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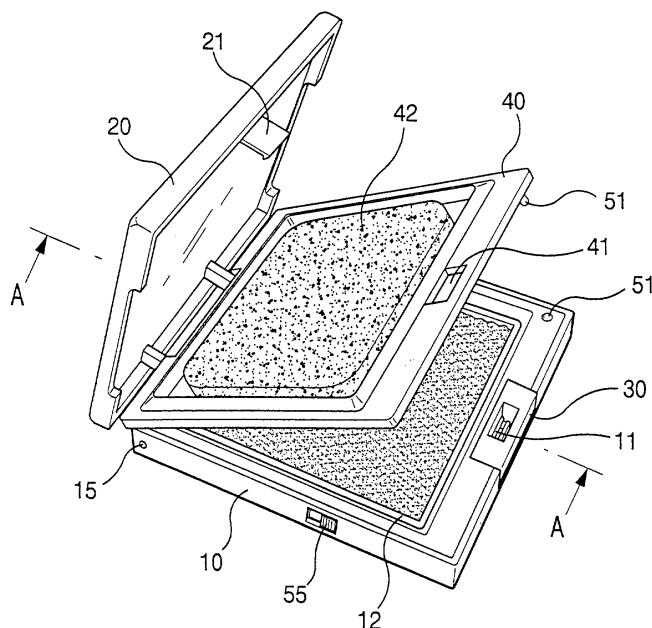
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(54) **Cosmetics case having melody output function**

(57) The present invention relates to a cosmetics case having a melody output function, which generates the melody automatically in opening the case for a makeup so as to attract the interest of users. The cosmetics case having a melody output function comprising: a body (10) having a container (12) for storing contents such as cosmetics; a cover (20) coupled to one end of the body using hinge so as to be opened and closed; a hook (21) formed at the other end of the cover, and a projection (11) formed in the body to be engaged

with the hook; an opening button (30) for releasing the hook from the projection so that the cover could be opened; a puff case (40) locating between the body and cover; its one end being connected with the hinge, the other end being formed with a hole (41) through which the hook could pass, an upper part thereof being formed with a space which could accommodate a puff (42) for putting on makeup, and a lower part being provided with a mirror (43); and a melody output circuit for generating the melody automatically in opening the cover for a makeup.

FIG.2



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Description

Field of the Invention

[0001] The present invention relates to a cosmetics case having a melody output function, more specifically the cosmetics case having the melody output function, which generates the melody automatically in opening the case for a makeup, thereby attracting the interest of users.

Background of the Related Art

[0002] As a common knowledge, a makeup is used widely to protect a face skin and to maintain a beauty, and most adult females put on makeup everyday.

[0003] For putting on a makeup, cosmetics such as a eye shadow and twin cakes and a makeup tool such as a brush are used, and a cosmetics case for these, for example a compact as shown in FIG. 1, comprises a body 4 which has a container 2 for storing the cosmetics and a cover 6 which has a mirror 8 and coupled with the body 4 to be opened and closed.

[0004] However, since the cosmetics case has a limited function that merely stores the cosmetics and does not have such a function that stores and generates short messages or greetings of which a person gives it someone as a gift, it could not attract the interest.

SUMMARY OF THE INVENTION

[0005] The present invention is contemplated to solve the aforementioned problem, and it is an object of the present invention to provide a cosmetics case having the melody output function, which generates the melody automatically in opening the case for a makeup, so as to attract the interest of users.

[0006] It is another object of the present invention to provide the cosmetics case which uses a photo sensor as a opening and closing detection switch of a cover so as to simplify a structure thereof.

[0007] It is still another object of the present invention to provide the cosmetics case, which has a mode setting switch determining an operation so as to suspend the melody output function temporarily if not required by the user.

[0008] To accomplish the above object, it is provided the cosmetics case having a melody output function comprising: a body having a container for storing contents such as cosmetics; a cover coupled to one end of the body using hinge so as to be opened and closed; a hook formed at the other end of the cover, and a projection formed in the body to be engaged with the hook; an opening button for releasing the hook from the projection so that the cover could be opened; a puff case locating between the body and cover, its one end being connected with the hinge, the other end being formed with a hole through which the hook could pass, an upper

part thereof being formed with a space which could accommodate a puff for putting on makeup, and an lower part being provided with a mirror; and a melody output circuit for generating the melody automatically in opening the cover for a makeup.

