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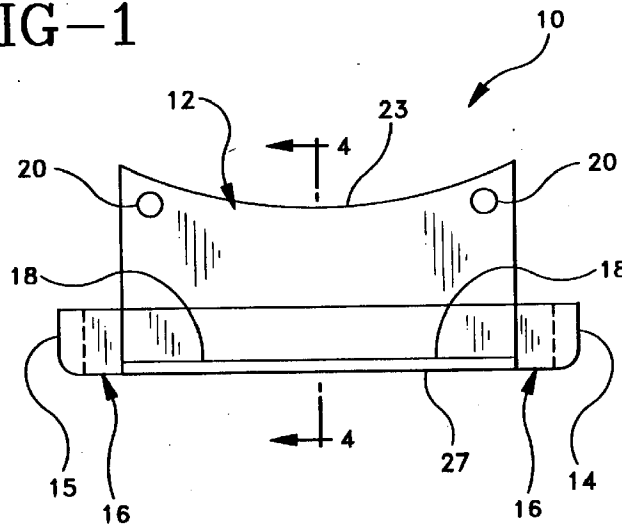
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(54) **Protective cover for a razor head**

(57) A protective cover (16) for a razor head (22) comprising a plurality of releasably engaging components for securely fastening the protective cover (16) to opposing portions (25,26) of a razor. At least two of the engaging components are symmetrically disposed

about a portion of the protective cover enabling the cover to be selectively engaged with the razor (28) in an upright or upside down fashion.

FIG-1



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Description

The present invention relates to a protective cover for the razor head, and more particularly, to a protective cover for a razor head comprising a plurality of means for releasably engaging opposing portions of a razor wherein at least two of the engaging means are symmetrically disposed about a portion of the cover so that the cover can alternatively engage the razor in an upright or upside down fashion without compromising the integrity of the engagement.

Background

One of the inherent difficulties of developing a high quality razor product, whether disposable (i.e., razor head integrated with razor) or reusable (i.e., razor head separable from razor), is protecting the razor blade from incidental damage or mutilation during normal everyday handling. Thus, in order to protect the razor heads, it has been known to utilize protective covers.

However, it has become evident that there are several notable disadvantages when selling razors in this fashion. For example, once a disposable razor has been separated from its plastic cover, it may be difficult to reuse the cover since the thin plastic can become malformed, crushed, lost or unintentionally discarded. In addition, the thin cover can become clogged with razor debris, (soap, hair and excess lubricant) and the consumer is then more likely to discard the unsightly cover thus leaving the blades unprotected. Similarly, once a razor cartridge is dislodged from the dispenser, the blades are left unprotected and can easily become damaged.

In many razor systems which provide a protective cover, the protective cover is fitted on the razor blade cartridge leaving vital parts of the razor, such as the razor blade engaging mechanism and the swivel mechanism, exposed and unprotected. If the razor is mishandled, e.g., dropped or heavily compressed in a travel bag, the razor can be damaged.

In other known protective covers, the cover must be oriented in an upright fashion in order to properly engage the cover with the razor and permit the blades to dry between uses. Moreover, since such protective covers are not mechanically engagable with the razor tray or stand, consumers are apt to accidentally discard or misplace the cover.

Some protective covers are fitted on the razor providing better protection for the razor blade, engaging mechanism and swivel mechanism. Nevertheless, such covers can be easily lost or a consumer may think that it is a throw away item (comes from disposables). Consumers may regard the handling of a protective cover on a daily or weekly basis as inconvenient and not necessary. As a result, the protective cover may not be used, may be discarded or easily misplaced and, when traveling, the blades would be left unprotected in a travel

bag with all the negative impacts to the quality of the blade and razor mechanism, e.g., damage to the inside of the travel bag and injuries to the hands and fingers during traveling.

It would therefore be desirable to provide a protective cover for a disposable or reusable razor, which can overcome the aforesaid difficulties and other disadvantages known in the art.

SUMMARY OF THE INVENTION

The present invention overcomes disadvantages by providing a protective cover for permanent use which is attachable to the razor and can also be stored in a razor stand during periods of nonuse. The present invention provides for a complete razor protective cover which is selectively engagable with the razor to provide protection for the blades, the blade engagement mechanism and the other vital components of the razor and/or which is selectively engagable with a razor stand during periods of nonuse.

Various embodiments of the present invention provide a protective cover for a razor head having a plurality of portions for releasably engaging opposing portions of the razor. At least two of the engaging portions are preferably symmetrically disposed about a portion of the protective cover allowing the cover to selectively engage the razor in opposite or alternative orientations.

The present invention is designed to provide a protective cover which ably protects a razor head and razor blades located therein from damage during ordinary handling and shipping as well as subsequent daily use by the consumer. The protective covers described herein can be used for both reusable and disposable razors.

Embodiments of the present invention advantageously comprise symmetrical engaging means on the top and bottom portions of the protective cover so that the top and/or the bottom portion can selectively engage the razor without compromising the cover's effectiveness and without the consumer having to properly align the top and bottom portions of the cover to the top and bottom portions of the razor.

Preferred embodiments of the present invention provide adequate ventilation and/or drainage for the razor when the protective cover is engaged with the razor whether upright or upside down. Preferred embodiments are also engagable with a razor tray or stand when the cover is either attached to the razor or when the cover is separate.

These and other aspects of the present invention are described in greater detail below.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings, wherein similar reference characters denote similar elements throughout the several

views:

FIG. 1 is a top plan view of one embodiment of the protective cover;

FIG. 2 is a front view of the protective cover, shown in FIG. 1;

FIG. 3 is a side view of the protective cover, shown in FIG. 1;

FIG. 4 is a section view of the protective cover shown in FIG. 1 taken along lines 4-4;

FIG. 5A. is a top view of the protective cover shown engaged with a razor;

FIG. 5B. is a side view of the protective cover of FIG. 5A shown engaged with a razor;

FIG. 6A is a side sectional view of one embodiment of the present invention engaged with a razor stand;

FIG. 6B is a partial front view of the protective cover shown engaged with a razor stand;

FIG. 7A is a side sectional view of a protective cover engaged with a razor tray; and

FIG. 7B is a partial top view of a protective cover shown engaged with a razor tray.

DETAILED DESCRIPTION

In accordance with one embodiment the present invention, a protective cover for a razor head, releasably engages opposing portions of a razor. Advantageously, at least two of the engaging portions of the cover are symmetrically disposed about another portion of the cover. Preferably, the protective cover comprises a plurality of engaging portions which are symmetrical to facilitate diametric or upside down engagement of the protective cover with the corresponding engaging portions of the razor.

