

14 APR 2000

**TITLE: STRUCTURE OF A SHADE FOR A CANDLE****BACKGROUND OF THE INVENTION****a) Technical Field of the Invention**

The present invention relates to a structure of a shade for a candle, and in particular, a shade body and a covering plate, both provided with a plurality of auxiliary openings and a plurality of through holes respectively. The covering plate can be rotated with respect to the shade body until the openings and the holes are aligned so that state of burning candle within the container body can be regulated.

**10 b) Description of the Prior Art**

Figs. 5 shows a conventional candle shade having a container body 30 with an open end having a stepped ring 31 to accommodate a shade body 40. This structure prevents the blowing of strong wind which will extinguish the burning candle within the container body.

15 This conventional structure allows the burning candle to burn in a very stable manner and the hot air of the burning candle is kept within the container body 30. This structure is effective in lighting the wick of the candle during winter. However, in such conventional design, a center opening 32 is provided to the shade body 40 so that the flame of the candle can reach outside  
20 the container body, and a plurality of apertures 33 are provided along the

circumferential edge of the shade body 40. As shown in Fig. 6, hot air rises and the hot air is dispersed out via the center opening 32. In this case, the speed of dispersion of hot air is slow. In summer, due to the hot air which is accumulated at the top portion of the container body 30, the top part of the  
5 candle will be melted and at this instance, the wick 34 of the candle will become longer and the flame of the burning becomes larger. As shown in Fig. 7, the flame will move in accordance with the convection of air. As a result, the flame may be blown so close to the container body 30 which will damage the wall of the container body 30. In addition, the melted wax may  
10 flow out of the container body 30, which further causes a danger to the user.

## SUMMARY OF THE INVENTION

To save the aforementioned problems, it is an object of the present invention to provide a structure of a shade for a candle, wherein the through holes provided on the covering plate can be adjusted to correspond with the  
5 auxiliary openings of the shade body so as to provide an optimum size of the opening for air passage, which in turn, provide convection air for the burning candle, thereby the effectiveness of candle burning is obtained.

Yet another object of the present invention is to provide a structure of a shade for a candle, wherein a plurality of protruded decorative discs are  
10 provided along the edge of the covering plate, adjacent to the through holes, thereby an aesthetic appearance for a candle shade is thus obtained.

Yet another object of the invention is to provide a structure of shade for a candle which is comparatively compact and light in weight.

Other objects, features and advantages of the invention will be apparent  
15 from the following description when read with reference to the accompanying drawings.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

Fig. 1 is a perspective exploded view of a structure of a shade for a candle in accordance with the present invention.

Fig. 2 schematically shows a structure of a shade for a candle in accordance with the present invention.

Fig. 3 schematically shows the convection of air of a burning candle in accordance with the present invention.

Fig. 4 is a schematically view showing the rotatably adjustment of the covering plate of the shade in accordance with the present invention.

Fig. 5 is a perspective exploded view of a conventional shade for a candle.

Fig. 6 is a schematic view showing the convection of air of a conventional shade for a candle.

Fig. 7 schematically shows the candle within the conventional shade where the flame of the candle is excessively large.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Figs. 1 to 3 show a structure of a shade for a candle in accordance with the present invention. The shade structure comprises a container body 10 having an open end, a shade body 20, and a covering plate 21. The open end of the container body 10, along the circumferential edge thereof is provided with a recessed stepped ring 11, which is adaptable to the circumferential edge of the shade body 20, which is detachably mounted onto the top of the open end. In accordance with the present invention, the covering plate 21 is rotatably and detachably mounted onto the shade body 20. The shade body 20 has a curved region at the center thereof, containing a plurality of auxiliary openings 24 and a center air hole 22 is provided to the center of the shade body 20. A plurality of apertures 23 are provided along the top circumferential edge of the shade body 20 to allow convection flow of air into the container body 10. In accordance with the present invention, the shape of the auxiliary openings 24 can be circular, oval, rectangular, square or rhombic shape. The top of the covering plate 21 is provided with a plurality of through holes 251, which can be rotatably adjusted to corresponding to the auxiliary openings 24 of the shade body 20 by rotating the covering plate 21 with respect to the shade body 20. A plurality of protruded decorative discs 25 are provided on the covering plate 21, adjacent to the through holes 251 of

the covering plate 21. The decorative discs 25 provide the entire shade structure with an aesthetic appearance. In order to stably mount the shade body 20 onto the stepped ring 11, a plurality of protrusions 26 are provided to the bottom circumferential edge of the shade body 20.

5 In order to moveably rotate the covering plate 21 with respect to the shade body 20, the user can push the decorative discs 25 until the through holes 251 and the auxiliary openings 24 overlap or correspond with each other. Based on burning requirements, the size of the openings 24 is adjusted by adjusting/rotating the covering plate 21.

10 As shown in Fig. 4, when the room temperature is high, the heat within the container body 10 may not be easily dispersed to the outside. For this instance, the covering plate 21 is appropriately moved with respect to the shade body 20 such that the protruded decorative discs 25 (or the through holes 251) are corresponding to the auxiliary openings 24 of the shade body  
15 20, forming a through opening. This will allow hot air within the container body 10 to disperse through the air holes 22 and the auxiliary openings 24. Thus, the temperature within the container body 10 is effectively regulated, and this assures that the temperature at the top part of the container body 10 is not high enough to melt the candle. During winter, the protruded discs 25 are  
20 moved to a position in between two auxiliary openings 24 so that the container

body 10 has a comparatively larger sealed space to retain the heat.

In accordance with the present invention, a recessed circular slot 27 is provided at the lower section of the curved surface of the shade body 20, such that the lower circumferential edge of the covering plate 21 can be rotatably  
5 and detachably mounted.

While the preferred embodiment of a shade for a candle is illustrated, this embodiment is presented by way of example only and not in a limiting sense. The invention in brief comprises all the embodiments and modifications coming within the scope and spirit of the following claims.

**I CLAIM:**

1. The structure of a shade for a candle comprising a container body having an open end, a shade body detachably mounted to the open end of the container body, and a covering plate detachably and rotatably mounted on top of the shade body, characterized in that the shade body is slightly curved at the center region thereof, and the top edge of the shade body is provided with a plurality of apertures, and the curved region of the shade body is provided with a plurality of auxiliary openings, and the center of the shade body is provided with a center air hole, the covering plate is provided with a center hole corresponding to the center air hole of the shade body, and the top edge of the covering plate is provided with a plurality of through holes, a plurality of protruded decorative discs are provided adjacent to the through holes, the covering plate is rotatably mounted onto the shade body, thereby, rotatably adjusting of the covering plate controls the convection of air within the container body.
2. The structure of a shade for a candle as set forth in Claim 1, wherein the lower edge of the curved region of the shade body is provided with a circular slot for the rotatably mounting with the bottom edge of the covering plate, facilitating rotating of the covering plate with respect to



the shade body.

3. The structure of a shade for a candle as set forth in Claim 1, wherein the bottom circumferential edge of the shade body are provided with a plurality of protrusions for mounting of the shade body on the edge of the open end of the container body.