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(54) **DISC CASE**

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(57) **ABSTRACT**

A disc case comprises a pair of opposite latches in a container member each having a latched piece coupled to an upward free end of the latch being extended outwardly and a flexible bridge interconnected the free ends of the latches for forming an integral member. In loading/unloading a disc simply press latches down to cause free ends of latches to draw toward each other uniformly with bridge bent downwardly. This eliminates conventional problems of different inward moving distance of latches, latched pieces squeezed by disc, and disc scrape or even damage when a base of either latch is broken.

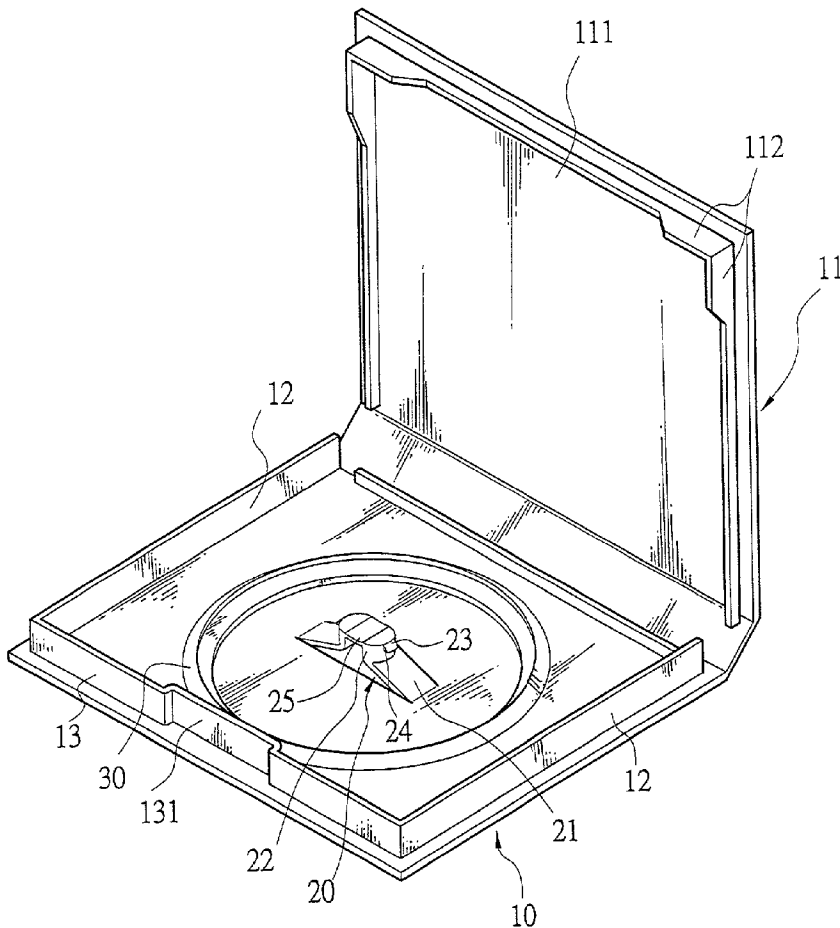


FIG. 1

FIG. 2

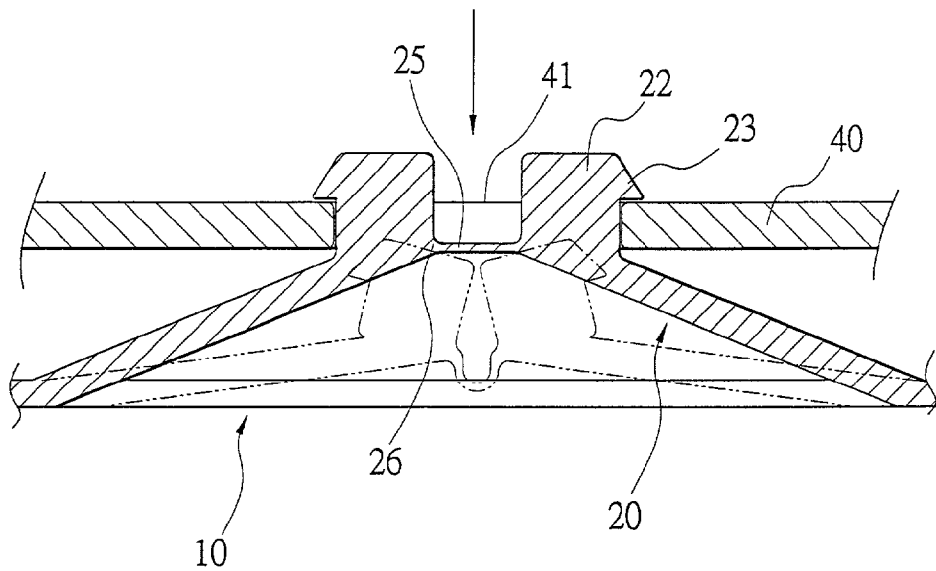


FIG. 3

DISC CASE

FIELD OF THE INVENTION

[0001] The present invention relates to containers and more particularly to an improved case for storing VCD, DVD, CD, LD, or the like.

BACKGROUND OF THE INVENTION

[0002] A conventional case for storing VCD, DVD, CD, LD, or the like comprises a container member; a cover extended from one side of container member; a pair of opposite latches in container member each having a base in one end coupled to the bottom of container member, a latched piece coupled to the other free end of latch being extended outwardly, and a recess at the joining of latched piece and latch; and a ring shaped flange concentric with latches wherein the height of flange is the same as that of latched piece and the radius of flange is smaller or less than that of disc.