As used herein, the term "razor head" is intended to include shaving cartridges designed for attachment to a separate razor, as well as the operative skin-engaging portion of a shaving system wherein a handle is integrally formed with the blade support structure.

In one particular embodiment, the protective cover comprises a top portion and a bottom portion and the engaging means are coupled to one or both of these portions enabling the protective cover to be selectively engaged with the razor in an upright (top portion to top of razor) or upside down (bottom portion to top of razor) fashion.

In a preferred embodiment of the present invention, the protective cover engages the razor in a mechanical

or snap-fit manner which promotes simple engagement of the cover with the razor. In another preferred embodiment, the protective cover comprises at least one aperture located therein for aerating the razor head and facilitates drying between uses. Advantageously, the protective cover has a plurality of such apertures located on both the top and bottom of the cover so that the razor head can drain when the cover is in either the upright or upside down orientation.

In one particular embodiment, the engaging portions of the protective cover are also adapted to engage a razor holder providing secure storage for the razor and cover in combination, or, alternatively, for the cover alone when not engaged with the razor. As used herein, the term "Razor Holder" or "Holder" is used to include a razor tray, another support, or another device which may commonly be used during or about the time of shaving.

One embodiment of the present invention is illustrated in FIG. 1 and comprises a cover 10, preferably made from a hard plastic or other semi-resilient material comprising top and bottom portions 12 and 13 respectively, a frontal shield 16 and a pair of opposing side portions 14 and 15 which together define cavity 30 (See FIG. 3 and 4). As shown in FIGS. 1 and 5B, top and bottom portions 12 and 13 extend beyond side portions 14 and 15 so that top edge 23 and bottom edge 19 substantially align with razor top 26 and razor bottom 25. In another embodiment, it may be desirable to have side portions 14 and 15 extend beyond top and bottom portions 12 and 13 in a similar manner.

The illustrated cover 10 also advantageously comprises a plurality of engaging members which releasably engage razor top portion 26 and razor bottom portion 25 of razor 28. As shown in FIGS. 1-4, engaging means can include a plurality of detents 20 coupled to both top portion 12 and bottom portion 13 of cover 10 which can cooperate with a corresponding plurality of recesses (Not shown) located in razor top portion 26 and razor bottom portion 25, respectively. In this particular embodiment, as seen most clearly in FIG. 2, engaging means (detents 20) are symmetrically aligned along top and bottom portions 12 and 13 to allow cover 10 to be selectively oriented in either an upright position, i.e., edge 23 of top protective portion 12 substantially aligned with razor top 26, or, alternatively, an upside down position, i.e., edge 19 of bottom protective portion 13 substantially aligned with razor top 26. As can be appreciated, allowing cover 10 to be attached to razor 28 in two different orientations fosters a more ergonomic feel to the razor 28 and cover 10 combination by reducing the amount of fumbling by a consumer to engaging the cover.

Also shown most clearly in FIG. 2, shield 16 comprises at least one aperture 18 located therein which permits razor head 22 (see FIG. 5B) to aerate and dissipate unwanted moisture after use. In the embodiment shown in FIGS. 1-7, two apertures 18 extend adjacent

to the top and bottom edges of shield 16, but in some cases it may be desirable to have a series of apertures located proximate shield 16 to minimize unnecessary exposure of the razor blades and prevent unwanted debris from entering cover 10.

FIGS. 3 is a side view of cover 10 showing shield 16, top portion 12, bottom portion 13 and side portion 15. FIG. 4 is a sectional view of FIG. 1 along lines 4-4 illustrating apertures 18 substantially located along shield 16. Top portion 12 and bottom portion 13 extend from the top edge 27 and bottom edge 29 of shield 16 and side portions 14 and 15 extend from opposite side edges of the same to define cavity 30 which is of sufficient volume to receive at least a portion of razor head 22.

In the particular embodiment shown in FIGS 3 and 4, rearwall 17 of shield 16 comprises recess 31 located therein for securing razor head 22 (not shown) in place to prevent unnecessary damage of the razor head 22 during handling. Preferably, recess 31 is symmetrical so as to receive the razor head 22 when cover is engaged in either an upright or upside down orientation. FIGS. 3 and 4 also show a pair of symmetrically aligned detents 20 designed to releasably engage respective portions of razor 28 and secure cover 10 to the same.

FIGS. 5A and 5B show cover 10 releasably engaged with razor 28. In both figures, edge 23 of top portion 12 is substantially aligned with razor top 26 and edge 19 of bottom portion 13 is substantially aligned with razor bottom 25. As illustrated in this embodiment, in particular FIG. 5A, cover 10 is designed so that razor head engaging mechanism 24 is free to operate without interference from cover 10 and, more importantly, cover 10 can engage and disengage razor 28 without interference from mechanism 24 regardless of whether razor head 22 is attached. FIG. 5B illustrates razor head 22 positioned in a secure manner against rearwall 17 of faceplate 16 permitting only minimal movement of razor head 22 and preventing damage to the same.

Another embodiment of the present invention is shown in FIGS. 6A and 6B, wherein razor stand 136 supports cover 10 releasably engaged about shelves 138 and 140. FIG. 6B. is a frontal view of FIG. 6A. In both figures, top portion 12 and bottom portion 13 of cover 10 mutually cooperate in a spring-like or clamping manner to engage upper shelf 138 and lower shelf 140 of stand 136. As can be appreciated, cover 10 can also be oriented in upright or upside down fashion about shelves 138 and 140 without compromising the integrity of the attachment.

Similarly, FIGS. 7A. and 7B illustrate cover 10 engaged with razor tray 245 in much the same manner as stand 136. In particular, top portion 12 and bottom portion 13 of cover 10 mutually cooperate in a spring-like manner to engage tray 245 about upper shelf 238 and lower shelf 240.

From the present description, those skilled in the art will appreciate that various other modifications may be

made without departing from the scope of the present invention. For example, while protective cover 10 is preferably made from a resilient plastic material, it may be desirable to construct cover 10, or a portion thereof, from a different material such as aluminum or other metal.

Most desirably, cover 10 has engaging means 20 coupled to top portion 12 and bottom portion 13, yet it may be preferable to couple engaging means 20 to side portions 14 and 15.

