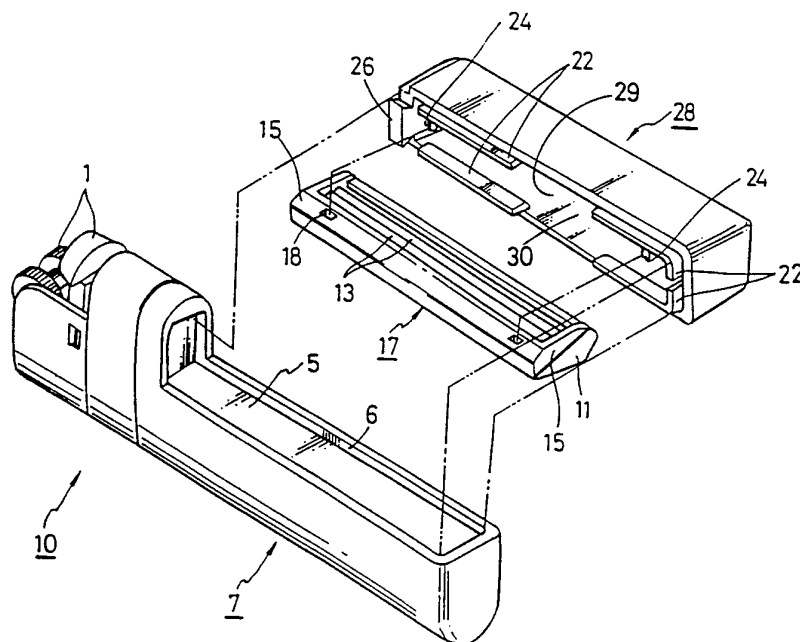




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/KR93/00088 (22) International Filing Date: 5 October 1993 (05.10.93) (30) Priority data: 1992-19127 U 6 October 1992 (06.10.92) KR (71)(72) Applicant and Inventor: KEE, Doo, Seok [KR/KR]; 402 ho, 4th floor, Duckchang Building, 24-1, Suha-dong, Chung-ku, Seoul 100-210 (KR). (74) Agents: YIM, Suk, Jae et al.; S.J. Yim &amp; Associates, 10th floor, Poonglim Building, 823-1, Yeoksam-dong, Kangnam-ku, Seoul 135-784 (KR).</p>		<p>(81) Designated States: AU, BR, CA, JP, RU, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i></p>

## (54) Title: GAS LIGHTER EQUIPPED WITH DISPOSABLE RAZOR



## (57) Abstract

A gas lighter (10) equipped with a disposable razor, wherein a part of the gas lighter's body is so shaped as to be suitable to fix a removable housing (28) which, on one hand, contains a disposable razor blade assembly (17) therein when the razor is not in use and, on the other hand, is used as the handle of the razor during shaving. The gas lighter equipped with a disposable razor according to the present invention provides increased convenience and portability of the razor to the user since it can be kept and contained inside the housing (28) whose shape is coincidental with the recess (5) of the gas lighter.

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TITLE OF INVENTION

GAS LIGHTER EQUIPPED WITH DISPOSABLE RAZOR

BACKGROUND OF THE INVENTION

This invention relates to a gas lighter equipped with a disposable  
5 razor, and, in particular, to a type of gas lighter, the body part of  
which has an L-shaped recess to which a removable housing is fixed  
which housing forms a compartment containing a disposable razor blade  
assembly therein and is also so shaped as to be used as a handle of the  
razor during shaving.

10 In general, conventional disposable razors may be divided into two  
types ; one type is that composed of two separated elements, that is,  
a handle which is not discarded but used continuously and a disposable  
razor blade assembly which can be interchangeably fitted to the head of  
the handle, the other being the type where the handle and the razor  
15 blade assembly are so formed in a single body that the handle and the  
razor blade assembly are to be discarded at the same time after use.

The separated type is suitable for home use and has economical  
merits in that the handle, which is comparatively more expensive than  
the razor blade assembly, may be saved for continued use by replacing  
20 only the used disposable razor blade assembly with a new one after it  
has been used. However, in consideration that a disposable separated  
razor assembly of this type must usually be carried in a certain  
separate package or case, it is somewhat inconvenient, unhandy or bulky  
to carry around on one's person if one wants to conveniently provide  
25 oneself with the razor at most times in one's jacket, shirt or trousers  
pocket.

