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

Schutzkappe für Rasierkopf

Capot de protection pour tête de rasoir

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(56) References cited:
GB-A- 2 207 074 **US-A- 3 172 202**
US-A- 3 177 582 **US-A- 4 587 730**

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Description

[0001] The present invention relates to a protective cover for a razor head of a shaving in combination with a razor holder for providing storage for the shaving system.

Background

[0002] 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.

[0003] 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.

[0004] 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.

[0005] For example in US 3 172 202 a protective cover for protecting razor blades of a safety razor is disclosed. The protective cover can be engaged with the razor head by means of side portions arranged at the front and at the back of the cover which engage the razor head in a snap-type manner.

[0006] The protective cover described in US 3 177 582 is similar in its construction. However, engagement means for engaging the razor head are positioned on the longitudinal sides of the cover and are operated by ribs positioned on top of the cover by pressing the ribs towards each other and, thus, bending the side portions outwardly.

[0007] Moreover in GB 2 207 074 a safety razor assembly is presented which comprises a handle, a razor blade head and a channel shaped shield. The channel shaped shield is engageable with the razor blade head.

[0008] 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 engageable with the razor tray or stand, consumers are apt to accidentally

discard or misplace the cover.

[0009] 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.

[0010] 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

[0011] The present invention overcomes disadvantages by providing a system comprising a protective cover for a razor head of a razor in combination with a razor holder for providing storage for the razor, with the protective cover in combination with the razor holder comprising means for releasably engaging said protective cover with said razor holder. The protective cover for permanent use is attachable to the razor and can also be stored in a razor holder, e.g. in a razor stand, during periods of nonuse. Furthermore, the complete razor protective cover is selectively engageable with the razor to provide protection for the blades, the blade engagement mechanism and the other vital components of the razor and/or is selectively engageable with a razor stand during periods of nonuse.

[0012] Preferred embodiments are described in the dependent claims.

[0013] 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 engageable with a razor tray or stand when the cover is either attached to the razor or when the cover is separate.

[0014] These and other aspects of the present invention are described in greater detail below.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] In the drawings, wherein similar reference characters denote similar elements throughout the several views:

[0016] It is noted that a protective cover without a holder is not protected by the claims and only shown for illustrative purposes

FIG. 1 is a top plan view of a 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

[0017] In accordance with one of the illustrative examples shown, 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.

[0018] 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.

[0019] In one particular of the illustrative examples shown, 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.

[0020] In one of the illustrative examples shown, the protective cover engages the razor in a mechanical or snap-fit manner which promotes simple engagement of the cover with the razor. In one preferred embodiment, the protective cover comprises at least one aperture lo-

cated 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.

[0021] 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.

[0022] One of the illustrative examples 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.

[0023] 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.

[0024] 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 unne-

essary exposure of the razor blades and prevent unwanted debris from entering cover 10.

[0025] 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.

[0026] In the example 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.

[0027] 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 example, 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.

[0028] 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.

[0029] 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.

[0030] 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.

[0031] 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.

[0032] 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.

[0033] 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.

[0034] 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.

[0035] 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.

45 Claims

1. A system comprising a protective cover (10) for a razor head (22) of a razor in combination with a razor holder (136, 245) for providing storage for the razor, comprising means for releasably engaging said protective cover (10) with said razor holder (136, 245).
2. A system according to claim 1, wherein said razor holder (136, 245) comprises a compartment for storing said protective cover (10).
3. A system according to any one of the preceding

claims,
wherein said system further comprises a razor (28).

4. A system according to any one of the preceding claims,
wherein said engaging means is mechanically releasable.
5. A system according to any one of the preceding claims,
wherein said protective cover (10) when coupled with a razor (28) is releasably engagable with said razor holder (136, 245).
6. A system according to any one of the preceding claims,
wherein said engaging means is mechanically releasable from said protective cover (10) and/or from said razor holder (136, 245).
7. A system according to any one of the preceding claims,
wherein said engaging means comprises a snap-fit mechanism.
8. A system according to any one of the preceding claims,
wherein said engaging means comprises a spring loaded mechanism.
9. A system according to any one of the preceding claims,
wherein said razor holder (136, 245) is a razor stand (136).
10. A system according to any one of the preceding claims,
wherein said razor holder (136, 245) is a razor tray (245).
11. A system according to any one of the preceding claims,
wherein said engaging means provides releasable engagement of said protective cover (10) with said razor holder (136, 245) and with said razor (28) selectively.
12. A system according to any one of the preceding claims 1 to 10,
wherein first engagement means provides engagement of said protective cover (10) with said razor holder (136, 245) and wherein second engagement means provides engagement of said protective cover (10) with said razor (18).
13. A system according to any one of the preceding claims,
wherein said means for releasably engaging said

protective cover (10) with said razor (28) comprises means for releasably engaging opposing portions of said razor (28).

- 5 14. A system according to any one of the preceding claims,
wherein said means for releasably engaging said protective cover (10) with said razor (28) is symmetrical and whereby said protective cover (10) can selectively engage said razor in an upright top-to-bottom or upside-down bottom-to-top fashion.
- 10 15. A system according to any one of the preceding claims,
wherein said means for releasably engaging said protective cover (10) with said razor (28) is mechanically releasable from said razor (28).
- 15 16. A protective cover (10) according to any one of the preceding claims,
wherein said protective cover (10) comprises at least one aperture (18).