Preferably, engaging means are located symmetrically on at least two of the portions 12, 13, 14, or 15 allowing reverse engagement of the same, yet in some cases it may not be necessary to have engaging means 20 be symmetric in order to accomplish this advantage of the present invention. For example, the engaging means may be constructed in such a fashion so that they releasably engage the razor in either orientation but not necessarily in the same manner.

In other embodiments of the present invention shown in combination with tray 245 or stand 136, it may be desirable for cover 10 to engage stand 136 or tray 245 in the same manner as razor 28, or; alternatively, provide a second means for engaging stand 136 or tray 245 apart from engaging members 20. In yet another embodiment, it may be desirable to store cover 10 inside a compartment located in stand 136 or tray 245 with or without securely attaching it to the same.

Advantageously, cover 10 and engaging members 20 can be manufactured so they are both symmetrical about a central line of symmetry drawn from the midpoint of the edge adjoining faceplate 16 and side portion 14 and the midpoint of the opposite edge adjoining faceplate 16 and side portion 15 thus making cover 10 easier to manufacture and easier for the consumer to use.

Preferably, the cover releasably engages the razor holder (130, 245) in some mechanical fashion as shown in FIGS. 6A, 6B, 7A and 7B, however, in some cases it may be desirable to engage cover 10 either by snap-fit, spring loading or other means known in the industry. In another case, it may be desirable to store the protective cover 10 in a compartment located within the razor holder (135, 245) when the cover 10 is not being used or when traveling.

Claims

1. A protective cover for a shaving system comprising a razor and razor head comprising means for selectively engaging a razor and a razor stand for said razor.
2. A protective cover according to claim 1 wherein said engaging means comprises a first engaging portion which engages said razor and a second engaging portion which engages said razor stand.
3. A protective cover for a shaving system comprising

a razor and a razor head, comprising:

means for releasably engaging opposing portions of said razor; and

a protective portion for protecting a portion of said razor head, wherein said engaging means are symmetrical and whereby said cover can selectively engage said razor in an upright top-to-bottom or upside-down bottom-to-top fashion.

4. A protective cover according to claim 3 wherein said protective cover comprises a plurality of protective portions and at least two of said portions are symmetrically disposed about a portion of said cover. 15
5. A protective cover according to claim 4 wherein said engaging means is integrally formed with said protective portions. 20
6. A protective cover according to claim 3 wherein said engaging means is mechanically releasable from said razor. 25
7. A protective cover according to claim 3 wherein said engaging means comprises a snap-fit mechanism. 30
8. A protective cover according to claim 3 wherein said protective cover comprises at least one aperture. 35
9. A protective cover according to claim 3 wherein said protective cover comprises a plurality of apertures. 40
10. A protective cover according to claim 3 further comprising a plurality of protective portions which each comprise at least one aperture. 45
11. A protective cover according to claim 3 wherein each of said protective portions comprises a plurality of apertures. 50
12. A protective cover according to claim 3 in combination with a razor holder wherein said holder comprises means for releasably engaging said protective cover. 55
13. A protective cover according to claim 12 wherein said engaging means is mechanically releasable from said holder.
14. A protective cover according to claim 12 wherein said engaging means comprises a snap-fit mechanism.
15. A protective cover according to claim 10 wherein said engaging means comprises a spring loaded mechanism.
16. A protective cover according to claim 3 in combination with a razor holder comprising a compartment for storing said protective cover.
17. A protective cover for a razor head in combination with a razor holder, comprising means for releasably engaging said protective cover with said razor holder.
18. A protective cover according to claim 17 wherein said engaging means is mechanically releasable.
19. A protective cover according to claim 17 wherein said protective cover when coupled with a razor is releasably engagable with said razor holder.
20. A protective cover according to claim 19 wherein said engaging means is mechanically releasable from said protective cover.
21. A protective cover according to claim 17 wherein said engaging means comprises a snap-fit mechanism.
22. A protective cover according to claim 18 wherein said engaging means comprises a snap-fit mechanism.
23. A cover for protecting a razor head on a razor, comprising:
 - a top portion and a bottom portion;
 - said top and said bottom portions connected to a protective portion for shielding at least a portion of a razor head; and
 - means for releasably connecting said top portion and said bottom portion to a razor wherein said connecting means are symmetrical about a portion of said razor whereby both of said top portion or said bottom portion are releasably connectable to a single portion of a razor.
24. A cover according to claim 23 wherein said top portion and said bottom portion are symmetrical and said cover can selectively engage said razor in an upright top-to-bottom or upside-down bottom-to-top fashion.
25. A cover according to claim 23 wherein said protective portion comprises two side portions and defines a protective cavity and wherein said engaging means is connected with said side portions.

26. A cover according to claim 25 wherein said side portions are symmetrical. a plurality of apertures.
27. A cover according to claim 23 wherein one of said top or said bottom portions further comprises a second means for releasably engaging a razor holder. 5
28. A cover according to claim 23 wherein said protective portions comprises at least one aperture. 10
29. A cover according to claim 23 wherein one of said protective portions comprises a plurality of apertures.
30. A protective cover for a razor head, comprising: 15
- a top portion, a bottom portion and side portions;
- said top, bottom and side portions defining a protective cavity for receiving at least a portion of a razor head; and 20
- means for releasably engaging at least two of said protective portions with a razor, whereby said protective cover can selectively engage said razor in an upright top-to-bottom or upside-down bottom-to-top fashion. 25
31. A protective cover according to claim 30 wherein said top protective portion and said bottom protective portion are symmetrical. 30
32. A protective cover according to claim 30 wherein said engaging means is coupled with said side portions. 35
33. A protective cover according to claim 32 wherein said side portions are symmetrical. 40
34. A protective cover according to claim 30 wherein one of said portions further comprises a second means for releasably engaging a razor holder.
35. A protective cover according to claim 30 wherein one of said top or said bottom portions comprises at least one aperture. 45
36. A protective cover according to claim 30 wherein both of said top and said bottom portions comprises at least one aperture. 50
37. A protective cover according to claim 30 wherein one of said top or said bottom portions comprises a plurality of apertures. 55
38. A protective cover according to claim 30 wherein both of said top and said bottom portions comprises