[0009] According to additional features of the present invention, it is preferable that the melody output circuit includes a opening and closing detection switch for the cover, a memory for storing the melody to be generated in opening the cover, a speaker for generating the melody stored in the memory, a processor for calling out the melody in the memory and controlling it to be generated by the speaker as the switch detecting the opening of the cover.

[0010] In the above, the opening and closing detection switch could be a mechanical switch which mounted at a coupling part of the body and cover so as to operate in the opening of the cover and simultaneous opening of the puff case, or a photo sensor which is mounted in the body so that it outputs different signals according to the intensity of radiation detected in the opening of the cover.

[0011] Also, According to additional features of the present invention, it is preferable that the cosmetics case further comprises a mode setting switch for determining the operation so as to suspend the melody output function temporarily, if not required by the user.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] The features and advantages of the present invention will be more described specifically in the following description of preferred embodiments of the invention with reference to the accompanying drawings wherein:

FIG. 1 is a perspective view showing a structure of a common cosmetic case according to the prior art; FIG. 2 is perspective view showing a structure of a cosmetic case according to the present invention; FIG. 3 is a sectional view taken along line A-A of FIG. 2;

FIG. 4 is a block diagram showing a melody output circuit that is provided with a cosmetic case according to the present invention; and

FIG. 5 is a perspective view showing a structure of a cosmetic case according to another embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0013] Reference will now be made in detail to the embodiment of the present invention and examples of which are illustrated in the accompanying drawings. In explaining the present invention, the same names and reference numerals will be given to the same components, and explanations in the same will be omitted.

[0014] FIG. 2 illustrates a perspective view showing a structure of a cosmetic case according to the present invention, and FIG. 3 illustrates a sectional view taken along line A-A of FIG. 2.

[0015] Referring to accompanying FIG. 1 and FIG. 2, a reference numeral 10 indicates a body which has a container 12 for storing contents such as cosmetics, and a reference numeral 20 indicates a cover which is coupled to one end of the body 10 using hinge 15 so as to be opened and closed according to its rotating operation. A hook 21 is formed at the other end of the cover 20, and the body 10 is formed with a projection 11 engaged with the hook 10.

[0016] A reference numeral 30 indicates an opening button which release the hook 21 from the projection 11 so that the cover 10 is opened, and a reference numeral 40 indicates a puff case locating between the body 10 and cover 20, in which its one end is connected with the hinge 15, the other end is formed with a hole 31 through which the hook 21 could pass, an upper part thereof is formed with a space which could accommodate a puff 42 for putting on makeup, and an lower part is provided with a mirror 43 to see the makeup part.

[0017] In the present invention, a melody output circuit that generates the melody automatically in opening the cover 20 for a makeup is also included. As shown in FIG. 4, the melody output circuit includes a opening and closing detection switch 51 for the cover 20, a memory 52 for storing the melody to be generated in opening the cover 20, a speaker 53 for generating the melody stored in the memory 52, a processor 54 for calling out the melody in the memory 52 and controlling it to be generated by the speaker 53 as the switch 51 detecting the opening of the cover 20, and a mode setting switch 55 for determining the operation so as to suspend the melody output function temporarily if not required by the user.

[0018] The opening and closing detection switch 51 could use a mechanical switch which mounted at a coupling part of the body 10 and cover 20 so as to operate in the opening of the cover 20 and simultaneous opening of the puff case 40, as shown in FIG. 2, or a photo sensor which is mounted in the body 10 so that it outputs different signals according to the intensity of radiation detected in the opening of the cover 20.

[0019] Also, the mode setting switch 55 could be mounted to be exposed to the body 10 or cover 20, and preferably mounted to a side surface of the body 10.

[0020] Therefore, in the cosmetics case of the present invention mentioned above, when the cover 20 and puff case 40 is opened simultaneously, the opening and closing detection switch 51 detects this. And then, when the signal from the switch 51 is input into the processor 54, the processor 54 causes the melody stored in the memory 52 to be called out and generated by the speaker 53.

[0021] As the melody is generated through these processes, the user could listen to the favorite melody.

[0022] Consequently, in the cosmetics case having the melody output function according to the present invention, the melody is generated automatically in opening the case for a makeup, thereby attracting the interest of users.

[0023] Also, by using the photo sensor as the opening and closing detection switch for a cover, the structure of the cosmetics case is simplified, and by having the mode setting switch which determines the operation of the melody output system, the melody output function could be suspended temporarily if not required by the user.

[0024] It will be apparent to those skilled in the art that various modifications and variations can be made in the fin tube type evaporator in an air conditioner of the present invention without departing from the spirit or scope of the invention. Thus, it is intended that the present invention cover the modifications and variations of this invention provided they come within the scope of the appended claims and their equivalents.

