

A CASE FOR COSMETIC PRODUCT AND THE LIKE

FIELD

[0001] The present disclosure generally relates to a case, and in particular a case for cosmetic product and the like.

BACKGROUND ART

[0002] The following discussion of the background to the disclosure is intended to facilitate an understanding of the present disclosure only. It should be appreciated that the discussion is not an acknowledgement or admission that any of the material referred to was published, known or part of the common general knowledge of the person skilled in the art in any jurisdiction as at the priority date of the disclosure.

[0003] As part of the daily life of modern people, cosmetics and beauty products have become essential daily necessities. In addition to the aesthetical appeal, functionality of packaging of cosmetic products has become another increasingly important factor that the beauty industry is looking at to enhance the overall user experience and to differentiate a brand from others.

[0004] Existing cosmetic cases typically include a base constituting a storage of the cosmetic product (e.g., foundation, eye shadow, poured or compacted powder), a lid that can cover the cosmetic product when not in use. The base and the lid may be connected through a hinge shaft (typically made of metal) with one or more screws to facilitating opening and closing of the lid, and a mirror may be installed on the lid to provide convenience to the user. Such a cosmetic case design requires the lid and the base to be configured with special structures for coupling with the hinge shaft. Also, a mounting operation of the hinge shaft is required during the manufacturing process, thus increasing the manufacturing time and costs. Furthermore, the base and the lid are typically molded from plastic materials, which are not environmentally friendly.

[0005] The present disclosure contemplates that it would be desirous to provide a case for cosmetic product and the like which may at least alleviate or mitigate the afore-mentioned problems.

SUMMARY

[0006] In accordance to one aspect of the present disclosure, there is provided a case comprising:- an envelope comprising a first connection plate, a second connection plate and a spine portion disposed between the first and second connection plates, a cover portion disposed on the first connection plate and a base portion disposed on the second connection plate, wherein each of the first and second connection plates is hingedly connected to the spine portion such that the cover portion is movable with respect to the base portion between a closed position and an open position, and at least one support member connected to the cover portion and the base portion, wherein in the open position, the cover portion and the base portion are held at a pre-determined angle by the at least one support member, and in the closed position, the cover portion and the at least one support member are rested on the base portion.

[0007] In some embodiments, the cover portion comprises a slot for removably receiving a mirror.

[0008] In some embodiments, the first connection plate, the second connection plate and the spine portion are integrally formed from a foldable material.

[0009] In some embodiments, the spine portion forms a first fold line with the first connection plate and forms a second fold line with the second connection plate, the first and second connection plate being rotatable around the first and second fold lines with respect to the spine portion respectively.

[0010] In some embodiments, the at least one support member and the cover portion are integrally formed from a foldable material.

[0011] In some embodiments, the at least one support member forms a third fold line with the cover portion, the at least one support member being rotatable around the third fold line with respect to the cover portion.

[0012] In some embodiments, the first connection plate comprises a covered area where the cover portion is disposed on and an exposed area adjoining the covered area that is not covered by the cover portion, wherein a width of the exposed area substantially corresponds to a width of the at least one support member.

[0013] In some embodiments, each of the envelope, the base portion, the cover portion, and the at least one support member is formed from a cellulose-based material.

[0014] In some embodiments, the cover portion comprises an attachment portion configured to attach a mirror to the cover portion.

[0015] In some embodiments, the attachment portion is configured to fully or partially cover edges of the mirror.

[0016] In some embodiments, the cover portion comprises a separation line between the attachment portion and a non-attachment portion.

[0017] In some embodiments, the attachment portion and the non-attachment portion are both made of same material, and the separation line is made of a plurality of perforated holes.

[0018] In some embodiments, the attachment portion is removably adhered to a non-attachment portion of the cover portion along the separation line.

[0019] In some embodiments, the cover portion also comprises an attachment extension of the attachment portion.

[0020] In some embodiments, the attachment portion is made of cardboard or cellulose material.

