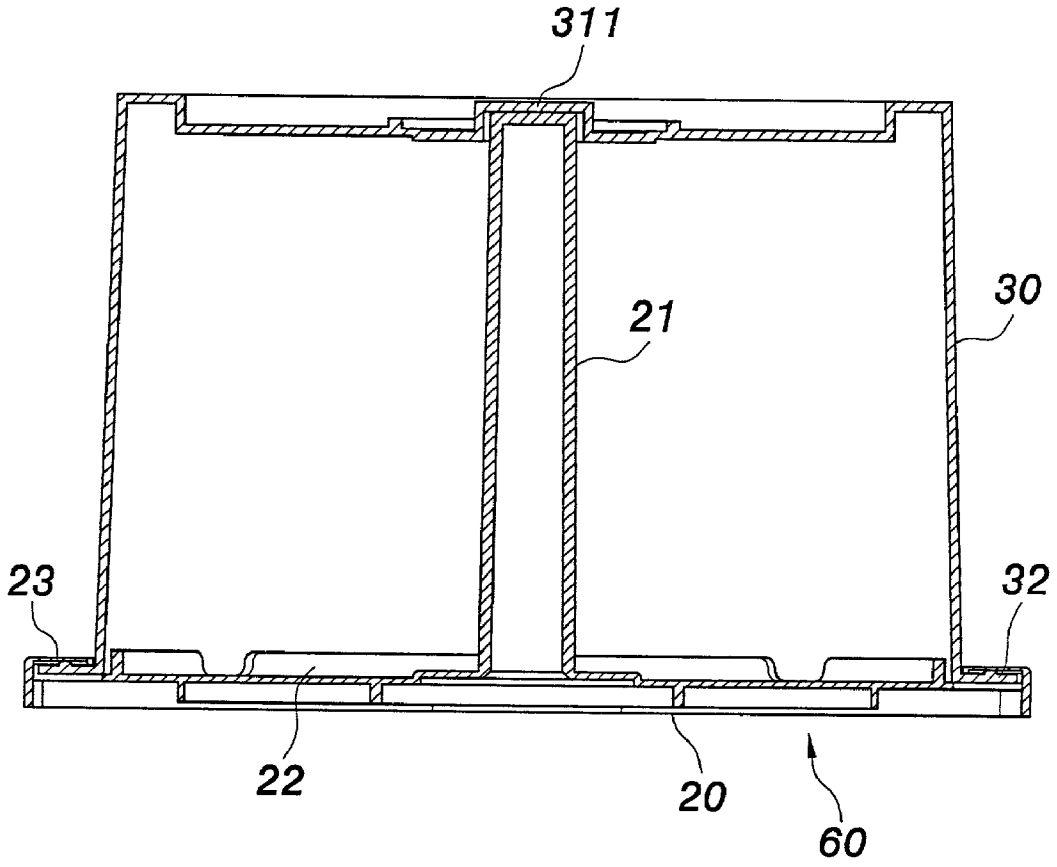


FIG. 3

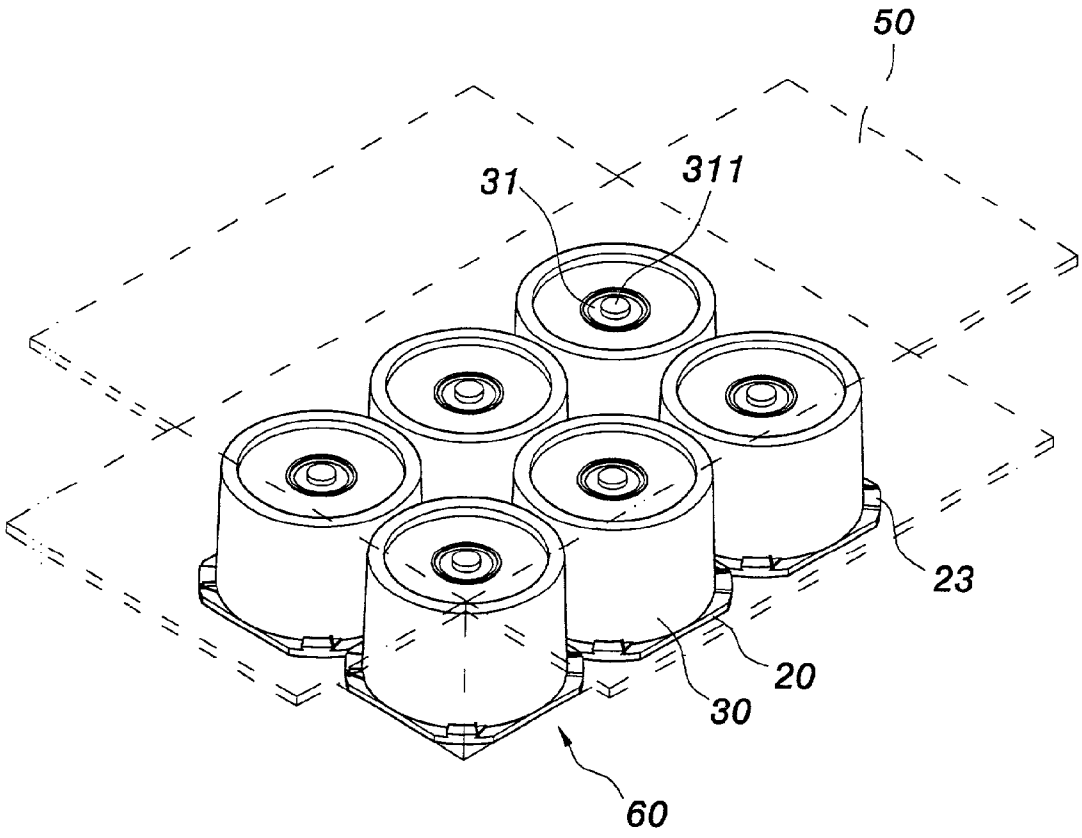


FIG. 4

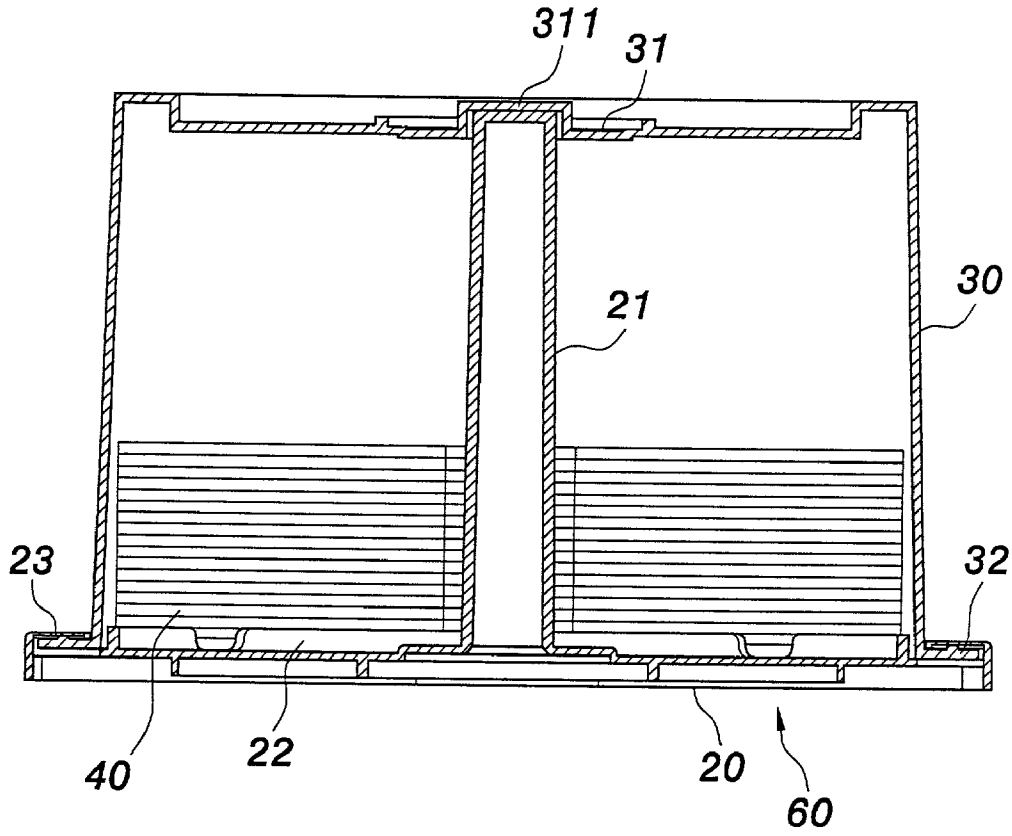


FIG. 5

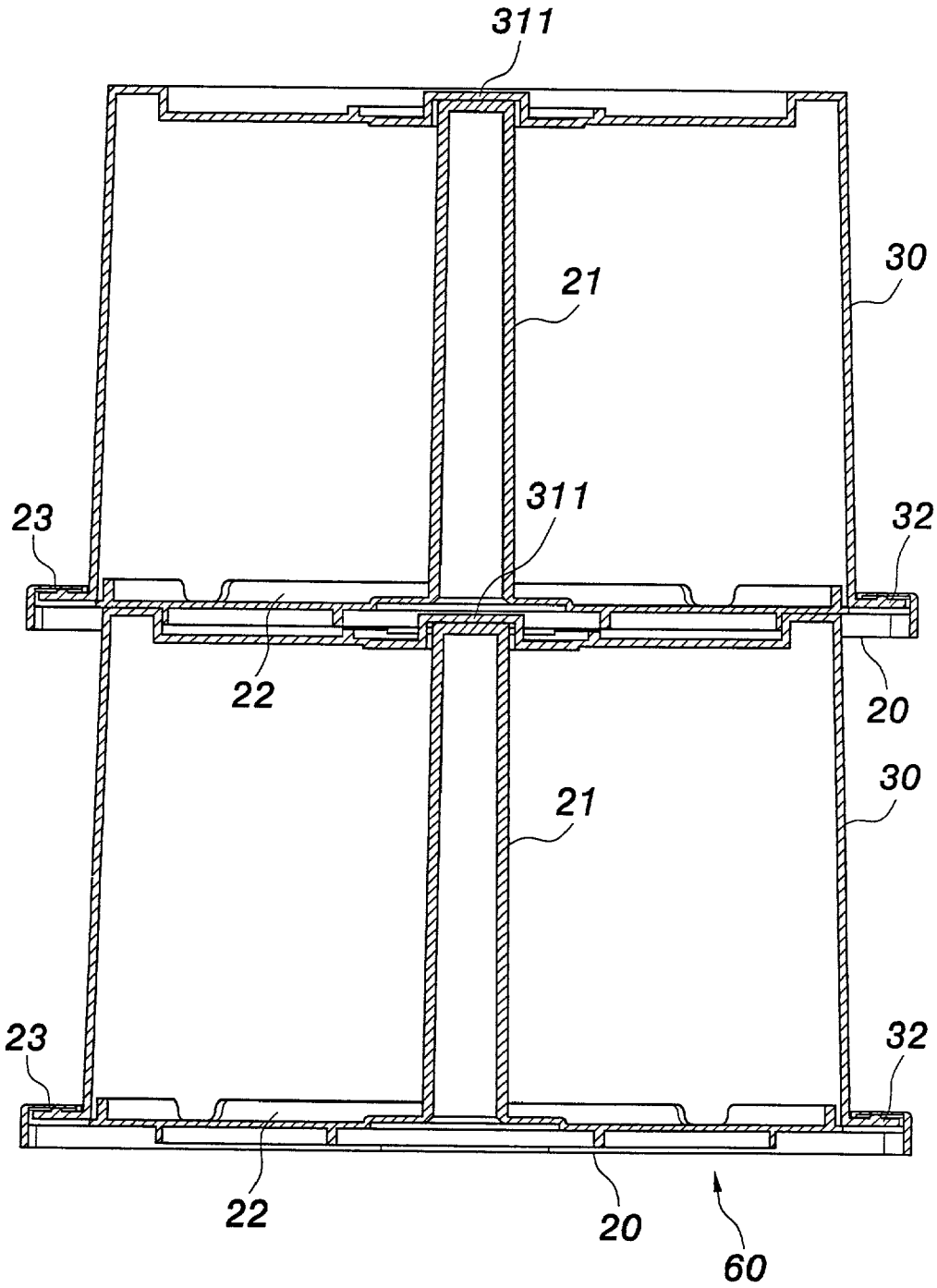


FIG. 6

DISK STORAGE BARREL

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to a container for storing CD disks, and more particularly, to a disk storage barrel having a square base and cylindrical barrel housing for more space-saving packaging.

[0003] 2. Description of the Prior Art

[0004] Typically, CD disks are stored in a CD storage barrel having a round base and a cylindrical barrel housing. However, this configuration usually leads to large space wasting when a set of CD storage barrels, for example, six barrels, are packaged into a box that typically has a square shape. Also, since the conventional CD storage barrel has a round base it is somewhat difficult to form a steadily packaged box in which the six barrels are fixed in place during transportation.

[0005] Consequently, there is a strong need to provide a redesigned CD storage barrel to solve above-mentioned problems.

SUMMARY OF THE INVENTION

[0006] It is a primary object of the present invention to provide a CD storage barrel having a square base.

[0007] Another objective of the present invention is to provide a disk container that is easy to be steadily packaged into a box having a square or cuboid shape, thereby saving a lot of space of the box.

