MEMORY FOAM CASE FOR EYEGLASSES AND JEWELRY

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Abstract

A case for storing various objects, such as eyeglasses or jewelry, having a top and a bottom shell member which are connected together to allow for movement between an open position and a closed position. Each of the shell members has an interior surface, which when in the closed position, collectively defines an enclosed interior cavity for storage of the objects. Each of the shell members has a layer of memory foam overlying the interior surface. The memory foam layers generally deform to the shape of the object placed within the interior space of the case, when in its closed position and return to a normal, non-deformed position when the case is in its open position.
MEMORY FOAM CASE FOR EYEGlasses AND JEWELRY

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Application No. 61/179,946, filed May 20, 2009.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The invention relates generally to the field of cases and holders to store and protect various personal objects, such as eyeglasses, sunglasses and/or jewelry. More particularly, the invention relates to a case for eyeglasses and sunglasses and/or jewelry which has a hard exterior surface and a layer of memory foam on the inside of the case, to cushion and protect the eyeglasses and/or jewelry placed therein.

[0004] 2. Brief Description of the Prior Art

[0005] Eyeglasses and sunglasses (hereinafter collectively referred to as “eyeglasses”) are fragile and can easily break or get scratched. Furthermore, it is easy to misplace eyeglasses or they can easily get lost in a purse or handbag. Similarly, jewelry is often small or delicate and can also easily get misplaced, scratched, damaged, lost or tangled. It is, therefore, useful to have a case or holder which can store and protect eyeglasses from breakage, scratching or from being lost or misplaced. It is also useful to have a case which can protect various items of jewelry so that they too, are not broken or lost.

[0006] However, not all eyeglasses are of the same size or shape. Thus, in order to prevent breakage, many eyeglass cases are designed to the specific shape and contour of the particular eyeglasses to be stored therein and, therefore, cannot be used for other eyeglasses. It is therefore useful to have a single case which can accommodate and protect eyeglasses of varying sizes and shapes, rather than having multiple cases to accommodate different pairs of eyeglasses. To address this issue and to accommodate various eyeglasses, many eyeglass cases, even though they have a hard exterior shell, have a hollow interior space within the case. However, this large interior space allows the eyeglasses to move or slide within the case which can lead to breakage, since they can hit against the sides of the case. Moreover, many eyeglass cases are soft and the eyeglasses stored therein can break or get damaged if dropped or come into contact with another object.

[0007] In addition, it is known in the prior art to provide various cases, holders or jewelry rolls for storing various items of jewelry. However, many of these holders have a soft exterior surface which leaves the jewelry vulnerable to damage. Additionally, while other cases may have a hard exterior surface, they allow the jewelry stored therein to slide around within the case which can lead to damage to the jewelry, particularly to delicate jewelry or fine chains and necklaces which can get tangled. Furthermore, jewelry is often of different sizes and shapes such as large bangles, fine chains, rings, earrings, etc. and, therefore, in many cases, they can slide around within the case because they are not held firmly in place due to their different sizes.

[0008] While the prior art discloses many types of eyeglasses and jewelry cases, so far as is known, none of the prior art devices resolve all of these problems in a simple, effective and yet highly advantageous manner, as does the present invention discussed herein.

SUMMARY OF THE INVENTION

[0009] It is therefore an object of the invention to provide a novel eyeglass and jewelry case.

[0010] It is another object of the invention to provide an eyeglass and jewelry case which can store and protect the eyeglasses and jewelry which are placed therein.

[0011] It is a further object of the invention to provide an eyeglass and jewelry case which can protect eyeglasses and jewelry of different sizes and shapes.

[0012] It is yet another object of the invention to provide an eyeglass and jewelry case which has an interior surface which will generally conform to the shape of the eyeglasses or jewelry placed therein to cushion them.

[0013] It is a further object of the invention to provide an eyeglass and jewelry case which has an interior surface which will resume its normal shape when the item is removed, to allow the case to accommodate a variety of different objects placed therein.