FIG-1

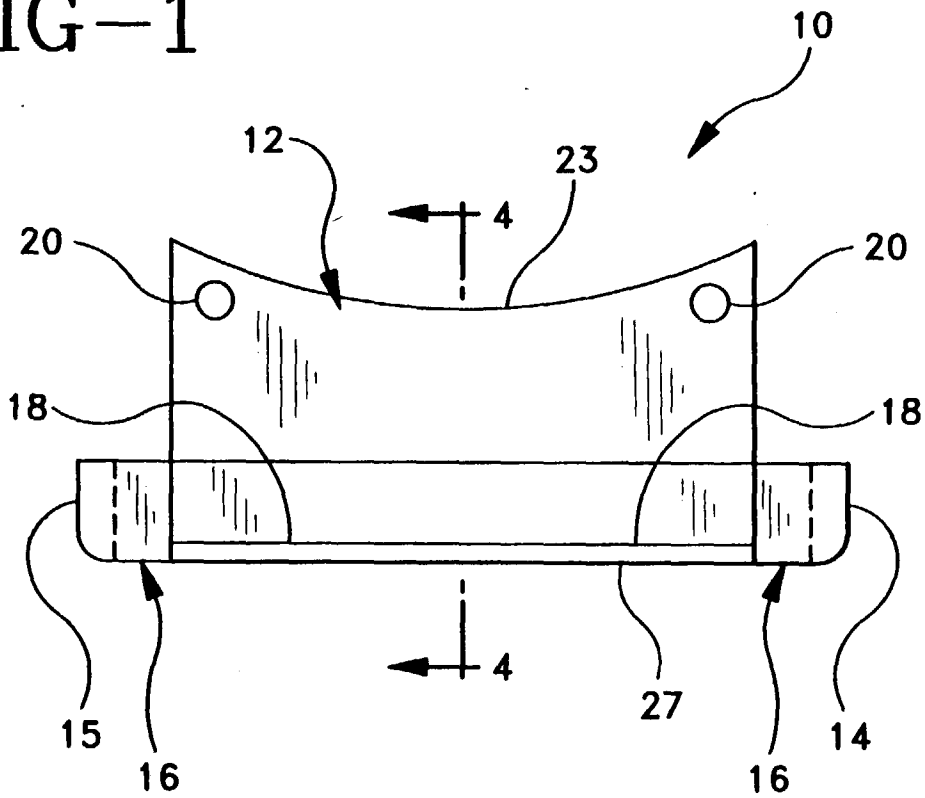


FIG-2

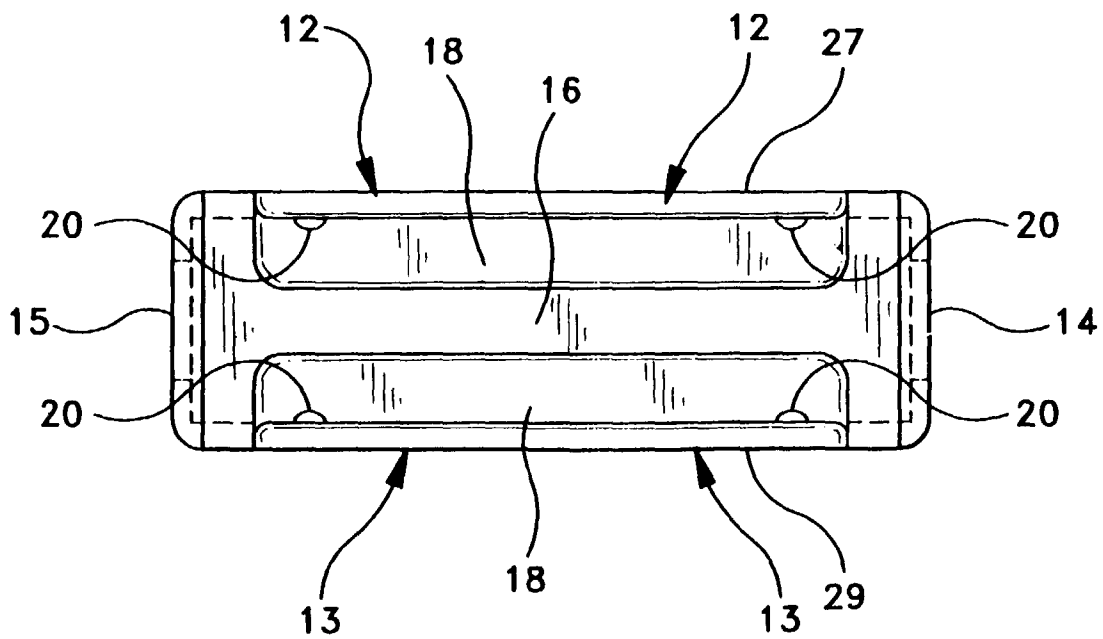