On the contrary, the single body type is so formed whereby its  
handle is made of comparatively less expensive material than that of  
the separated type so that it may be said to be more advantageous  
30 economically than the separated type when it is used for the purpose of  
one time only use.

However, the single body type has some disadvantages in that the

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handle and the razor blade assembly must be discarded simultaneously after use, therefore, even though the manufacturing cost of this type razor is less expensive than that of the separated type razor, it is resource consumptive and is still inconvenient, unhandy or bulky to carry around on one's person at most times in one's jacket, shirt or trousers pocket and is unfavorable in view of environmental protection.

#### SUMMARY OF THE INVENTION

The present invention is intended to provide a gas lighter equipped with a disposable razor blade assembly, wherein a part of the gas lighter's body is so shaped as to be suitable to fix a removable housing which contains a disposable razor blade assembly therein and which housing is used as handle of the razor in shaving wherein one need not buy the comparatively more expensive handle and one can increase the portability of the razor at most times since the razor blade assembly can be contained inside the housing whose shape is coincidental with the recess of the gas lighter.

#### BRIEF DESCRIPTION OF THE DRAWING

Fig. 1 is a exploded perspective view of the gas lighter equipped with the disposable razor blade assembly according to the present invention.

Fig. 2 is a back view of the disposable razor blade.

Fig. 3 is a sectional view of the housing and the razor blade which are combined in a conventional T-shaped razor.

Figs. 4 (a)(b) are the perspective views of gas lighters which have different housing shapes respectively.

Figs. 5 (a)(b) are the perspective views of the housings and the razor blade assemblies which show different connecting means respectively.

Fig. 6 is a perspective view of the gas lighter and the housing which have rail type connecting means.

#### DETAILED DESCRIPTION OF THE INVENTION

As shown in Fig. 1, the gas lighter equipped with a disposable

razor assembly according to the present invention is characterised in that said gas lighter comprises :

5 (a) a gas lighter body (10) comprising an elongated casing (7) having a longitudinal axis, an outer surface having an L-shaped recess (5) formed along with said longitudinal axis and a conventional igniting means (1) at one end of said elongated casing ; and

10 (b) a housing (28) which has a longitudinal hollow compartment (29) to keep a conventional disposable razor blade assembly (17) therein, a longitudinal opening (30) through which the disposable razor blade assembly (17) can be inserted and removed, a connecting means (26) so formed on the upper end of the brim of said longitudinal opening (30) that said connecting means enables the housing to be easily connected with or removed from the back side of the razor blade assembly (17) by virtue of such connecting means' T-shape, and whereby  
15 said housing (28) can be used as a handle of the razor during shaving, and a fixing means (22) so formed on the brim of longitudinal direction as to fix or easily remove said housing (28) with said longitudinal recess (5) of the lighter.

20 The gas lighter equipped with the disposable razor according to the present invention can further comprise a conventional disposable razor blade, the razor blade assembly of which is kept contained in said compartment of the housing at most times but is taken out and assembled to form a T-shape be attached to the housing handle and used as a razor in shaving.

25 Said conventional disposable razor blade assembly, as shown in Fig. 1 and Fig. 2, may consist of a front panel (15), a back panel (11) and one or two blades (13) so inserted between said front panel and back panel and arranged in a slanted position so as to expose only the cutting edge of blade outwardly therefrom.

30 The back panel (11) of the rezor blade assembly may comprise on its surface a longitudinal reinforcing support (20) and one or more protrusions (19) which can be matched with said connecting means (26)

formed on the upper end of the brim of said housing whereby said razor blade assembly is connected with said housing to form a T-shape and thereby assume its proper configuration and function as a shaving razor device.