[0014] Certain of the foregoing and related objects are readily attained according to the present invention by the provision of a case for storing eyeglasses, comprising, a top and a bottom shell member which are connected together to allow for movement between an open position and a closed position. Each of said shell members having an interior surface which when in said closed position, collectively defines an enclosed interior cavity for storage of eyeglasses therein and a layer of memory foam attached to and overlying said interior surface of each of said shell members. When said case is in said closed position, said layers of memory foam generally deform to the shape of eyeglasses placed within said interior cavity of said case, and when said case is in said open position, said layers of memory foam return to a normal, non-deformed position.

[0015] Preferably, said top and bottom shell members each have a generally rectangular, convex-shaped bottom wall defining four outer peripheral edges and four upstanding side walls, each of which is connected to an outer peripheral edge of said bottom wall, to collectively define said interior surface therebetween. In a preferred embodiment, said top and bottom shell members are of a complementary shape to each other and are disposed opposite one another when in said closed position. Desirably, said top and bottom shell members are pivotally connected together by a hinge which is disposed along at least a portion of respective side walls thereof.

[0016] It is also preferable that the case further comprises a mechanical fastener for securing said top and bottom shell members in said closed position, and preferably, said mechanical fastener is a tab connected to one of said side walls of one of said top and bottom shell members and a slot connected to a corresponding side wall of the other of said top and bottom shell members and wherein said tab engages said slot when in said closed position.

[0017] Advantageously, said memory foam is visco-elastic polyurethane foam and has a density of about 45 kg/m3. It is also desirable that said layers of memory foam can be deformed and reshaped multiple times. It is further desirable that said top and bottom shell members have a hard exterior surface.
In a further embodiment, a case for storing jewelry comprises a top and a bottom shell member which are connected together to allow for movement between an open position and a closed position. Each of said shell members having an interior surface which when in said closed position, collectively defines an enclosed interior cavity for storage of jewelry therein and a layer of memory foam attached to and overlaying said interior surface of each of said shell members. When said case is in said closed position, said layers of memory foam generally deform to the shape of jewelry placed within said interior cavity of said case, and when said case is in said open position, said layers of memory foam return to a normal, non-deformed position.

Preferably, said top and bottom shell members are bowl-shaped, each comprising a generally oval-shaped planar bottom wall defining an outer peripheral edge and an upstanding side wall connected to said outer peripheral edge of said bottom wall, to collectively define said interior surface therebetween. In a preferred embodiment, said top and bottom shell members are of a complementary shape to each other and are disposed opposite one another when in said closed position. Desirably, said planar bottom walls and said side walls are made of a rigid material. Advantageously, said top and bottom shell members are pivotally connected together by a hinge disposed along at least a portion of said respective side walls thereof.

It is also preferable that the case further comprise a mechanical fastener for securing said top and bottom shell members in said closed position, and preferably, said mechanical fastener is a zipper disposed along a top edge of each of said side walls.

Advantageously, said memory foam is visco-elastic polyurethane foam and has a density of about 40 kg/m³. It is also desirable that one of said layers of memory foam has a thickness which is greater than the thickness of the other of said layers of memory foam. It is furthermore desirable that said layers of memory foam can be deformed and reshaped multiple times.

In yet another preferred embodiment, a case for storing at least one object, comprises a top and a bottom shell member which are connected together to allow for movement between an open position and a closed position. Each of said shell members having an interior surface which when in said closed position, collectively defines an enclosed interior cavity for storage of at least one object therein and a layer of memory foam attached to and overlaying said interior surface of each of said shell members. When said case is in said closed position, said layers of memory foam generally deform to the shape of at least one object placed within said interior cavity of said case, and when said case is in said open position, said layers of memory foam return to a normal, non-deformed position.

**BRIEF DESCRIPTION OF THE DRAWINGS**

Additional objects and advantages of the present invention will become apparent to those skilled in the art upon reference to the detailed description considered in conjunction with the accompanying drawings. It is to be understood that the drawings are to be used for the purpose of illustration only and not as a definition of the limits of the invention.