FIG-3

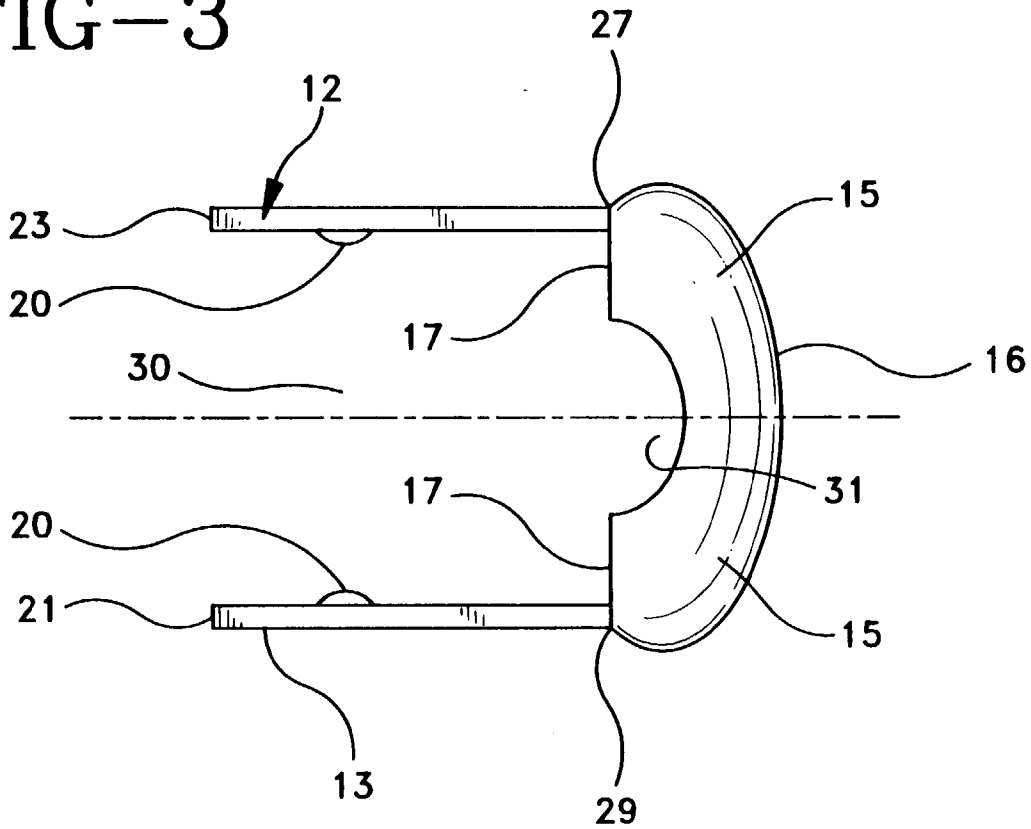
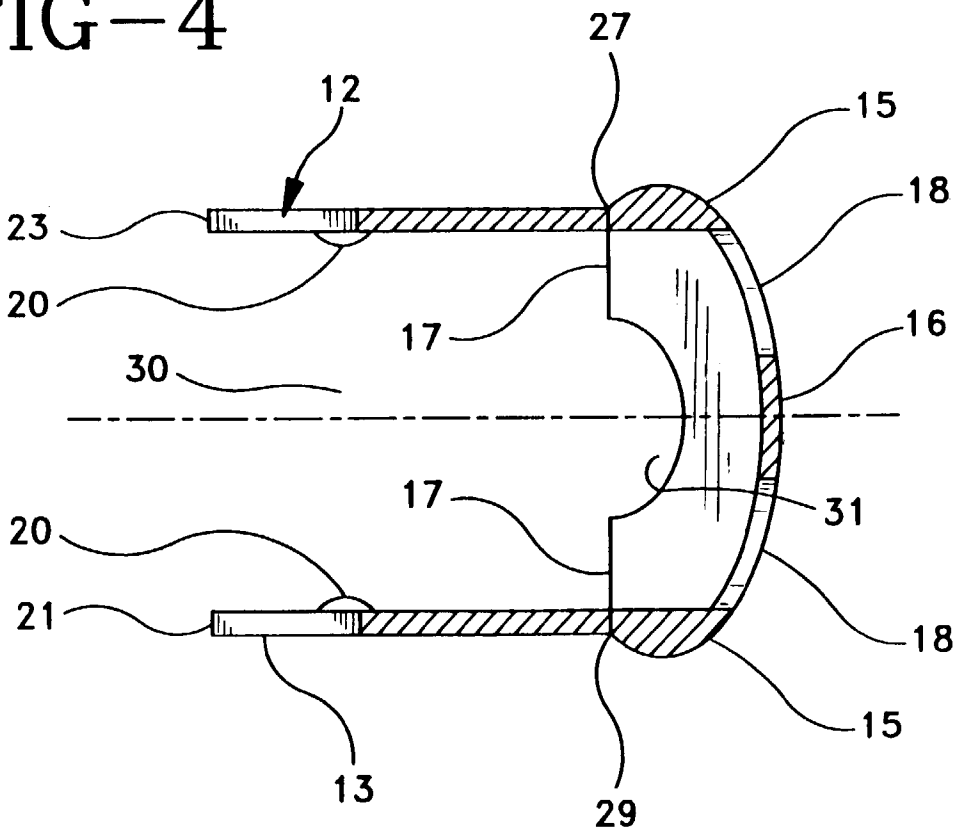