Claims

1. A cosmetics case having a melody output function comprising:

a body having a container for storing contents such as cosmetics;
a cover coupled to one end of the body using hinge to be opened and closed;
a hook formed at the other end of the cover, and a projection formed in the body to be engaged with the hook;
an opening button for releasing the hook from the projection so that the cover could be opened;
a puff case locating between the body and cover, its one end being connected with the hinge, the other end being formed with a hole through which the hook could pass, an upper part thereof being formed with a space which could accommodate a puff for putting on makeup, and an lower part being provided with a mirror; and
a melody output circuit for generating the melody automatically in opening the cover for a makeup.

2. A cosmetics case according to claim 1, wherein the melody output circuit includes a opening and closing detection switch for the cover, a memory for storing the melody to be generated in opening the cover, a speaker for generating the melody stored in the memory, a processor for calling out the melody in the memory and controlling it to be generated by the speaker as the switch detecting the opening of the cover.

3. A cosmetics case according to claim 2, wherein the opening and closing detection switch is a mechanical switch which mounted at a coupling part of the body and cover so as to operate thereof in the opening of the cover and simultaneous opening of the puff case, or a photo sensor which is mounted in the body so that it outputs different signals according to the intensity of radiation detected in the opening of the cover.
4. A cosmetics case according to claim 2, further comprising a mode setting switch for determining the operation so as to suspend the melody output function temporarily, if not required by the user.