**FIG. 1** is a perspective view of an eyeglass case of the present invention in its closed position.

**FIG. 2** is a perspective view of the eyeglass case in its open position, with a pair of eyeglasses placed therein.

**FIG. 3** is a partially cut-away, perspective view of the eyeglass case, in its closed position;

**FIG. 3a** is a sectional view along line 3a-3a in FIG. 3;

**FIG. 4** is a perspective view of a jewelry case of the present invention in its closed position;

**FIG. 5** is a perspective view of the jewelry case in its open position, with items of jewelry placed therein;

**FIG. 6** is a partially cut-away, perspective view of the jewelry case, in its closed position;

**FIG. 6a** is a sectional view along line 6a-6a in FIG. 6.

**DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

Turning now in detail to the drawings, and in particular FIG. 1 thereof, therein depicts the eyeglass case or holder 10 of the present invention in its closed configuration. As can be seen in FIG. 2, the case 10 is of a book-like or shell-like configuration and can hingedly or pivotally open into its open position as seen in FIG. 2, so that various objects, such as eyeglasses, sunglasses and/or jewelry can be placed within the case 10, so that they are stored and protected therein, when the case 10 is closed.

As seen best in FIG. 1, the case 10 has a generally rectangular shape with rounded corners and approximates the size and shape of conventional eyeglasses and sunglasses. Furthermore, case 10 has a top and a bottom cover, leaf or shell member 22 and 24, respectively. The shell members 22 and 24 each have four upstanding side walls 26a, 26b, 26c and 26d and are hingedly connected together via a hinge 27 disposed along a portion of one side wall 26a thereof so that the case 10 can be movable between the closed position shown in FIG. 1 and the open position shown in FIG. 2. Moreover, the shell members 22 and 24 have a complementary shape to each other and are disposed opposite one another when the case is in its closed position, shown in FIGS. 1 and 3a. While it is preferable to hingedly connect the leaves 22 and 24 together, it can be appreciated that other means can be used to secure the leaves to each other, such as a zipper or snap.

Furthermore, as seen best in FIG. 3a, each of the leaves 22 and 24 of the case 10 are of a generally rectangular, bowl-shaped configuration and have a convex, bottom wall 25 which together with the four upstanding side walls 26a, 26b, 26c and 26d, collectively define an interior cavity 28 in each of the leaves. The interior cavity 28 of each of the leaves 22 and 24 are of a complementary shape to each other and are disposed opposite one another on the inside of the case 10 when it is closed, in order to accommodate the eyeglasses and sunglasses 100 which are placed therein. As seen in FIG. 1, the exterior surfaces 29 of the leaves 22 and 24 are preferably made of a hard or rigid material, such as plastic, metal or cardboard to protect the eyeglasses 100 contained within the case 10. In addition, exterior surface 29 can be covered with a more aesthetically pleasing outer surface such as leather or fabric.

Additionally as seen in FIG. 2, closure means are provided within the case 10 to secure the leaves 22 and 24 in their closed positions, such as a mechanical fastener. For example, as seen best in FIG. 2, a tab 40 and a slot 42 are provided and are disposed opposite one another on each of the leaves 22 and 24, respectively, and engage each other when the case is in its closed position as seen in FIG. 3a. However,
it can be appreciated that other closure means could be used to secure the case 10 in its closed configuration such as a zipper, button and loop, clip or latch. Alternatively, the sides 26a, 26b, 26c and 26d of the case 10 can be made of a flexible or accordion-like material so that they can compress and expand to accommodate eyeglasses of varying shapes and sizes.

As depicted in FIG. 2, the leaves 22 and 24 can open to expose the two interior cavities 28. A solid piece or layer of memory foam 30 and 32 which generally conforms to the shape of the leaves 22 and 24 and is secured in each interior cavity. The memory foam layers 30 and 32 can be secured, e.g., by the use of an adhesive (not shown). As can be seen in FIG. 3, the user can place the eyeglasses or sunglasses 100 on top of the memory foam 32 and close the case 10, to secure and store the eyeglasses 100 between the two layers of memory foam 30 and 32. However, it can be appreciated that the eyeglasses can be placed on top of memory foam layer 30.