FIG-4



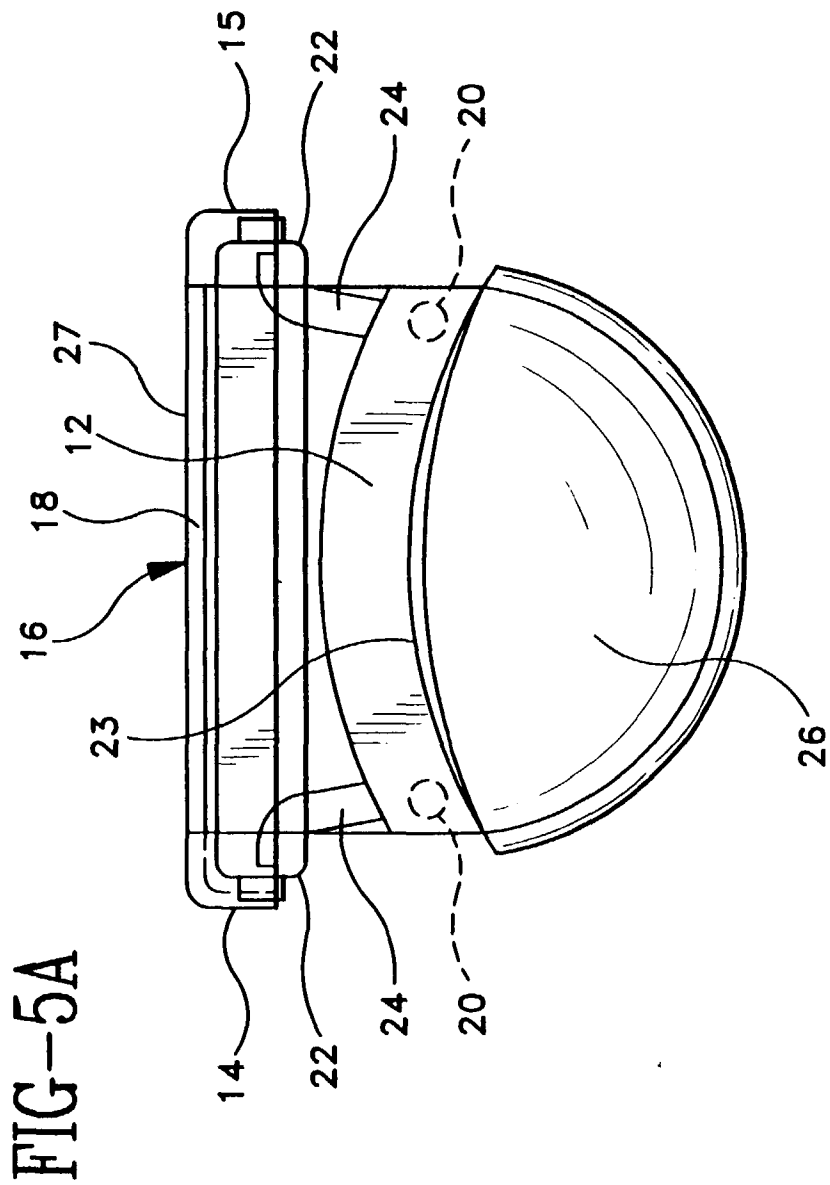


FIG--5B

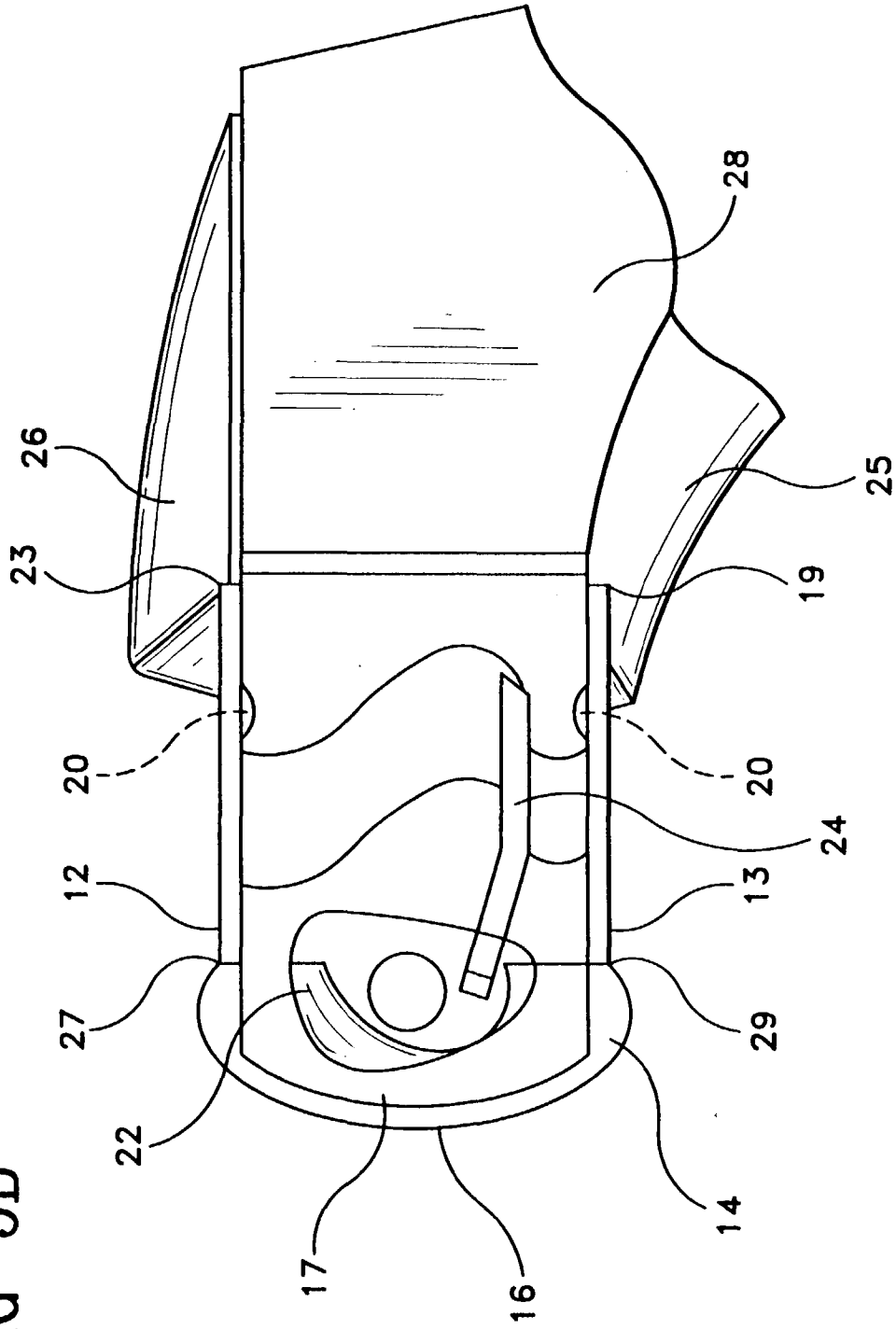


FIG-6A

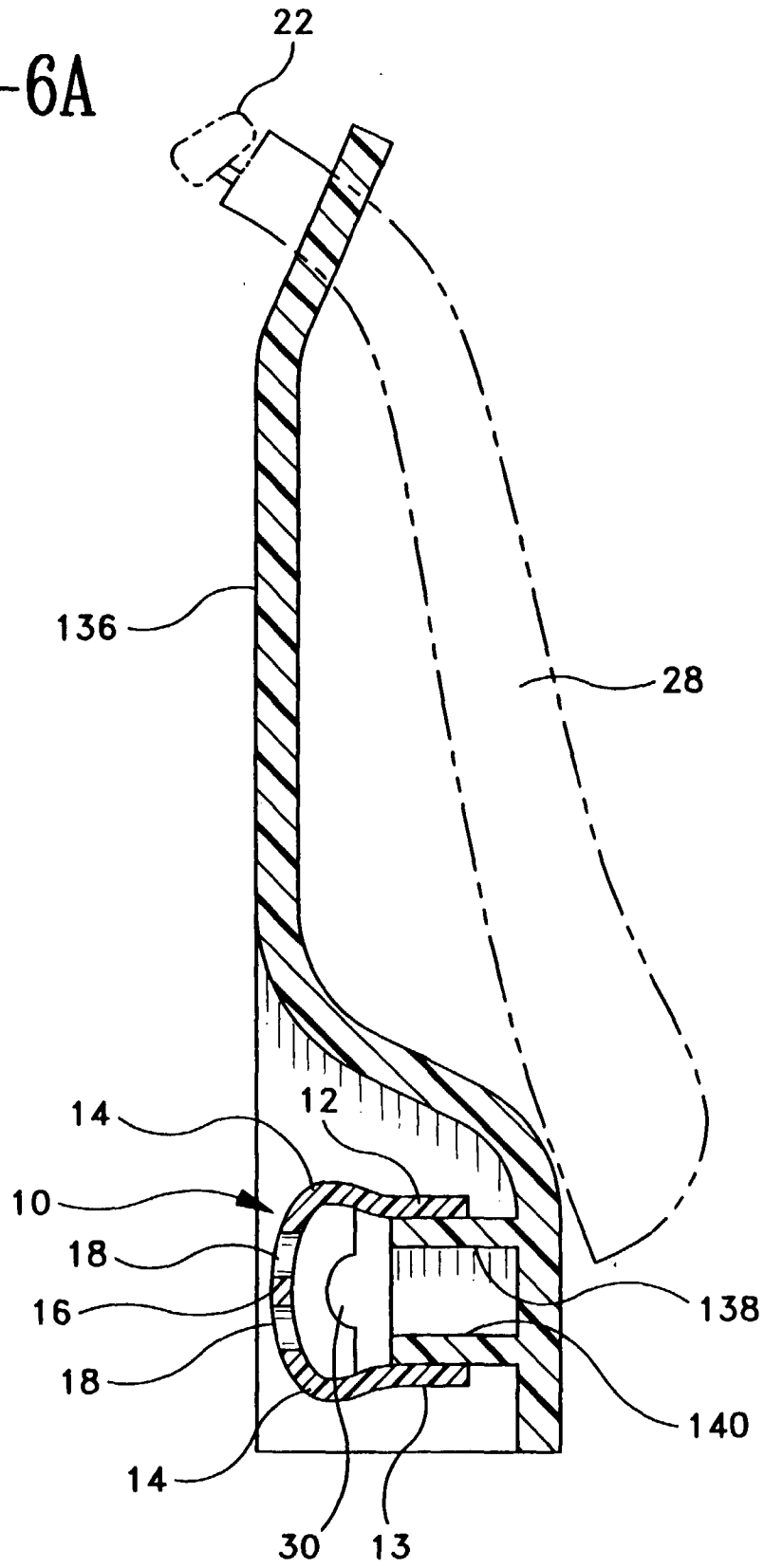


FIG-6B

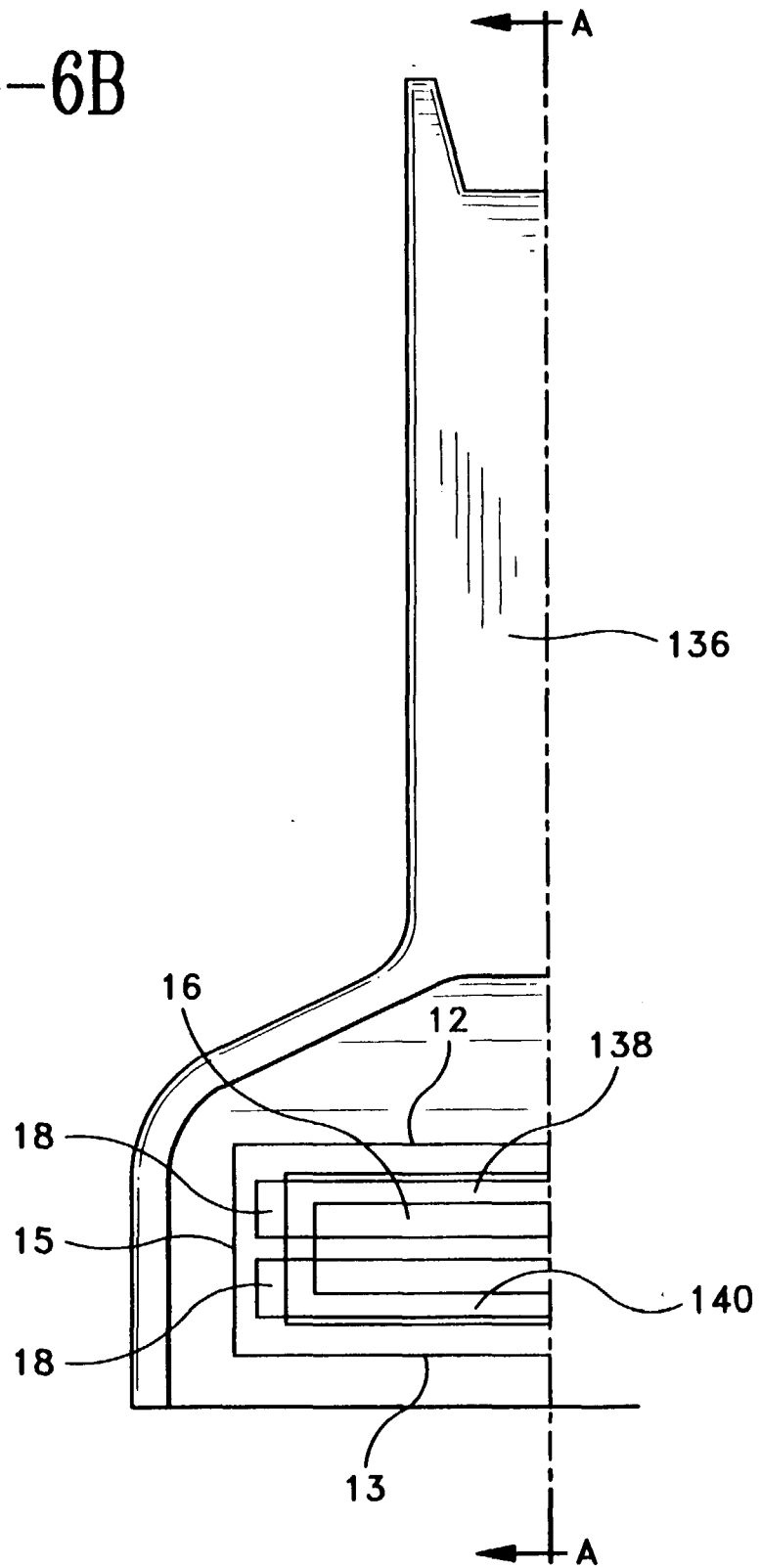


FIG--7A

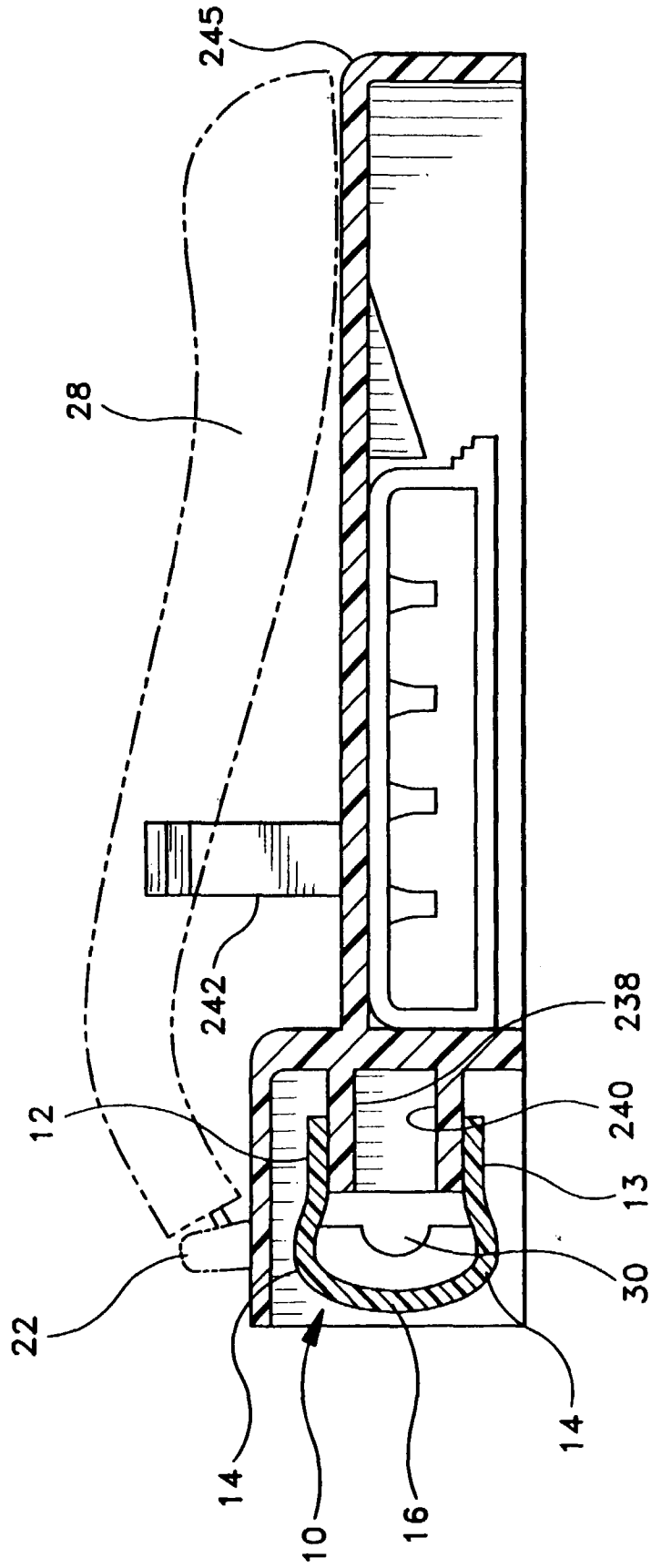
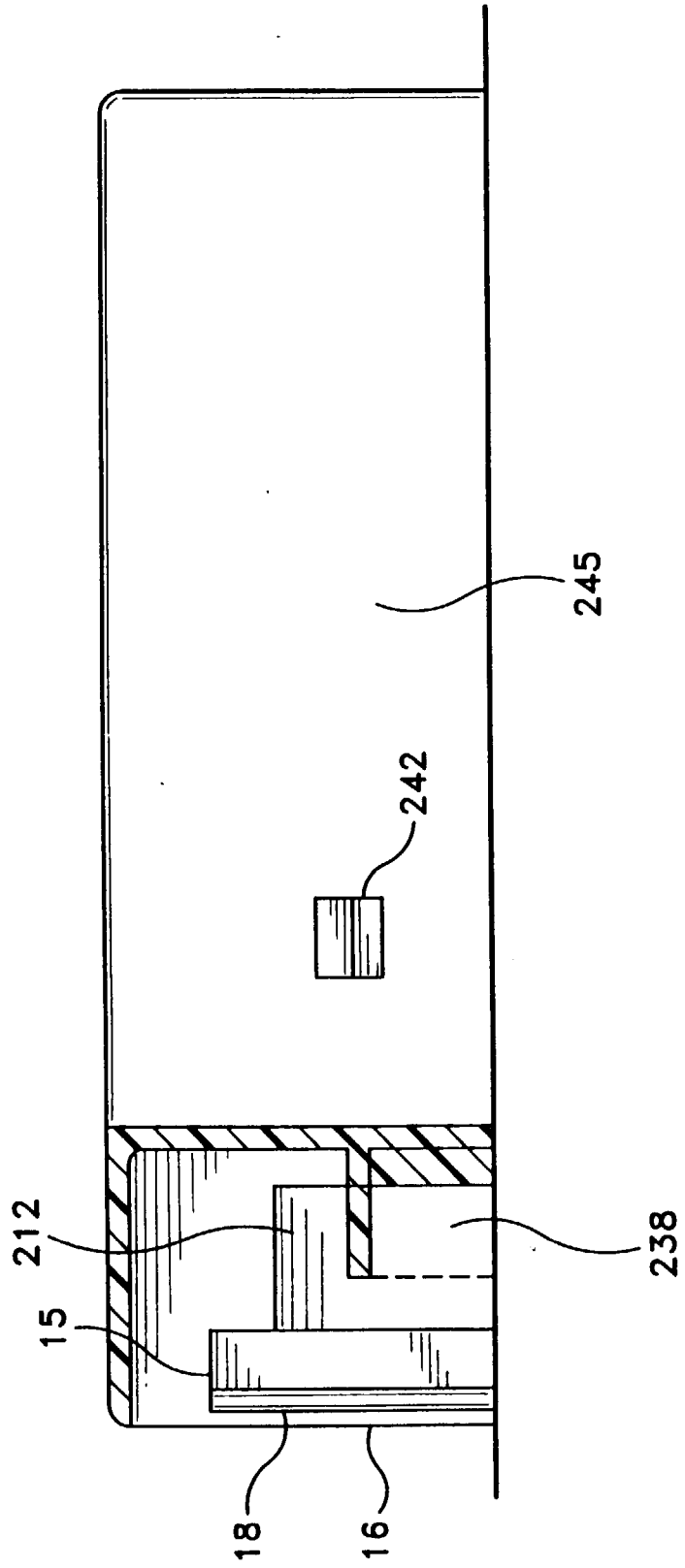


FIG-7B





European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 98 10 0714

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	US 3 172 202 A (SOOTER) * the whole document * ---	3-9, 17-34	B26B29/00 A45D27/29
A		1	
X	US 3 177 582 A (CURTIS) * the whole document * ---	3-7, 17-27, 30-34	
X	GB 2 207 074 A (AMERICAN SAFETY RAZOR) * page 13, last paragraph - page 14, paragraph 1; figures 9-12 * ---	3-7, 17-27, 30-34	
A	US 4 587 730 A (ITEN CLEMENS A) * the whole document * -----	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B26B A45D
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	7 April 1998	Herygers, J	
CATEGORY OF CITED DOCUMENTS		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	
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		& : member of the same patent family, corresponding document	

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