5 As shown in Fig. 1, the peripheral edge of said recess of the gas lighter has a low upright wall (6) in order to removably match and fix the fixing means (22) formed on brim of the opening (30) to said L-shaped recess (5) of the lighter. Said low upright wall (6) of the recess (5) and said fixing means (22) of said housing can fix and  
10 attach to each other by virtue of the elasticity of the material to form a connection between themselves, or can be fitted by virtue of tight friction between these two components, or, as shown in Fig. 6, can be connected by sliding onto rails (31) (32) which have slanted sections in the direction parallel to the longitudinal axis so as not  
15 to permit the housing to separate easily from the L-shaped lighter body.

In order to keep the razor blade assembly fixed and contained in the hollow compartment (29) of the housing (28), one side of the connecting means (22) of the housing (28) may have one or more small protrusions (24) which correspond to the holes (18) formed on the front  
20 panel (15) of the razor blade assembly (17).

Fig. 4 (a)(b) show the perspective views of the gas lighter having different housing shapes respectively. These teach that the shape of the housing of the invention can be altered arbitrarily without changing the spirit and scope of the invention so long as it satisfies  
25 its own function according to the present invention, that is, keeping the disposable razor blade assembly at most times contained within the body of the conventional gas lighter and being used as a handle of the razor in shaving.

Fig. 5 and Fig. 6 show another embodiment of the subject  
30 disposable razor blade assembly (17) and two varieties of the connecting means (26) corresponding to fit the shape of the back panel of the razor blade assembly (17).

In Fig. 5, the housing has a flat aperture (33) perpendicular to the longitudinal axis at one end thereof and an oblong  $\Omega$ -shaped hook (34) which is so inserted in said flat aperture (33) in such a way that both its outwardly hooked ends (35) are exposed outwardly. Said  
5 oblong  $\Omega$ -shaped hook can be inserted in and removed from said flat aperture (33) and this construction can help to increase the productivity of the housing by virtue of the design of the invention.

Figs. 5 and 6 also teach that the connecting means formed at one end of the housing (28) should be construed to be changeable into other  
10 forms or shapes according to the form or shape of the back panel of the conventional disposable razor blade assembly (17).

From the present invention described above a gas lighter equipped with a disposable razor blade assembly is provided, wherein a part of the gas lighter's body is so shaped as to be suitable to fix a  
15 removable housing which, on one hand, keeps and contains a disposable razor blade assembly therein and which is, on the other hand, also used as a handle of the razor in shaving so as to enhance the convenience and portability of the razor at most times and can aid in preventing environmental pollution.

CLAIMS

What I claim are :

1. A gas lighter equipped with a disposable razor which is characterised in that said gas lighter comprises :

5 (a) a gas lighter comprising an elongated casing having a longitudinal axis, an outer surface having an L-shaped recess formed along with said longitudinal axis and a conventional igniting means at one end of said elongated casing ; and

(b) a housing which has a longitudinal compartment therein for  
10 containing a conventional disposable razor blade assembly therein, a longitudinal opening through which the disposable razor blade assembly can be put inserted and removed, a connecting means so formed on the upper end of the brim of said longitudinal opening that said connecting means enables the housing to connect with and be removed from the back  
15 side of the razor blade assembly in a T-shape whereby said housing can be used as a handle of the razor in shaving, and a means for fixing on the brim of longitudinal direction of the housing so formed as to fix and remove said housing with said longitudinal recess of the lighter.

2. The gas lighter equipped with a disposable razor according to  
20 Claim 1, wherein said gas lighter further comprises a conventional disposable razor blade assembly, which is kept in said longitudinal compartment of the housing when the razor is not being used but is capable of being removed and assembled in a T-shape for use as a razor during shaving.

25 3. The gas lighter equipped with a disposable razor according to Claim 1, wherein the peripheral edge of said recess of the gas lighter has a low upright wall in order to match and be fixed or removed from the fixing means formed on the brim of the opening of the housing, said fixing means consisting of one or more longitudinal elastic protrusions  
30 which match the inside of said low upright wall.

4. The gas lighter equipped with a disposable razor according to Claim 1, wherein said recess of the gas lighter and said connecting



means of the housing is slidably connected with each other by way of such connecting means being able to slide under the rails which are formed on the longitudinal edges of said recess and on the longitudinal brims of said opening, said rails having a slanted section so as to prevent removal of the housing oriented in a direction parallel to the longitudinal axis.