25 Patentansprüche

- 30 1. System, umfassend eine Schutzabdeckung (10) für einen Rasiererkopf (22) eines Rasierers in Verbindung mit einem Rasiererhalter (136, 245) zum Bereitstellen einer Aufbewahrung für den Rasierer, umfassend Mittel zum lösbaren Eingriff der Schutzabdeckung (10) mit dem Rasiererhalter (136, 245).
- 35 2. System gemäß Anspruch 1, wobei der Rasiererhalter (136, 245) ein Fach zum Aufbewahren der Schutzabdeckung (10) umfasst.
- 40 3. System gemäß einem der vorhergehenden Ansprüche, wobei das System ferner einen Rasierer (28) umfasst.
- 45 4. System gemäß einem der vorhergehenden Ansprüche, wobei das eingreifende Mittel mechanisch lösbar ist.
- 50 5. System gemäß einem der vorhergehenden Ansprüche, wobei die Schutzabdeckung (10), wenn sie mit einem Rasierer (28) gekoppelt ist, lösbar mit dem Rasiererhalter (136, 245) in Eingriff bringbar ist.
- 55 6. System gemäß einem der vorhergehenden Ansprüche, wobei das eingreifende Mittel mechanisch von der Schutzabdeckung (10) und/oder vom Rasiererhalter (136, 245) lösbar ist.
7. System gemäß einem der vorhergehenden Ansprüche, wobei das eingreifende Mittel einen Einschnappmechanismus umfasst.

8. System gemäß einem der vorhergehenden Ansprüche, wobei das eingreifende Mittel einen federbelasteten Mechanismus umfasst.
9. System gemäß einem der vorhergehenden Ansprüche, wobei der Rasiererhalter (136, 245) ein Rasiererständer (136) ist. 5
10. System gemäß einem der vorhergehenden Ansprüche, wobei der Rasiererhalter (136, 245) eine Rasiererschale (245) ist. 10
11. System gemäß einem der vorhergehenden Ansprüche, wobei das eingreifende Mittel selektiv einen lösbaren Eingriff der Schutzabdeckung (10) mit dem Rasiererhalter (136, 245) und dem Rasierer (28) bietet. 15
12. System gemäß einem der Ansprüche 1 - 10, wobei ein erstes eingreifendes Mittel einen Eingriff der Schutzabdeckung (10) mit dem Rasiererhalter (136, 245) bereitstellt, und wobei ein zweites eingreifendes Mittel einen Eingriff der Schutzabdeckung (10) mit dem Rasierer (28) bereitstellt. 20
13. System gemäß einem der vorhergehenden Ansprüche, wobei das Mittel zum lösbaren Eingreifen der Schutzabdeckung (10) mit dem Rasierer (28) ein Mittel zum lösbaren Eingreifen mit gegenüberliegenden Abschnitten des Rasierers (28) umfasst. 25
14. System gemäß einem der vorhergehenden Ansprüche, wobei das Mittel zum lösbaren Eingreifen der Schutzabdeckung (10) mit dem Rasierer (28) symmetrisch ist, und wobei die Schutzabdeckung (10) mit dem Rasierer selektiv in einer aufrechten Weise von der Oberseite zur Unterseite oder in einer umgekehrten Weise von der Unterseite zur Oberseite eingreifen kann. 30
15. System gemäß einem der vorhergehenden Ansprüche, wobei das Mittel zum lösbaren Eingreifen der Schutzabdeckung (10) mit dem Rasierer (28) mechanisch vom Rasierer (28) lösbar ist. 35
16. Schutzabdeckung (10) gemäß einem der vorhergehenden Ansprüche, wobei die Schutzabdeckung (10) zumindest eine Öffnung (18) umfasst. 40
- 245).
2. Système suivant la revendication 1, dans lequel ledit support de rasoir (136, 245) comprend un compartiment pour ranger ledit capot de protection (10).
3. Système suivant l'une quelconque des revendications précédentes, dans lequel ledit système de rasage comprend en outre un rasoir (28).
4. Système suivant l'une quelconque des revendications précédentes, dans lequel lesdits moyens d'engagement sont mécaniquement détachables.
5. Système suivant l'une quelconque des revendications précédentes, dans lequel ledit capot de protection (10), lorsqu'il est couplé à un rasoir (28), peut être engagé de façon détachable avec ledit support de rasoir (136, 245).
6. Système suivant l'une quelconque des revendications précédentes, dans lequel lesdits moyens d'engagement sont mécaniquement détachables dudit capot de protection (10) et/ou dudit support de rasoir (136, 245).
7. Système suivant l'une quelconque des revendications précédentes, dans lequel lesdits moyens d'engagement comprennent un mécanisme d'encliquetage.
8. Système suivant l'une quelconque des revendications précédentes, dans lequel lesdits moyens d'engagement comprennent un mécanisme à ressort.
9. Système suivant l'une quelconque des revendications précédentes, dans lequel ledit support de rasoir (136, 245) est un porte-rasoir (136).
10. Système suivant l'une quelconque des revendications précédentes, dans lequel ledit support de rasoir (136, 245) est un boîtier de rasoir (245).
11. Système suivant l'une quelconque des revendications précédentes, dans lequel lesdits moyens d'engagement réalisent de façon sélective un engagement détachable dudit capot de protection (10) avec ledit support de rasoir (136, 245) et avec ledit rasoir (28).
12. Système suivant l'une quelconque des revendications 1 à 10 qui précèdent, dans lequel les premiers moyens d'engagement réalisent un engagement dudit capot de protection (10) avec ledit support de rasoir (136, 245), et dans lequel des deuxièmes moyens d'engagement réalisent un engagement dudit capot de protection (10) avec ledit rasoir (28).