When the case 10 is in its closed position as seen in FIG. 3, the memory foam layers 30 and 32 will generally adapt and conform to the shape of the objects placed in between the two layers to secure it in place in order to protect the object. In particular, as seen in FIG. 3, when the eyeglasses 100 are placed between the leaves 22 and 24, the memory foam layers 30 and 32 will deform and conform to the contour and general shape of the eyeglasses 100 and the eyeglasses will partially sink into the memory foam layers 30 and 32. Thus, the case can accommodate many different eyeglasses or sunglasses because the memory foam will compress and generally conform to its shape.

The memory foam layers 30 and 32 also serve to cushion and protect the eyeglasses 100 because they form a snug fit, such that they conform to the shape of the eyeglasses 100 when the case is closed to secure them in place within the case to prevent their movement and possible breakage. When the case is opened and the eyeglasses 100 are removed from the case, the memory foam layers 30 and 32 resiliently and inherently return to their normal, non-deformed position as seen in FIG. 2 because of their shape memory properties and, therefore, the user can place different eyeglasses therein and the case 10 will conform to their corresponding shapes and sizes.

In a particularly preferred embodiment, the case 10 has a length of approximately 6½ inches, a width of about 2½ inches and a height of about ½ inch. The sidewalls 26b and 26d are narrower than sidewalls 26a and 26c, so that the case tapers towards each of the lateral ends and approximates the shape of the eyeglasses which are contained therein so that they are held firmly in place. However, it can be appreciated that the case 10 can be made in other shapes and sizes depending on the type of eyeglasses which are to be stored therein. The case can also be made larger in order to store more than one pair of eyeglasses.

Furthermore, in a particularly preferred embodiment, the memory foam has a density of about 45 kg/m³ and a thickness of approximately ½”. However, it can be appreciated that foams having other specifications can be utilized without departing from the scope of the present invention.

Turning now to FIG. 4, therein depicts another embodiment of the present invention, particularly a jewelry case 50, in its closed configuration. As can be seen in FIG. 5, the jewelry case 50 is also of a book-like or shell-like configuration and is hingedly or pivotally connected via connecting web 67 to allow for movement between an open position and a closed position. In its open position, as seen in FIG. 5, various items of jewelry can be placed within the case 50, here a bracelet 102 and ring 104, so that they are stored and protected therein when the case 50 is closed.

Particularly, the case 50 has a first and a second cover, leaf or shell member 62 and 64, respectively. Each of the shell members 62 and 64 of the case 50 are of a generally bowl-shaped configuration, having a generally round or oval-shaped, planar bottom wall 65 and an upstanding side wall 66, which collectively define an interior cavity 68. The interior cavity 68 of each of the leaves 62 and 64 are a complimentary shape to each other and are disposed opposite one another on the inside of the case when it is closed, in order to accommodate the various items of jewelry which are placed therein. The shell members 62 and 64 are hingedly connected via connecting web portion 67 thereof, to allow the case 50 to assume the closed configuration shown in FIGS. 4 and 6 and the open configuration shown in FIG. 5. While it is preferable to hingedly connect the leaves 62 and 64 together, it can be appreciated that other means can be used to secure the leaves to each other.

The bottom walls 65 and side walls 66 of each of the leaves 62 and 64 is made of a hard material such as plastic, metal or cardboard to protect the jewelry. Preferably, the bottom walls 65 and side walls 66 are made from ethylene-vinyl acetate (EVA). Alternatively, the side walls 66 can be made of a flexible or accordion-like material or configuration to facilitate compression and expansion thereof. Furthermore, the exterior surface of the case can be covered with a more aesthetically pleasing outer covering such as fabric or leather.

Additionally as seen in FIG. 5, closure means are provided to secure the leaves 62 and 64 in their closed position, such as the zipper 70 and zipper pull 72. However, it can be appreciated that other closure means could be used to secure the case in its closed configuration, such as a button and loop, clip, snap or latch.