[0021] Other aspects of the disclosure will be apparent to those of ordinary skill in the art upon review of the following description of specific embodiments of the disclosure in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] Various embodiments are described, by way of example only, with reference to the accompanying drawings, in which:

[0023] **Figure 1** is a perspective view of a case in an assembled form according to one embodiment of the present disclosure;

[0024] **Figure 2** is a perspective view of the case of Figure 1 in an unassembled form;

[0025] **Figure 3** is a cross-sectional side view of the case where a cover portion of the case is in an open position;

[0026] **Figure 4** is a cross-sectional side view of the case where a cover portion of the case is in a closed position;

[0027] **Figure 5a** is a perspective view of the case wherein a mirror is attached to the cover portion via attachment portion;

[0028] **Figure 5b** is a perspective view of the case wherein the mirror has been removed from the cover portion.

[0029] **Figure 6a** is a photo of the case wherein the mirror has been attached to the cover portion via the attachment portion.

[0030] **Figure 6b** is a perspective view of the case wherein the attachment portion has been partially peeled off from the cover portion.

[0031] **Figure 6c** is a perspective view of the case wherein the mirror has been completely detached from the cover portion.

DETAILED DESCRIPTION

[0032] In the following description, details are provided to describe the embodiments of the specification. It shall be apparent to one skilled in the art, however, that the embodiments may be practiced without such details.

[0033] Similar parts of the embodiments may have the same names, similar part numbers, or similar part numbers with an alphabet symbol or prime symbol. The description of one part applies by reference to another similar part, where appropriate, thereby reducing repetition of text without limiting the disclosure.

[0034] Throughout this specification, unless otherwise indicated to the contrary, the terms ‘comprising’, ‘consisting of’, ‘having’ and the like, are to be construed as non-exhaustive, or in other words, as meaning ‘including, but not limited to’.

[0035] Throughout the specification, unless the context requires otherwise, the word ‘include’ or variations such as ‘includes’ or ‘including’ will be understood to imply the

inclusion of a stated integer or group of integers but not the exclusion of any other integer or group of integers.

[0036] Throughout the specification, the singular form "a", "an" and "the" include plural references unless the context clearly dictates otherwise. For example, the term "a mirror" or "at least one mirror" may include a plurality of mirrors.

[0037] Unless defined otherwise, all other technical and scientific terms used herein have the same meaning as is commonly understood by a skilled person to which the subject matter herein belongs.

[0038] In accordance to various embodiments of the invention and with reference to Figures 1 to 4, there is provided a case 10 for cosmetic product and the like. The case 10 is particularly suitable for certain cosmetics, for example, foundation, eye shadow, poured or compacted powder. However, it can also be used to hold other objects including, but not limited to, brushes or other make-up accessories that are used to apply the cosmetics.

[0039] The case 10 comprises an envelope 100 having a first connection plate 101, a second connection plate 102 and a spine portion 103 disposed between the first and second connection plates 101, 102. The case 10 further comprises a cover portion 201 disposed on the first connection plate 101, a base portion 202 disposed on the second connection plate 102, wherein each of the first and second connection plates 101, 102 is hingedly connected to the spine portion 103 such that the cover portion 201 is movable with respect to the base portion 202 between a closed position and an open position, and at least one support member 203 connected to the cover portion 201 and the base portion 202, wherein in the open position, the cover portion 201 and the base portion 202 are held at a pre-determined angle by the at least one support member 203, and in the closed position, the cover portion 201 and the at least one support member 203 are rested on the base portion 202.

[0040] The case 10 may be configured in a suitable shape, for example, a rectangular shape as shown in the various figures. It is to be appreciated that the shape and size of the case 10 and accordingly the shape and size of different parts of the case 10 may vary depending on factors including the type and amount of the cosmetics/other objects to be contained in the case 10.

[0041] The envelope 100 of the case 10 defines the outer shape of the case 10 and is configured to hold the cover portion 201 and the base portion 202 thereon. As shown in Figure 2, the first and second connection plates 101, 102 are of a substantially planar shape, where the size and shape of the two are identical or almost identical. The spine portion 103 of the envelope 100 may be of an elongate shape. The spine portion 103 acts as a central support for the case 10 and provides for a rotational movement of the first and second connection plates 101, 102 (and accordingly, a rotational movement of the cover portion 201 and the base portion 202 mounted thereon) with respect to each other.