Revendications

1. Système comprenant un capot de protection (10) pour une tête de rasoir (22) d'un rasoir en combinaison avec un support de rasoir (136, 245) destiné au rangement du rasoir, comprenant des moyens pour engager de façon détachable ledit capot de protection (10) avec ledit support de rasoir (136, 55

13. Système suivant l'une quelconque des revendications précédentes, dans lequel lesdits moyens d'engagement détachable dudit capot de protection (10) avec ledit rasoir (28) comprennent des moyens pour engager de façon détachable des portions opposées dudit rasoir (28). 5
14. Système suivant l'une quelconque des revendications précédentes, dans lequel lesdits moyens pour engager de façon détachable ledit capot de protection (10) avec ledit rasoir (28) sont symétriques, et dans lequel ledit capot de protection (10) peut engager de façon sélective ledit rasoir dans une position à l'endroit de haut en bas ou dans une position à l'envers de bas en haut. 10
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15. Système suivant l'une quelconque des revendications précédentes, dans lequel lesdits moyens pour engager de façon détachable ledit capot de protection (10) avec ledit rasoir (28) sont mécaniquement détachables dudit rasoir (28). 20
16. Capot de protection (10) suivant l'une quelconque des revendications précédentes, dans lequel ledit capot de protection (10) comporte au moins une ouverture (18). 25