As depicted in FIG. 5, the leaves 62 and 64 of the case 50 can open to expose the two interior cavities 68. A solid piece or layer of memory foam 80 and 82 is secured to each of the inner cavities 68 of the leaves 62 and 64. The memory foam layers 80 and 82 can be secured to the interior surface of the leaves 62 and 64 respectively, by the use of an adhesive (not shown). As can be seen in FIG. 5, the user can place the various items of jewelry such as a bracelet 102 or a ring 104 on top of memory foam layer 80, and close the case 50 to secure and store the jewelry 102 and 104 between the two layers 80, 82, as seen in FIG. 6. As can be seen in FIG. 5, in a preferred embodiment, the layer of memory foam 82 has a greater thickness than the layer of memory foam 80 so that the top surface of memory foam layer 82 extends upwardly beyond the zipper 70 on the leaf 64. This allows the foam to form a “seal” around the jewelry to keep it in place and from each piece touching or getting tangled. Alternatively, layer 80 could have a greater thickness than layer 82.

Memory foam layers 80 and 82 are made of a visco-elastic polyurethane foam material which has a shape memory and can be formed or shaped multiple times but
remembers its original shape. Multiple types of this memory foam are commercially available and suitable for use in the case of the present invention and would be well known to a person having ordinary skill in the art.

[0048] When the case 50 is in its closed position as seen in FIG. 6, the memory foam layers 80 and 82 are generally adaptable and generally deform to the contour and shape of the various items of jewelry placed between the two layers. In particular, as seen in FIG. 6a, when the ring 104 and bracelet 102 are placed between the leaves 62 and 64, the memory foam layers 80 and 82 will deform around each of the items of jewelry. Particularly, the bracelet 102 and the ring 104 will partially sink into the memory foam leaves 80 and 82. As can be seen in FIG. 6a, the memory foam will compress to a greater extent around the larger object here, the bracelet 102, than around the smaller object, here the ring 104, in order to conform to the shape of the various pieces of jewelry and secure objects of different sizes within the case. When the jewelry case is opened and the jewelry is removed from the case, the memory foam layers 80 and 82 will resiliently and inherently return to their normal, non-deformed positions as seen in FIG. 5 because of their shape memory properties. Therefore, different items of jewelry can be placed within the case and the foam will compress and in turn, conform to their corresponding shapes and sizes in order to secure all of the objects in place within the case.

[0049] In a particularly preferred embodiment, the case is provided in at least two sizes, a smaller size which is approximately 6 and 1/4 inches×4 and 3/8 inches×3 inches and a larger size which is approximately 10 inches×7 1/2 inches×3 1/2 inches. However, it can be appreciated that the case 50 can also be made in other shapes and sizes depending on the type or number of items of jewelry which are to be stored and protected therein. For example, the case can be made smaller so that it can be used for traveling or larger in order to be used to store jewelry everyday.

[0050] In addition, in the particularly preferred embodiment, the memory foam has a density of approximately 40 kg/m³. Preferably, in the larger sized case the layer of memory foam 82 has a thickness of about 2 3/8 inches and the layer of memory foam 80 has a thickness of about 3/8 inches. In the smaller embodiment, the layer of memory foam 82 has a thickness of about 2 1/8 and memory foam layer 80 has a thickness of about 1/8. However, it can be appreciated that foams having other specifications and thicknesses can be utilized without departing from the scope of the present invention.

[0051] Additional objects and advantages of the invention will become apparent to those skilled in the art upon reference to the detailed description taken in conjunction with the provided figures. While particular embodiments of the invention have been described, it is not intended that the invention be limited thereto, as it is intended that the invention be as broad in scope as the prior art will allow and that the specification be read likewise. Particularly, the case can be used to store and protect various objects, besides jewelry or eyeglasses and thus, can be made in any shape or size depending on the objects to be stored therein. Furthermore, the leaves of the case do not have to be pivoted together by a hinge, but rather can be two separate halves and connected by a snap or zipper. Additionally, the top and bottom shell members can be reversed so that the top is the bottom and vice versa. Moreover, the memory foam layers can be received within the interior of the case but not secured to it or, alternatively, they can be removably secured to the case. Additionally, the entire outer surface of the case can be made of a soft or flexible material, rather than a hard or rigid outer shell. Accordingly, it will therefore be appreciated by those skilled in the art that other modifications could be made thereto without departing from the spirit and scope of the invention.