[0042] The envelope 100 allows the cover portion 201 to be moved between an open position (illustrated in Figure 4) and a closed position (illustrated in Figure 4).

[0043] In the closed position, the cover portion 201 and the at least one support member 203 both come into contact with the base portion 202 on a substantially horizontal contact surface. The first connection plate 101 and the second connection plate 102 of the envelope 100 may be substantially parallel with each other, and are separated by the cover portion 201 and the base portion 202 therebetween. It may be understood that a width of the spine portion 103 is configured to be at least equal to the total thickness of the cover portion 201 and base portion 202 so that the cover portion 201 and 202 may be accommodated inside the envelope 100 in the closed position.

[0044] During the opening of the cover portion 201 towards the open position, the first connection plate 101 of envelope 100 and the cover portion 201 are lifted from and moved away from the base portion 202 and the second connection plate 102. In the open position, the cover portion 201 is substantially away from the base portion 202, and is eventually held in position by the at least one support member 203.

[0045] More specifically, the at least one support member 203 forms a bridge-like structure or a linkage between the cover portion 201 and the base portion 203 when the cover portion 201 is moved to the open position. The at least one support member 203 defines a maximum extent that the case 10 can be opened, and is configured to hold the cover portion 201 and the base portion 202 at a pre-determined angle in the open position.

[0046] As can be seen from Figure 3, in the open position, the envelope 100 resembles an L-shape where the spine portion 103 and the second connection plate 102 are substantially levelled off (i.e. forming a substantially flat surface). The first connection plate 101 carrying

the cover portion 201 is disposed at an angle (determined by the at least support member 203) with respect to the spine portion 103 and the second connection plate 102. It is to be appreciated that the angle formed between the cover portion 201 and the base portion 202 may vary depending on the dimension of the various parts of the case 10, the relationship of which will be described in further details.

[0047] In various embodiments, the base portion 202 may be configured to contain one or more cosmetic products, and/or one or more other objects. For example, as shown in Figure 1, the base portion 202 may comprise a plurality of concave portions for storing the cosmetic products (such as eyeshadow of different colors) therein.

[0048] In various embodiments, the cover portion 201 may comprise a slot 400 for removably receiving a mirror 500, for example, as shown in Figure 1 and Figure 3. This provides convenience to a user during the make-up process. Further, the slot 400 allows the mirror 500 to be removed from the case 10 easily upon disposal of the case 10. As such, the mirror 500 and the case 10, which are made of different materials, may be separately disposed (or the mirror can be reused). The step of segregating different materials during the waste disposal process is therefore simplified, and safety issues (for example, risk of being cut by the mirror during the waste segregation and disposal process) can be minimized.

[0049] In various embodiments, instead of being slotted into the cover portion 201, the mirror 500 is attached to the cover portion 201 via an attachment portion 502, as shown in Figure 5 and Figure 6. In some embodiments, the attachment portion 502 is configured as a strip that encloses the edge 508 of the mirror 500, and accordingly attaches the mirror 500 onto the cover portion 201. As the mirror 500 is attached to the cover portion 201 via the attachment portion 502, once the attachment portion 502 has been removed, the mirror 500 can be easily detached from the cover portion 201. In some embodiments, the attachment portion 502, configured as a mirror frame, fully encloses the edge 508 of the mirror (as shown in Figure 5 and Figure 6). In some embodiments, the attachment portion 502 is configured to partially enclose some portions of the edge 508 of the mirror, such as the four corners of the mirror 500.

[0050] In various embodiments, the cover portion 201 is configured to comprise an attachment portion 502 and a non-attachment portion 504 (i.e., the non-attachment portion 504 does not function to attach the mirror 500 to the cover portion 201), and there is a separation line 501 separating the attachment portion 502 and the non-attachment portion 504. In some

embodiments, the separation line 501 is a binding line that binds the attachment portion 502 to the non-attachment portion 504 (e.g., the attachment portion 502 can be stitches onto the non-attachment portion 504). Thus, the attachment portion 502 can be easily peeled off from the non-attachment portion 504 along the separation line 501. In some embodiments, the attachment portion 502 and the non-attachment portion 504 are made from the same material (e.g., card board, cellulose material), and the separation line 501 (e.g., a line of perforated holes located between the attachment portion 502 and the non-attachment portion 504) is created to make it easy to detach the attachment portion 502 from the non-attachment portion 504. In some embodiments, the attachment portion 502 and the non-attachment portion 504 are made of different materials that are removably adhered together along the separation line 501. Thus, it is easy to detach the attachment portion 502 following the separation line 501.