[0008] According to the claimed invention, the CD storage barrel includes a injunction molding plastic base and a barrel housing. The base and the barrel housing are integral form made. The barrel hosing engages with the base to form a CD storage barrel. Mostly important, the base is square corresponding to a square packaging box.

[0009] It is to be understood that both the forgoing general description and the following detailed description are exemplary, and are intended to provide further explanation of the invention as claimed. Other advantages and features of the invention will be apparent from the following description, drawings and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] **FIG. 1** is a perspective diagram depicting the barrel housing and the base before combination according to one preferred embodiment of this invention.

[0011] **FIG. 2** is a perspective diagram showing the CD storage barrel after engaging the barrel housing with the base.

[0012] **FIG. 3** is a cross-sectional diagram showing the CD storage barrel of **FIG. 2**

[0013] **FIG. 4** is a perspective diagram showing the six-barrel package in a box.

[0014] **FIG. 5** is a cross-sectional diagram showing the CD storage barrel containing a plurality CD disks.

[0015] **FIG. 6** is a cross-sectional diagram showing two CD storage barrel in a stack state.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0016] Referring to **FIG. 1** to **FIG. 6**. **FIG. 1** is a perspective diagram depicting the barrel housing **30** and the base **20** before combination according to one preferred embodiment of this invention. **FIG. 2** is a perspective diagram showing the CD storage barrel **60** after engaging the barrel housing **30** with the base **20**. **FIG. 3** is a cross-sectional diagram showing the CD storage barrel **60** of **FIG. 2**. **FIG. 4** is a perspective diagram showing the six-barrel package in a box. **FIG. 5** is a cross-sectional diagram showing the CD storage barrel **60** containing s plurality CD disks. **FIG. 6** is a cross-sectional diagram showing two CD storage barrel **60** in a stack state.

[0017] As shown in **FIG. 1** and **FIG. 2**, the present invention relates to a container for storing CD disks, which comprises a base **20** and a barrel housing **30**.

[0018] The base **20** is integral form made of injunction molding plastic and presents a polygon shape or a square shape to match with, respectively, a rectangular shape packaging box **50** (shown in **FIG. 4**) and a square shape box. As shown in **FIG. 6**, to save space of the packaging box **50**, the CD storage barrels **60** may be steadily stacked by tightly combining bottom of the base **20** of one CD storage barrel **60** with the top of the barrel housing **30** of the other CD storage barrel **60**. The base **20** is comprised of a retaining ring **22** and a plurality of first engaging members **23** formed on periphery of the base **20**. The retaining ring **22** may be formed in a discontinuous way as shown in **FIG. 1**. A pillar **21** is disposed at center of the base **20** for passing through central aperture of CD disks **40** (shown in **FIG. 5**).

[0019] Similarly, the barrel housing **30** is also integral form made of injunction molding plastic and presents a shape corresponding to the base **20**. As shown in **FIG. 2, a** CD storage barrel **60** is formed, by engaging the barrel housing **30** with the base **20**. In addition, on top surface of the barrel housing **30** there are a groove **31** and a holding part **311**, which are provided for a user to take the barrel housing **30** from the base **20**. A plurality of second engaging members **32** are provided on bottom periphery of the barrel housing **30** corresponding to the plurality of first engaging members **23** of the base **20**. A positioning fringe **321** is provided on each of the plural second engaging members **32** for purpose of positioning when the second engaging member **32** of the barrel housing **30** engages with first engaging member **23** of the base **20**.

[0020] In short, it is advantageous to use the present invention since the base **20** is square shaped thereby saving a lot of space of a packaging box **50**. Also, a plurality of CD storage barrels **60** may be stacked together to form a steadily package.

[0021] Those skilled in the art will readily observe that numerous modification and alterations of the device may be made while retaining the teachings of the invention. Accordingly, the above disclosure should be construed as limited only by the metes and bounds of the appended claims.

What is claimed is:

1. A CD storage barrel, comprising:

a base being integral form made of injunction molding plastic and having a plurality of first engaging members and a retaining ring;

a pillar formed at center of the base; and

a barrel housing having a plurality of second engaging members arranged at bottom periphery of the barrel housing corresponding to the plural first engaging members of the base for engaging with the base.

2. The CD storage barrel of claim 1, wherein the base presents a polygon shape or a square shape.

3. The CD storage barrel of claim 1, wherein the pillar passes through aperture of a CD disk.

4. The CD storage barrel of claim 1, wherein the barrel housing further comprises a groove and a holding part formed on top surface of the barrel housing.

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