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FIG-1

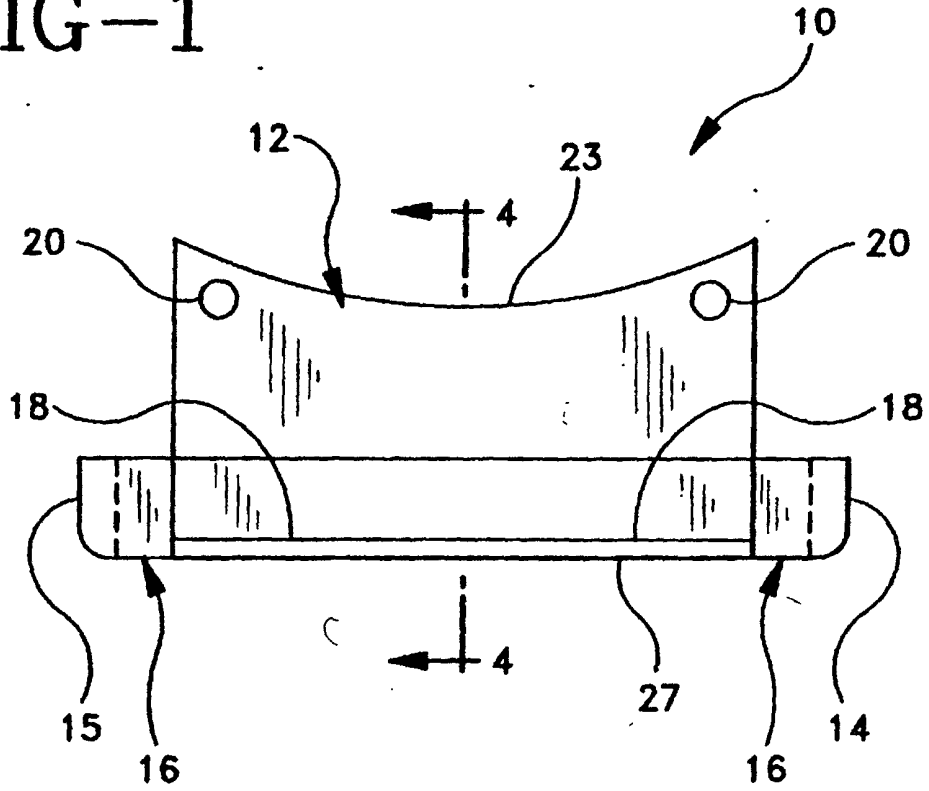


FIG-2