[0051] In some embodiments, the cover portion 201 is configured to comprise an attachment extension 506 extending from the attachment portion 502. When intending to remove the attachment portion 502, the user can lift up the attachment extension 506 to start peeling off the attachment portion 502. The attachment extension 506 can take various forms and sizes.

[0052] In the abovementioned embodiments, as it is easy to remove the mirror 500 by removing the attachment portion 502, the step of segregating the mirror 500 and the case 10 during the waste disposal process is therefore simplified, and safety issues (for example, risk of being cut by the mirror during the waste segregation and disposal process) can be minimized. The removed mirrors 500 can also be recycled and reused, after the case 10 has been disposed.

[0053] Various parts of the case 10 as described above may be formed from materials that are relatively inexpensive and may be formed in a relatively easy manner.

[0054] In some embodiments, the envelope 100 (including the first connection plate 101, the second connection plate 102 and the spine portion 103) may be integrally formed from a foldable material. In other words, the envelope 100 may be a one-piece element formed from the foldable material. Suitable foldable materials for forming the envelope 100 may include cardboard or other cellulose-based materials. In some embodiments, the foldable material may be a rigid or a semi-rigid material so as to provide for structure integrity of the case 10.

[0055] The spine portion 103 forms a first fold line 310 with the first connection plate 101 and forms a second fold line 320 with the second connection plate 102, wherein the first

and second connection plates 101, 102 are rotatable around the first and second fold lines 310, 320 with respect to the spine portion 103 respectively. More specifically, the envelope 100 may be a blank in a flat form, and the first and second fold lines 320 are formed so as to divide the blank into the first connection plate 101, the spine portion 102 and the second connection plate 103. As a result, the first connection plate 101 and the second connection plate 102 may be bended towards each other along the first and second fold lines 310, 320 to provide for a rotational movement of the cover portion 201 and the base portion 202 attached thereon.

[0056] In some embodiments, the cover portion 201 and the base portion 202 may similarly be formed from a foldable material (e.g. a cardboard or other cellulose-based materials). It is to be appreciated that other known processing techniques may be applied so as to form specific structures on the cover portion 201 and on the base portion 202. For example, one or more openings or concave portions may be formed on the cover portion 201 and on the base portion 202 which may be required for storing a cosmetic products and/or for receiving other objects (such as make-up accessories, a mirror and etc.).

[0057] Generally, the at least one support member 203 is fixedly connected to the cover portion 201 and the base portion 202 at two opposing side edges. The connection may be provided by various suitable attachment means including, but not limited to, attachment by way of applying an adhesive material. It is to be appreciated that there may be one support member 203 as shown in Figure 1 and Figure 2 that acts to connect the cover portion 202 and the base portion 202. Alternatively, there may be more than one support members 203 (e.g. two or more support members 203 arranged in a row) that cooperatively act to achieve the same function.

[0058] In some embodiments and with reference to Figure 2, the at least one support member 203 and the cover portion 201 may be integrally formed from a foldable material. In some embodiments, the at least one support member 203 may form a third fold line 330 with the cover portion 201, wherein the at least one support member 203 is rotatable around the third fold line 330 with respect to the cover portion 201. As shown in Figure 2, the at least one support member 203 is an integral part extending from one side of the cover portion 201, which may then be attached to the base portion (e.g. by means of applying an adhesive material). The connection between the at least one support member 23 and the base portion 202 is adapted to allow a degree of rotational movement between the two.

[0059] It is to be appreciated that the at least one support member 203 may also be formed as an integral part of the base portion 202 with a fourth fold line 304 (as shown in Figure 3), and subsequently being attached to the cover portion 201. Alternatively, the at least one support member 203, the cover portion 201, and the base portion 202 may be integrally formed from a blank made of a foldable material.