[0003] In a loading operation of disc, user may press latches down. Then load disc in the container member with disc rested on flange. Then release latches to lock disc by latched pieces as latched pieces bounce up by the stored elastic force of the returning latches. However, the previous design suffered from several disadvantages. For example, two latches are opposite but without being coupled together. Hence, the inward moving distance of one latch may be different from that of the other latch when latches are drawn toward each other. This is because force applied on one latch by finger(s) is different from that applied on the other latch due to different sized fingers. This can cause latched pieces to be squeezed by the central hole of disc. As an end, it is very difficult to remove disc therefrom. Further, a scrape may be formed on disc or even disc is damaged when base of either latch is broken. Thus, it is desirable to provide an improved disc case in order to overcome the above drawbacks of prior art.

SUMMARY OF THE INVENTION

[0004] It is therefore an object of the present invention to provide a disc case comprising a container member; a cover extended from one side of the container member; a pair of opposite latches in the container member each comprising a base in one end coupled to a bottom of the container member, and a latched piece coupled to the other upward free end of the latch being extended outwardly; and a flexible bridge interconnected the free ends of the latches for forming an integral member.

[0005] The above and other objects, features and advantages of the present invention will become apparent from the following detailed description taken with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] FIG. 1 is a perspective view of a first preferred embodiment of disc case according to the invention where cover is open;

[0007] FIG. 2 is a perspective view of a second preferred embodiment of disc case according to the invention where cover is open; and

[0008] FIG. 3 is a sectional view of the central portion of FIG. 2 disc case showing the operations of loading and unloading of disc.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0009] Referring to FIG. 1, there is shown a disc case in accordance with a first preferred embodiment of the invention for storing VCD, DVD, CD, LD, or the like. The case comprises a rectangular container member 10 and a corresponding rectangular cover 20 extended from one side of container member 10 wherein cover 20 is bendable to close or open container member 10. A pair of opposite latches 20 are provided in container member 10. Each latch 20 comprises a base 21 in one end coupled to the bottom of container member 10, a latched piece 23 coupled to the other upward free end 22 of latch 10 being extended outwardly, a recess 24 at the joining of latched piece 23 and latch 20. Also, a flexible bridge 25 interconnects the top edges of free ends 22 of latches 20 for forming an integral arch member. While it is appreciated by those skilled in the art that such arch member may be replaced by another suitably shaped member without departing from the scope and spirit of the invention. Further, a ring shaped flange 30 is provided concentric with latches 20. The height of flange 30 is the same as that of latched piece 23 and the radius of flange 30 is smaller or less than that of disc 40 (FIG. 3). The provision of flange 30 may prevent disc 40 from contacting the bottom of container member 10 while resting on flange 30.

[0010] Additionally, first walls 12 are provided on two opposite sides of container member 10 and a second wall 13 is provided on a side opposite to the side having the extended cover 11. A recessed portion 131 is formed on second wall 13. A recessed portion 111 formed on a side wall of cover 11 is disposed corresponding to recessed portion 131. A substantially 90-degree bent frame member 112 is formed on either end of recessed portion 111 (i.e., on the corner of cover 11). Each frame member 112 is capable of engaging with the outer surface of a joining of first wall 12 and second wall 13. Hence, in closing container member 10, user may close cover 11 to cause frame members 112 to cling onto first and second walls 12 and 13. To the contrary in opening cover 11, user may first put a finger on a gap between recessed portions 111 and 131 prior to pulling cover 11 up.

[0011] Referring to FIG. 2, there is shown a disc case of a second preferred embodiment of the invention. The difference between first and second preferred embodiments is that a flexible bridge 25 interconnects the bottom edges 26 of free ends 22 of latches 20 for forming an integral member also.

[0012] Referring to FIG. 3, the operations of loading and unloading of disc 40 will now be described below. In a loading of disc 40, user may first press latches 20 down to cause the free ends 22 of latches 20 to draw toward each other with bridge 25 bent downwardly. Then put the center hole 41 of disc 40 around latches 20 with disc 40 rested on flange 30. Then release latches 20 to cause them to expand outwardly by the stored elastic force thereof and bridge 25. As a result, the edge of center hole 41 of disc 40 is clamped by latched pieces 23, thus securing disc 40 to latches 20. To the contrary in an unloading of disc 40, user may first press

latches **20** down to cause the free ends **22** of latches **20** to draw toward each other with bridge **25** bent downwardly, thus disengaging the center hole **41** of disc **40** from latched pieces **23**. As a result, user may successfully remove disc **40** from container member **10** thereafter.

[0013] In brief, by utilizing such integrally formed bridge **25** and latches **20**, it is possible of loading/unloading the disc **40** in a smooth convenient manner. Moreover, above conventional problems, i.e., two latches **20** are opposite but without being coupled together; the inward moving distance of one latch **20** is different from that of the other latch **20** when latches **20** are drawn toward each other (because force applied on one latch **20** by finger(s) is different from that applied on the other latch **20** due to different sized fingers); latched pieces **23** are squeezed by the central hole **41** of disc **40**; difficult to remove disc **40** from case; and a scrape is formed on disc **40** or even disc **40** is damaged when base **21** of either latch **20** is broken are substantially eliminated by the invention.

[0014] While the invention has been described by means of specific embodiments, numerous modifications and varia-

tions could be made thereto by those skilled in the art without departing from the scope and spirit of the invention set forth in the claims.

What is claimed is:

1. A disc case comprising:

a container member;

a cover extended from one side of said container member;

a pair of opposite latches in said container member each comprising a base in one end coupled to a bottom of said container member, and a latched piece coupled to the other upward free end of said latch being extended outwardly; and

a flexible bridge interconnected the free ends of said latches for forming a first integral member.

2. The disc case of claim 1, wherein said bridge interconnects bottom edges of the free ends of said latches for forming a second integral member.

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