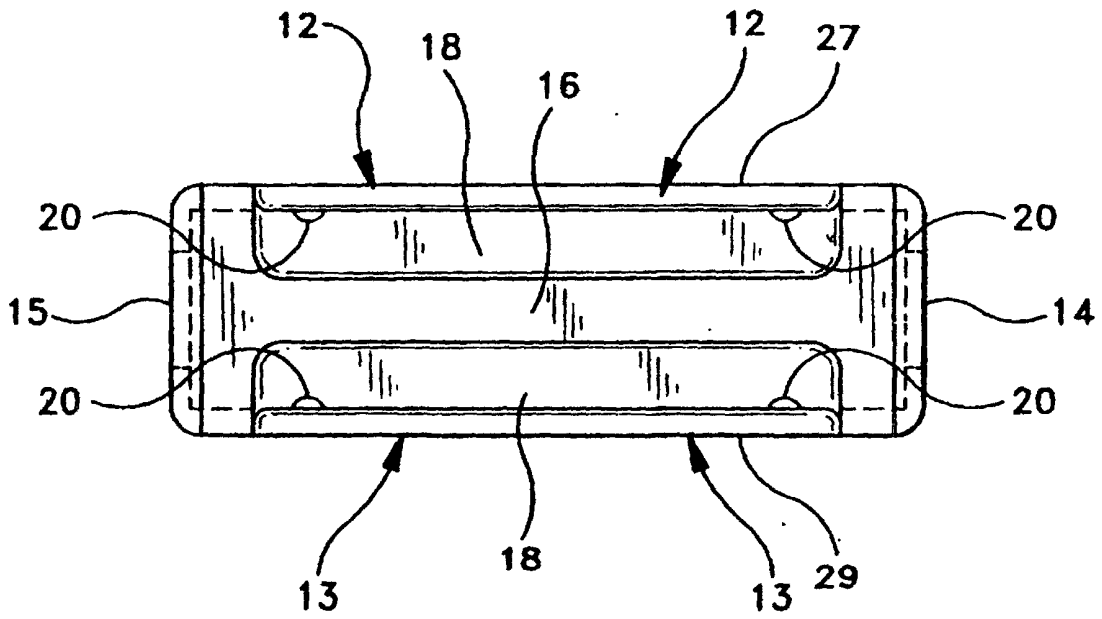


FIG-3

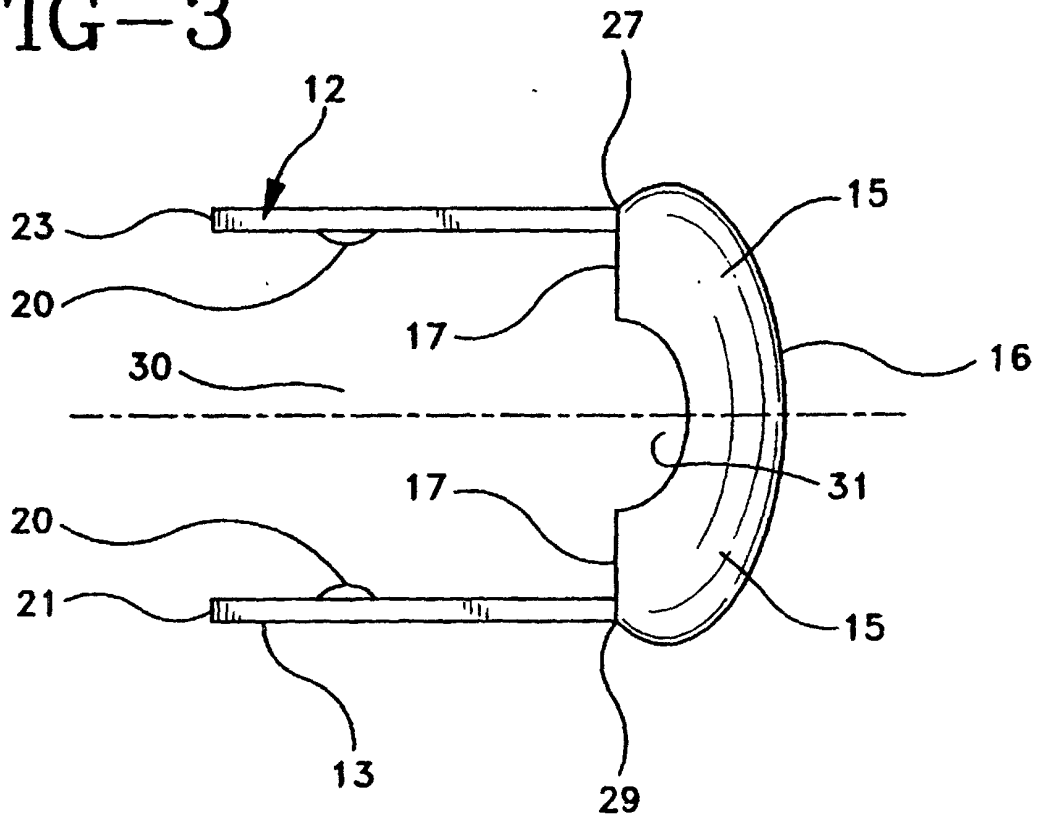
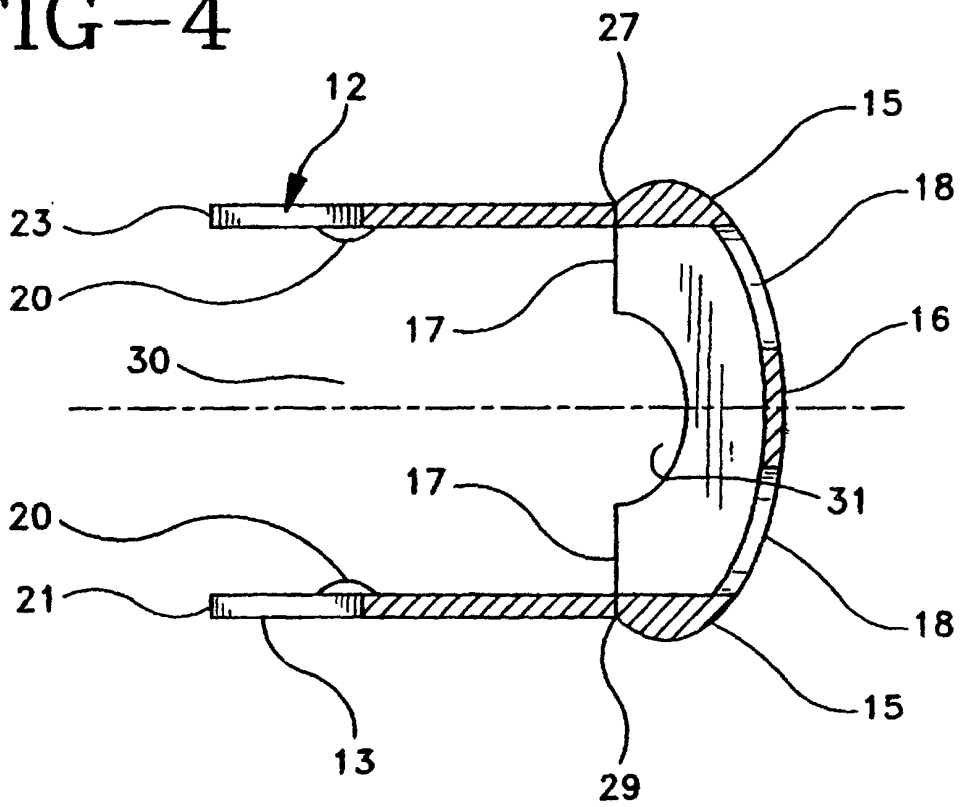