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FIG. 1

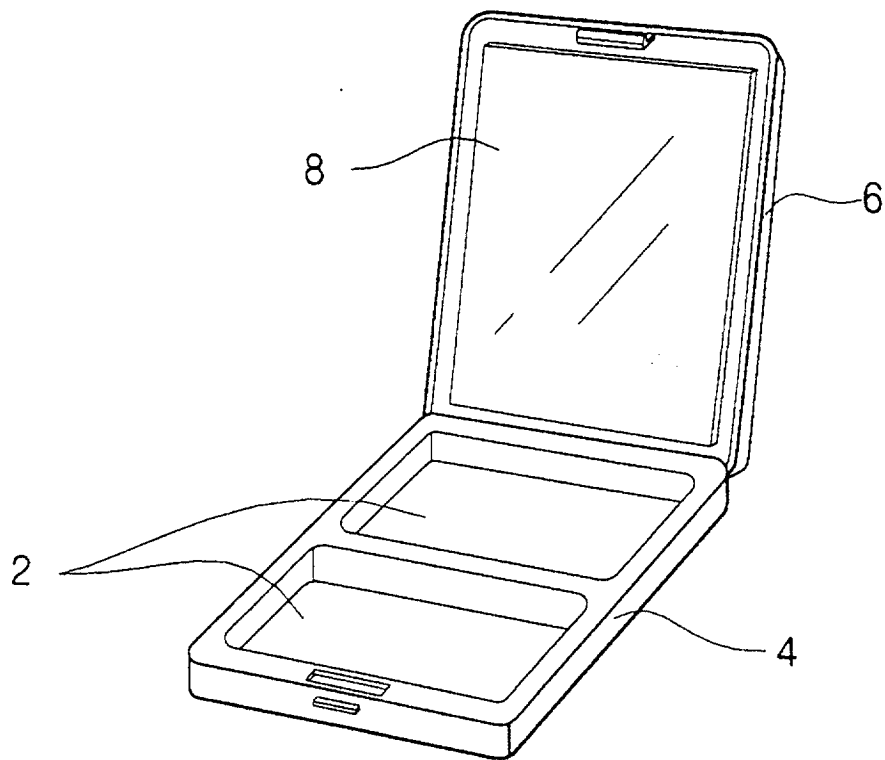


FIG. 2

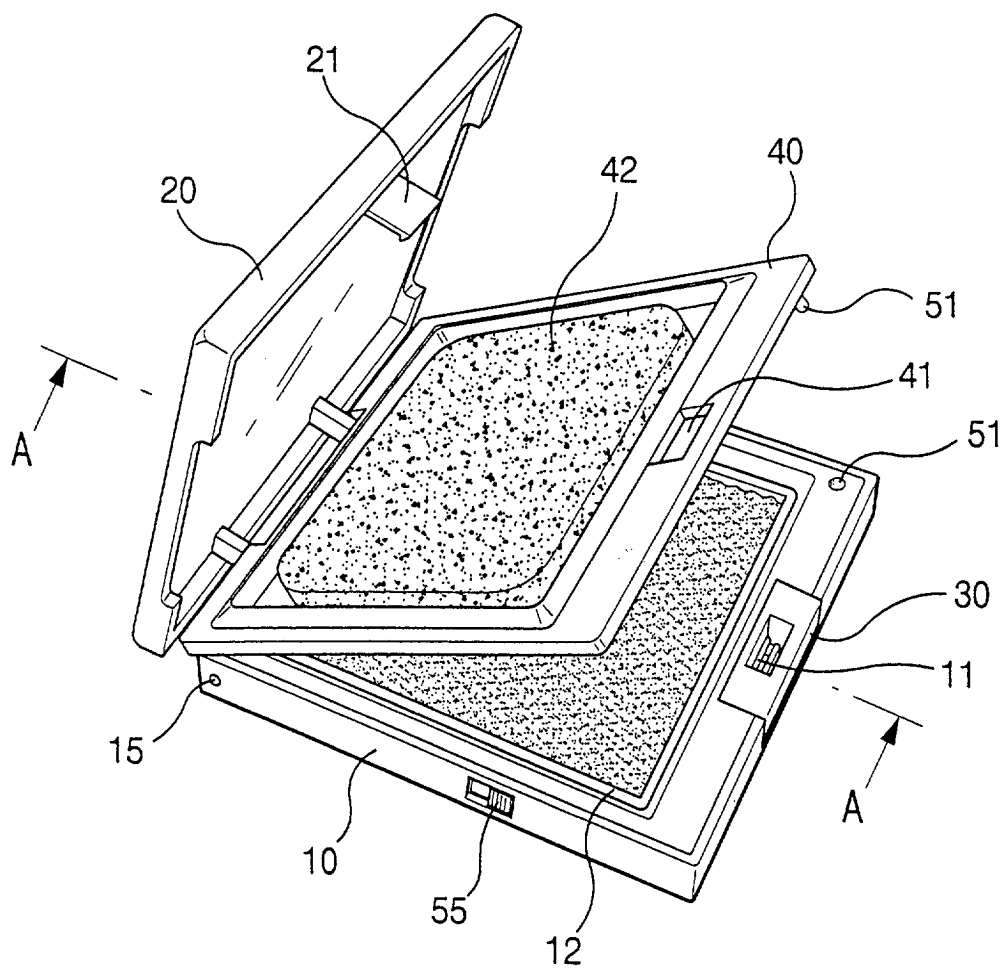


FIG. 3

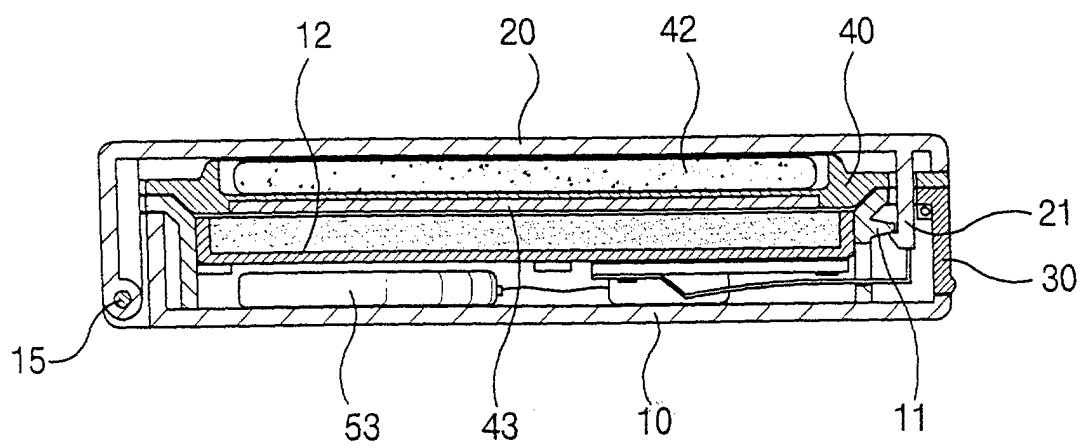


FIG. 4

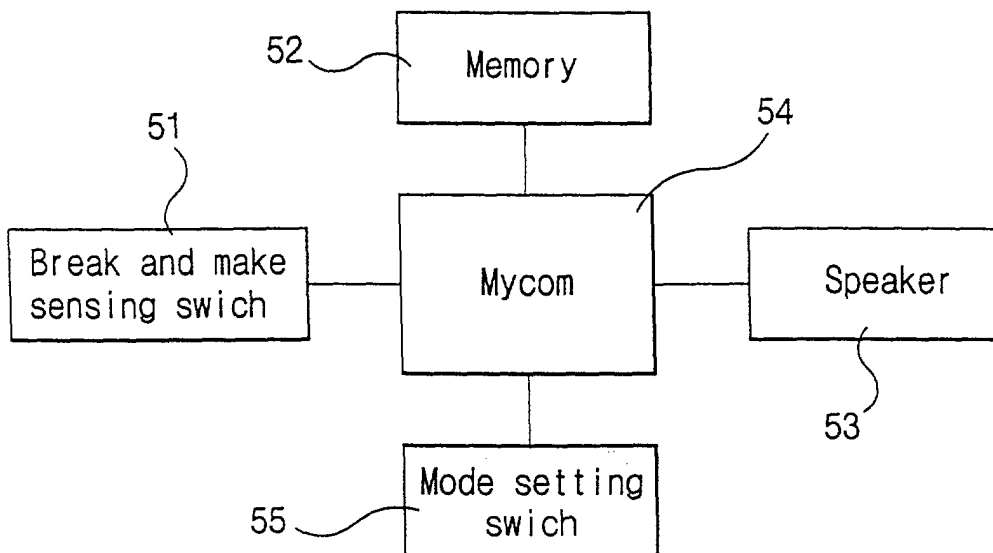
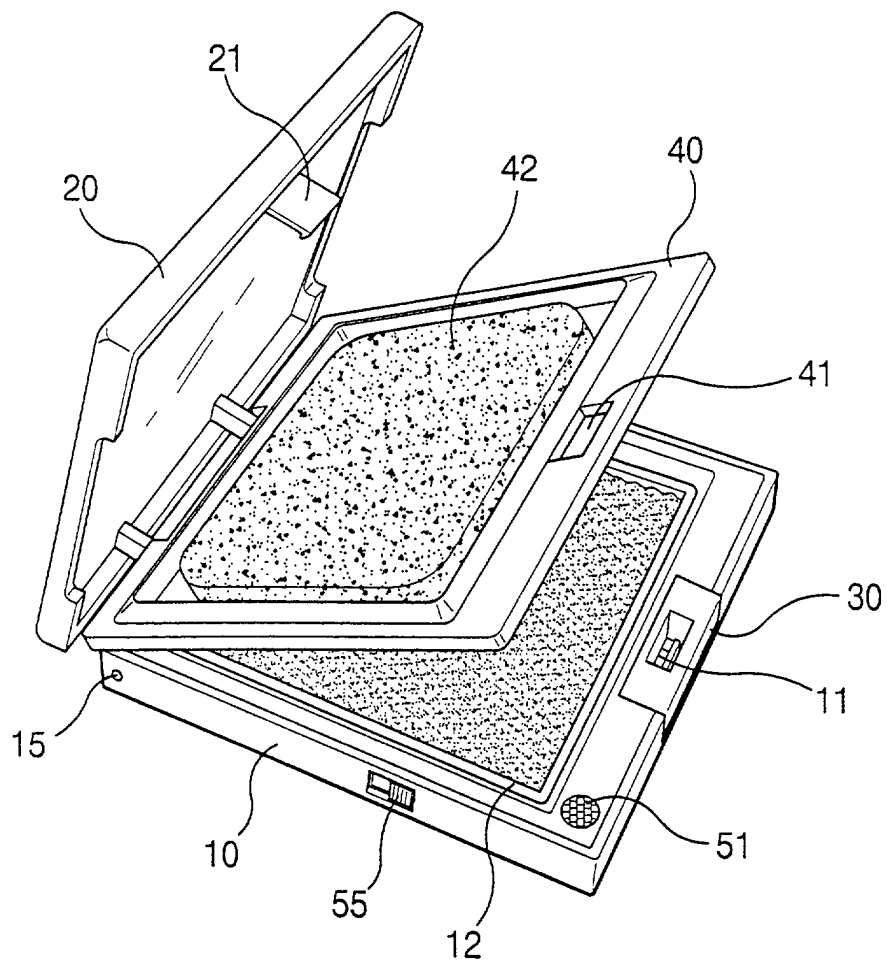


FIG. 5





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EUROPEAN SEARCH REPORT

Application Number
EP 01 10 9708

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A	US 4 696 317 A (SHIOI YUJI ET AL) 29 September 1987 (1987-09-29) * figure 4 *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 8 November 2001	Examiner Lehe, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 03 B2 (P04001)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 01 10 9708

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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