What is claimed is:

1. A case for storing eyeglasses, comprising:
a top and a bottom shell member which are connected together to allow for movement between an open position and a closed position, each of said shell members having an interior surface which in said closed position, collectively defines an enclosed interior cavity for storage of eyeglasses therein; and

a layer of memory foam attached to and overlying said interior surface of each of said shell members, wherein when said case is in said closed position, said layers of memory foam generally deform to the shape of eyeglasses placed within said interior cavity of said case, and when said case is in said open position, said layers of memory foam return to a normal, non-deformed position.

2. The case according to claim 1, wherein:
said top and bottom shell members each have a generally rectangular, convex-shaped bottom wall defining four outer peripheral edges and four upstanding side walls, each of which is connected to an outer peripheral edge of said bottom wall, to collectively define said interior surface therebetween.

3. The case according to claim 1, wherein:
said top and bottom shell members are of a complementary shape to each other and are disposed opposite one another when in said closed position.

4. The case according to claim 2, wherein:
said top and bottom shell members are pivotally connected together by a hinge which is disposed along at least a portion of respective side walls thereof.

5. The case according to claim 1, further comprising:
a mechanical fastener for securing said top and bottom shell members in said closed position.

6. The case according to claim 5, wherein:
said mechanical fastener is a tab connected to one of said side walls of one of said top and bottom shell members and a slot connected to a corresponding side wall of the other of said top and bottom shell members and wherein said tab engages said slot when in said closed position.

7. The case according to claim 1, wherein:
said memory foam is visco-elastic polyurethane foam.

8. The case according to claim 7, wherein:
said visco-elastic polyurethane foam has a density of about 45 kg/m³.

9. The case according to claim 1, wherein:
said layers of memory foam can be deformed and reshaped multiple times.

10. The case according to claim 1, wherein:
said top and bottom shell members have a hard exterior surface.

11. A case for storing jewelry, comprising:
a top and a bottom shell member which are connected together to allow for movement between an open position and a closed position, each of said shell members having an interior surface which when in said closed position, collectively defines an enclosed interior cavity for storage of jewelry therein; and

a layer of memory foam attached to and overlying said interior surface of each of said shell members, wherein when said case is in said closed position, said layers of
memory foam generally deform to the shape of jewelry placed within said interior cavity of said case, and when said case is in said open position, said layers of memory foam return to a normal, non-deformed position.

12. The case according to claim 11, wherein:
said top and bottom shell members are bowl-shaped, each comprising a generally oval-shaped planar bottom wall defining an outer peripheral edge and an upstanding side wall connected to said outer peripheral edge of said bottom wall, to collectively define said interior surface therebetween.

13. The case according to claim 11, wherein:
said top and bottom shell members are of a complementary shape to each other and are disposed opposite one another when in said closed position.

14. The case according to claim 12, wherein:
said planar bottom walls and said side walls are made of a rigid material.

15. The case according to claim 12, wherein:
said top and bottom shell members are pivotally connected together by a hinge disposed along at least a portion of said respective side walls thereof.

16. The case according to claim 11, further comprising:
a mechanical fastener for securing said top and bottom shell members in said closed position.

17. The case according to claim 16, wherein:
said mechanical fastener is a zipper disposed along a top edge of each of said side walls.

18. The case according to claim 11, wherein:
said memory foam is visco-elastic polyurethane foam.

19. The case according to claim 18, wherein:
said visco-elastic polyurethane foam has a density of about 40 kg/m³.

20. The case according to claim 11, wherein:
one of said layers of memory foam has a thickness which is greater than the thickness of the other of said layers of memory foam.

21. The case according to claim 11, wherein:
said layers of memory foam can be deformed and reshaped multiple times.

22. A case for storing at least one object, comprising:
a top and a bottom shell member which are connected together to allow for movement between an open position and a closed position, each of said shell members having an interior surface which when in said closed position, collectively defines an enclosed interior cavity for storage of at least one object therein; and
a layer of memory foam attached to and overlying said interior surface of each of said shell members, wherein when said case is in said closed position, said layers of memory foam generally deform to the shape of at least one object placed within said interior cavity of said case, and when said case is in said open position, said layers of memory foam return to a normal, non-deformed position.

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