FIG-4



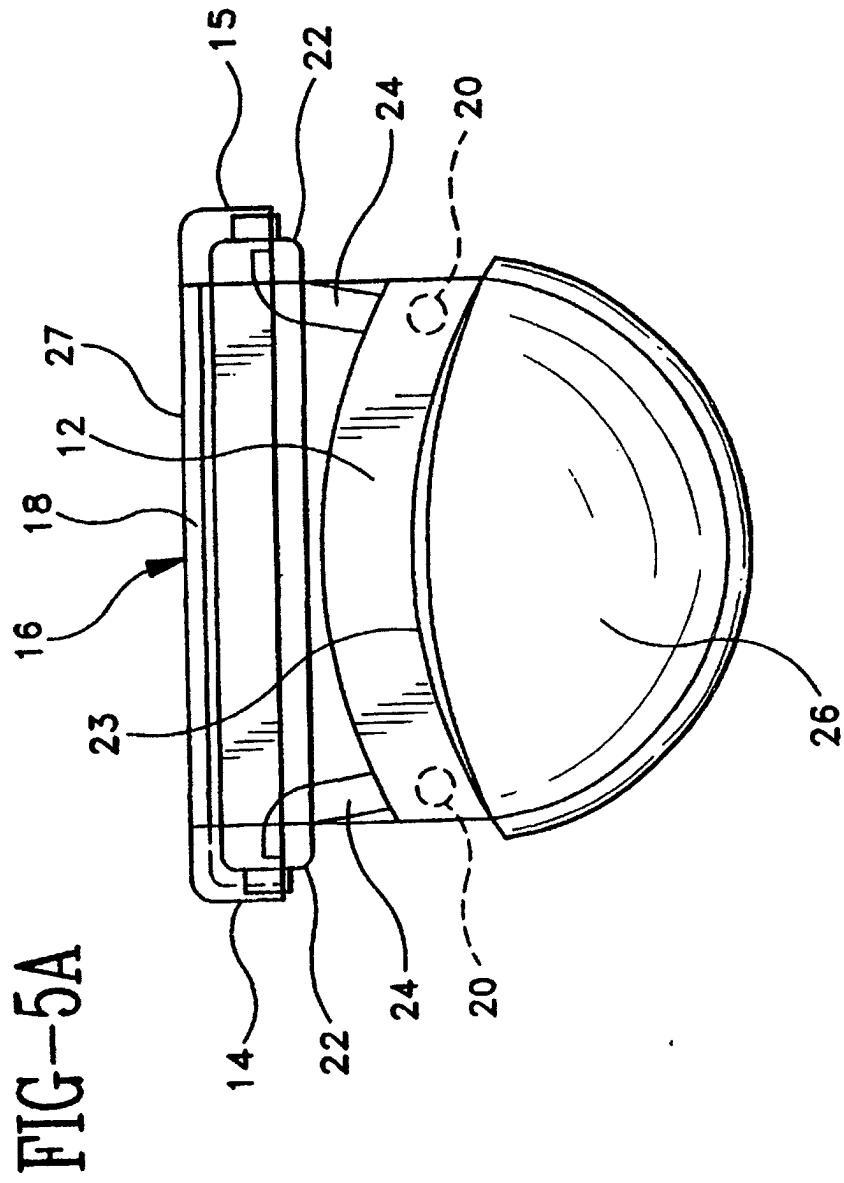


FIG--5B

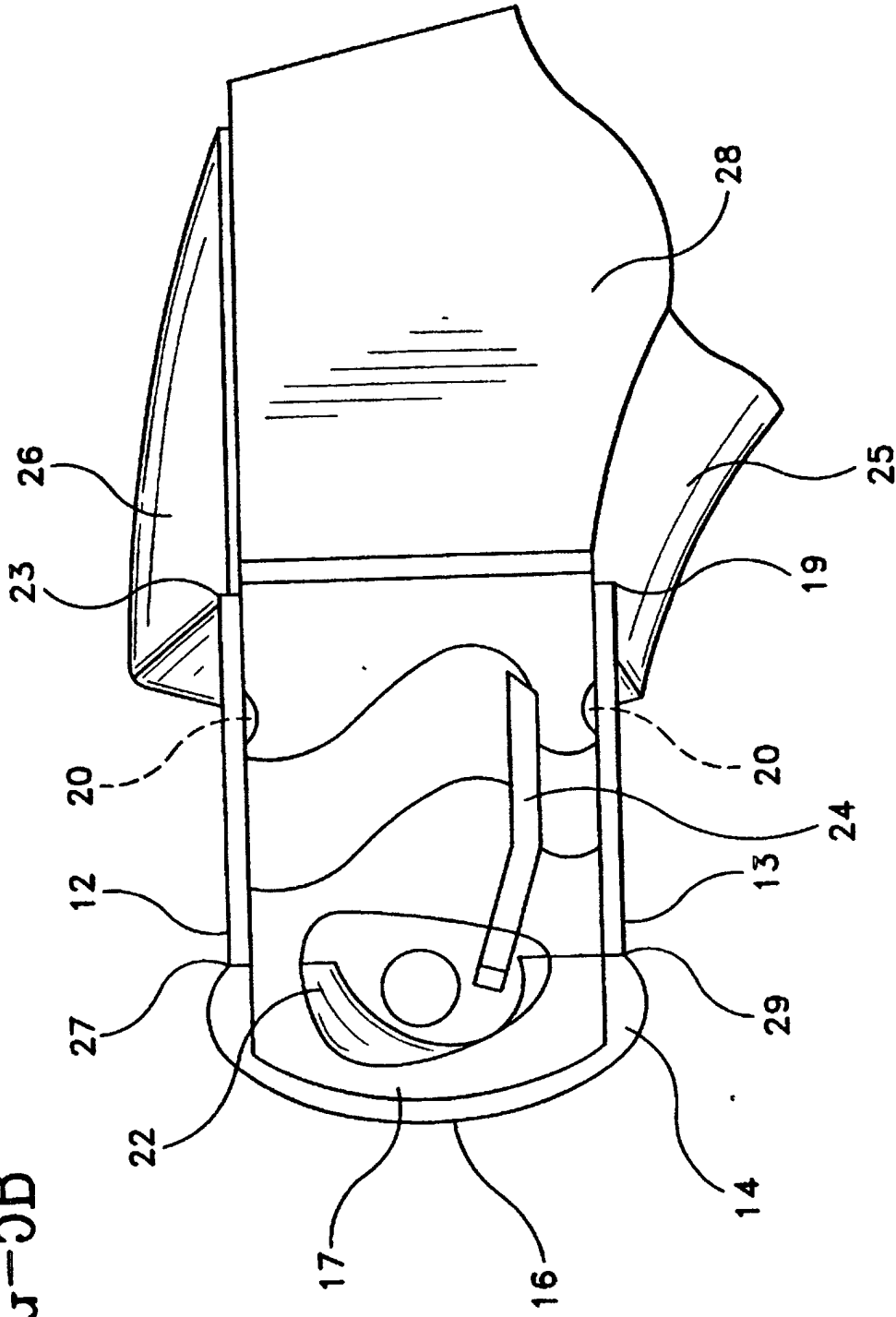