[0060] In some embodiments, each of the envelope 100, the base portion 102, the cover portion 101, and the at least one support member 203 is formed from a cellulose-based material such as a cardboard. Cellulose-based material is a more environmentally friendly option as compared to plastic materials which are commonly used in existing cosmetic cases. Further, the case 10, which may be made wholly of cellulose-based materials, may be disposed (into a recycling bin) without the need of separating the various parts, thus facilitating ease of disposal and recycling of waste materials. It is also to be appreciated that the process forming the case 10 using cellulose-based materials is relatively simple and does not require additional parts (such as hinge shafts or screws). Therefore, manufacturing time and costs for producing the case 10 may be reduced as compared with existing cosmetic case designs.

[0061] The various parts of the case 10 are sized and shaped such that the cover portion 201 may be lifted up to a desired open angle, and the case 10 may be in a compact form when closed. The relationship of the dimensions of the various parts will be illustrated in detail with reference to Figure 3 and Figure 4.

[0062] As may be better seen from Figure 4, the first connection plate 101 may comprise a covered area 101-a where the cover portion 201 is disposed on, and an exposed area 101-b, i.e. an area that is not covered by the cover portion 201.

[0063] A width of the exposed area 101-b substantially corresponds to a width of the at least one support member (denoted as W_{support} in Figure 4). In this manner, the at least one support member 203 and the cover portion 201 may together form a substantially planar contact surface that is rested on the base portion 202 when the case is completely closed. Advantageously, a reduced form factor of the case 10 is achieved.

[0064] In some embodiments, the base portion 202, the spine portion 103 and the at least one support member 203 are sized and dimensioned according to the following relationship:

$$W_{\text{spine}} \geq T_{\text{cover}} + T_{\text{base}}$$

where W_{spine} is a width of the spine portion 103, T_{cover} is a thickness of the cover portion 201 and T_{base} is a thickness of the base portion 202. Accordingly, the spine portion 103 may at least accommodate the cover portion 201 and the base portion 103 when the case 10 is completely closed.

[0065] In some embodiments, the cover portion 201, the first connection plate 101, and the at least one support member 203 may be sized and dimensioned according to the following relationship:

$$W_1 \geq W_{\text{support}} + W_{\text{cover}}$$

where W_1 is a width of the first connection plate 101, W_{support} is the width of the at least one support member 203, and W_{cover} is a width of the cover portion 201. Accordingly, the first connection plate 101 may at least accommodate the cover portion 201 and the at least one support member 203 when the case 10 is completely closed.

[0066] In some embodiments, the cover portion 201, the base portion 202, and the at least one support member 203 are sized according to the following relationship:

$$W_{\text{base}} \geq W_{\text{support}} + W_{\text{cover}}$$

where W_{base} is a width of the base portion 202, W_{support} is the width of the at least one support member 203, and W_{cover} is the length of the cover portion 201. This allows the entirety of the cover portion 201 and the at least one support member 203 to be rested on the base portion 202 when the case 10 is in the closed position.

[0067] It is to be appreciated that the size and dimension of the various parts of the case 10 may be adjusted according to the specific requirement. For example, the width and thickness of the base portion 202 may be adapted based on type and volume of cosmetic products, in which case the dimension of other parts including the spine portion 103 and the at least one support member 203 will also need to be adjusted accordingly.

[0068] The case 10 formed according to the present application is advantageous at least in the following aspects:

[0069] Firstly, functionality of the case 10 is enhanced in that the cover portion 101 may be held in position by the at least one support member 203. Particularly, when a mirror is attached to the cover portion 201, a user may conveniently use the build-in mirror during the make-up process and no external support on the mirror/the cover portion is required. When the case 10 is closed, the at least one support member 203, the cover portion 201 and the base portion 202 fit into the dimension of each other. The compactness of the case 10 is improved.

[0070] Compared with some of the existing cosmetic case designs where hinge shafts are used for holding the cover/lid of the cosmetic case, the case 10 of the present application may be manufactured in a simpler, faster, and less expensive manner. This is achieved by using foldable material (including cardboard and other cellulose materials) to form various parts of the case 10 as explained above.