FIG-6A

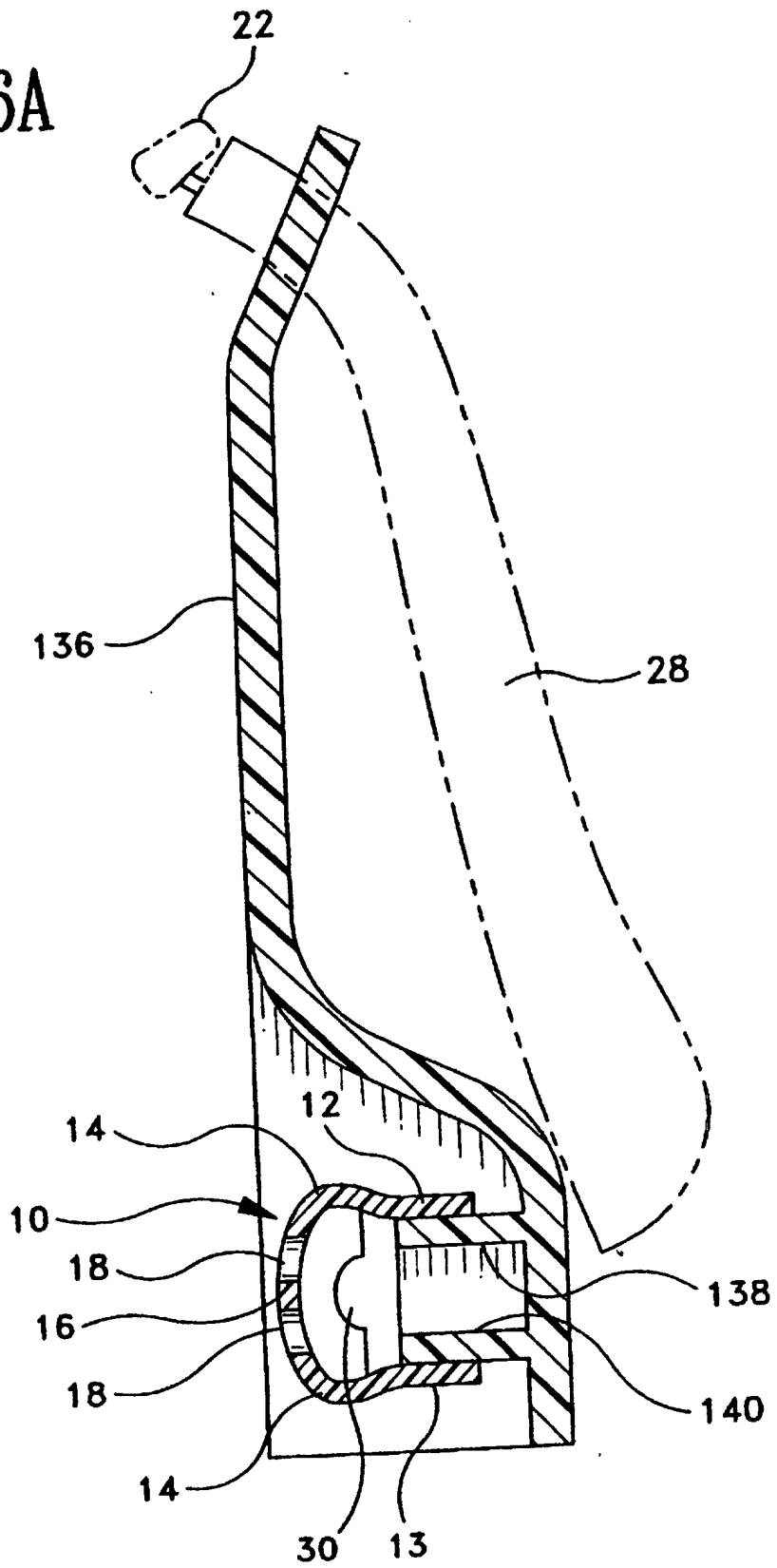


FIG-6B

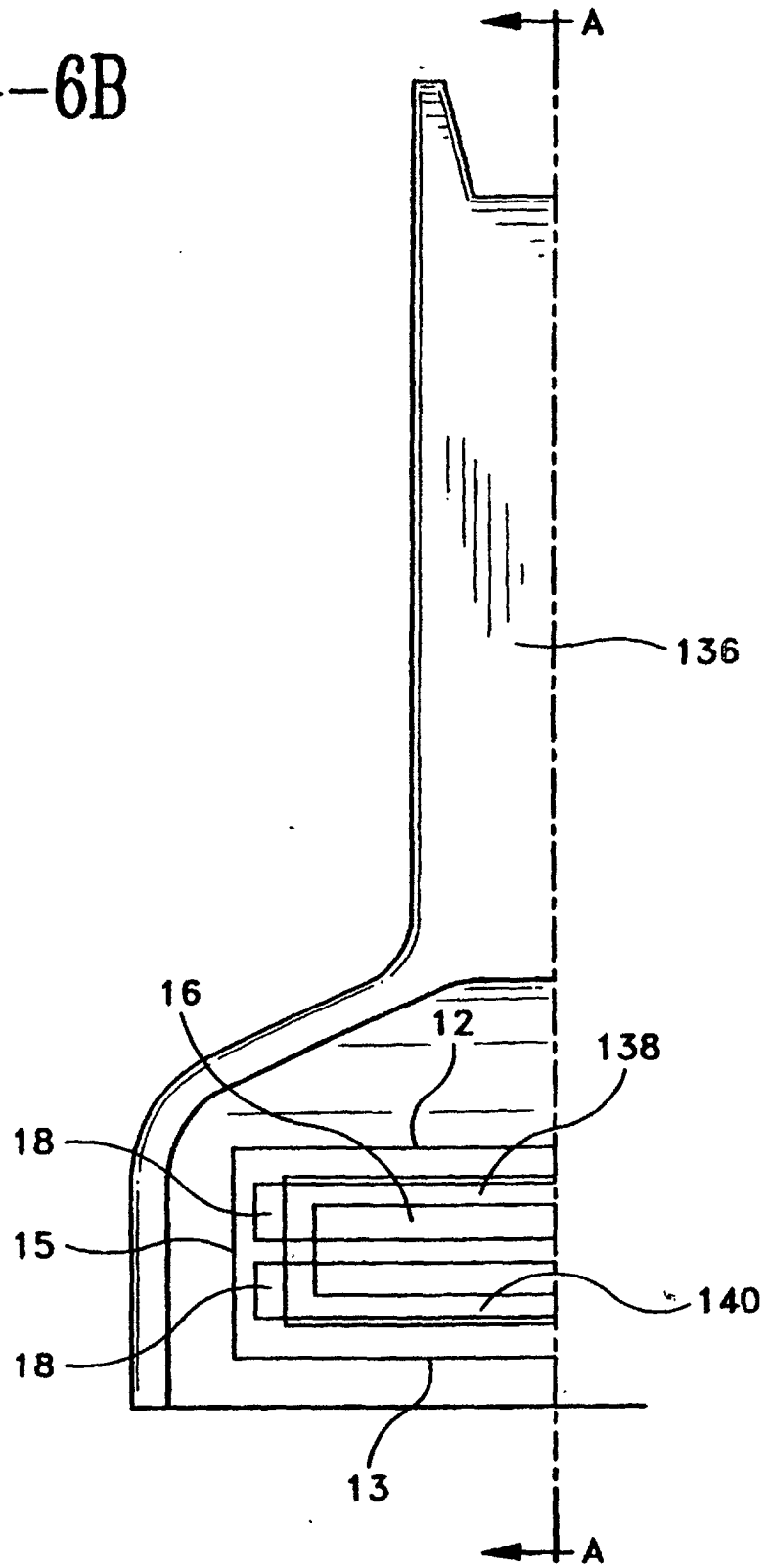


FIG-7A

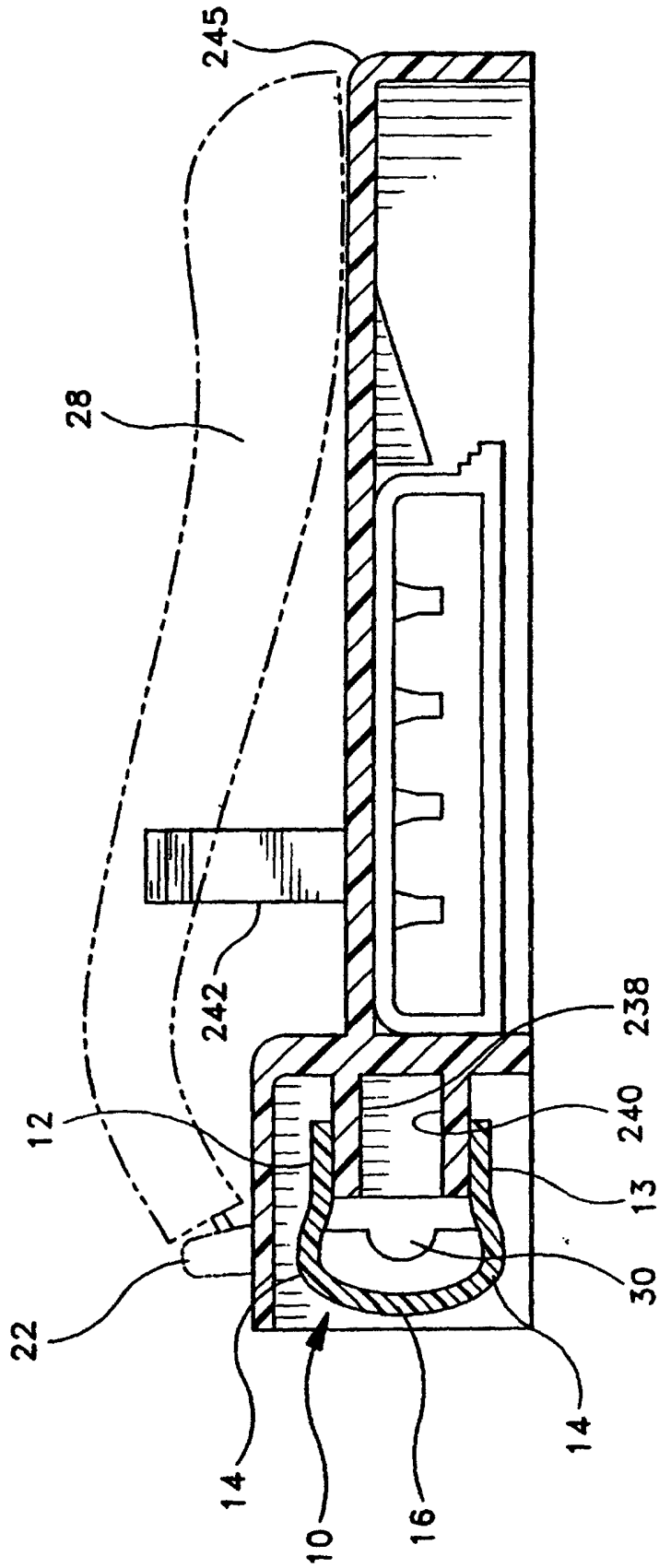


FIG--7B