[0071] Further, the case 10 provides additional benefits of being easy to dispose/recycle, and being more environmentally friendly. When the cosmetic product is used up and the user is about to throw away the case 10, the mirror may be easily removed by the user (e.g., because of the slot 400 as shown in Figure 1 and Figure 3; as well as the attachment portion 502 as shown in Figure 5 and Figure 6), after which the case 10 may be disposed into a recycling bin. The case 10 may be wholly made of cellulose materials, and there is no need of separating the various parts (e.g. to remove a metal hinge shaft or any screws) during the material recycling process.

[0072] It is to be appreciated that certain features of the invention, which are, for clarity, described in the context of separate embodiments, may also be provided in combination in a single embodiment. Conversely, various features of the invention, which are, for brevity, described in the context of a single embodiment, may also be provided separately or in any suitable sub-combination or as suitable in any other described embodiment of the invention. Certain features described in the context of various embodiments are not to be considered essential features of those embodiments, unless the embodiment is inoperative without those elements.

[0073] It is to be appreciated by the person skilled in the art that variations and combinations of features described above, not being alternatives or substitutes, may be combined to form yet further embodiments falling within the intended scope of the disclosure.

REFERENCE

10	case
100	envelope
101	first connection plate
101-a	covered area
101-b	exposed area
102	second connection plate
103	spine portion
201	cover portion
202	base portion
203	support member
310	first fold line
320	second fold line
330	third fold line
340	fourth fold line
400	slot
500	mirror
501	separation line
502	attachment portion
504	non-attachment portion
506	attachment extension
508	mirror edge

CLAIMS

1. A case comprising:-

- an envelope comprising a first connection plate, a second connection plate and a spine portion disposed between the first and second connection plates,
- a cover portion disposed on the first connection plate and a base portion disposed on the second connection plate, wherein each of the first and second connection plates is hingedly connected to the spine portion such that the cover portion is movable with respect to the base portion between a closed position and an open position, and
- at least one support member connected to the cover portion and the base portion, wherein in the open position, the cover portion and the base portion are held at a pre-determined angle by the at least one support member, and in the closed position, the cover portion and the at least one support member are rested on the base portion.

2. The case according to claim 1, wherein the first connection plate, the second connection plate and the spine portion are integrally formed from a foldable material.

3. The case according to claim 2, wherein the spine portion forms a first fold line with the first connection plate and forms a second fold line with the second connection plate, wherein the first and second connection plates are rotatable around the first and the second fold lines with respect to the spine portion respectively.

4. The case according to any one of the preceding claims, wherein the at least one support member and the cover portion are integrally formed from a foldable material.

5. The case according to claim 4, wherein the at least one support member forms a third fold line with the cover portion, wherein the at least one support member is rotatable around the third fold line with respect to the cover portion.

6. The case according to claim 5, wherein the first connection plate comprises a covered area where the cover portion is disposed on and an exposed area adjoining the covered area that is

not covered by the cover portion, wherein a width of the exposed area substantially corresponds to a width of the at least one support member.

7. The case according to any one of the preceding claims, wherein each of the envelope, the base portion, the cover portion, and the at least one support member is formed from a cellulose-based material.

8. The case according to any one of the preceding claims, wherein the cover portion comprises a slot for removably receiving a mirror.

9. The case according to any one of the preceding claims, wherein the cover portion comprises an attachment portion configured to attach a mirror to the cover portion.

10. The case according to claim 9, wherein the attachment portion is configured to fully or partially cover edge of the mirror.

11. The case according to claim 9, wherein the cover portion comprises a separation line between the attachment portion and a non-attachment portion.

12. The case according to claim 11, wherein the attachment portion and the non-attachment portion are both made of same material, and the separation line is made of a plurality of perforated holes.

13. The case according to claim 11, wherein the attachment portion is removably adhered to a non-attachment portion of the cover portion along the separation line.

14. The case according to claim 9, wherein the cover portion also comprises an attachment extension of the attachment portion.

15. The case according to claim 9, wherein the attachment portion is made of cardboard or cellulose material.