5  
10  
5. The gas lighter equipped with a disposable razor according to Claim 1, wherein said connecting means to connect the housing with the razor blade assembly is an oblong  $\Omega$ -shaped hook which is inserted in a flat aperture formed substantially perpendicular to the longitudinal axis at one end of the housing in such a way that both its hooked ends are exposed outwardly.

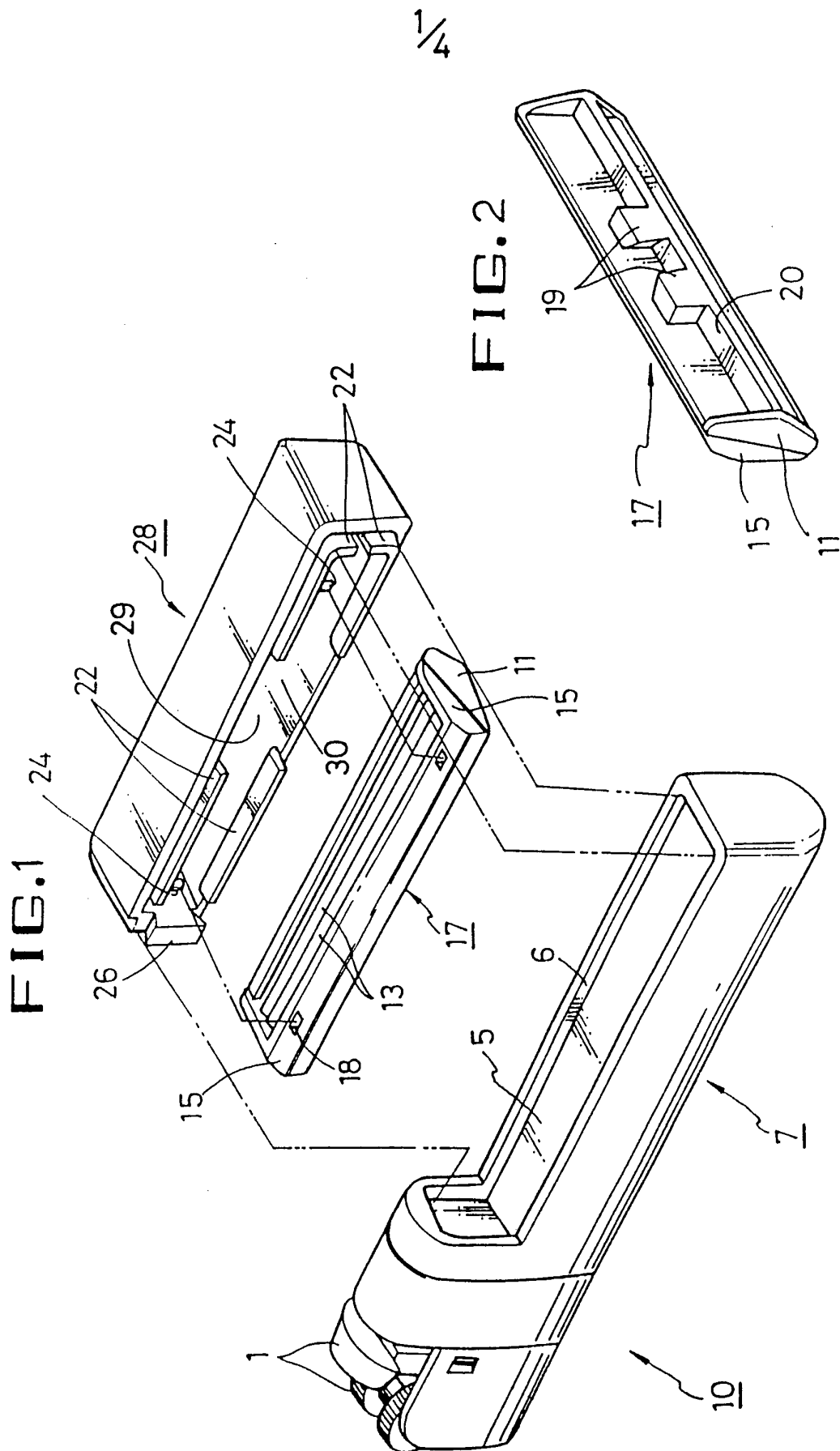


FIG. 4

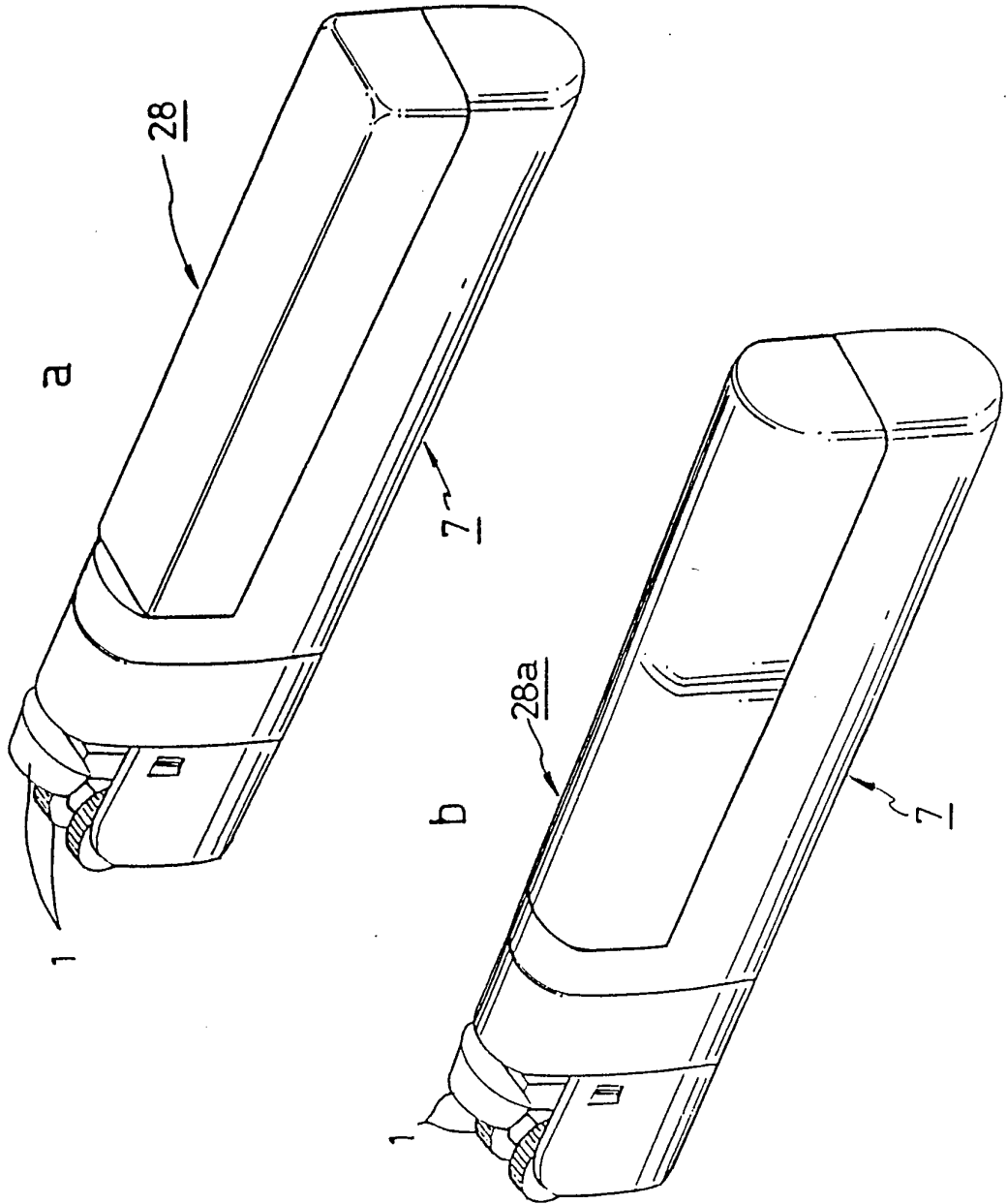


FIG. 3

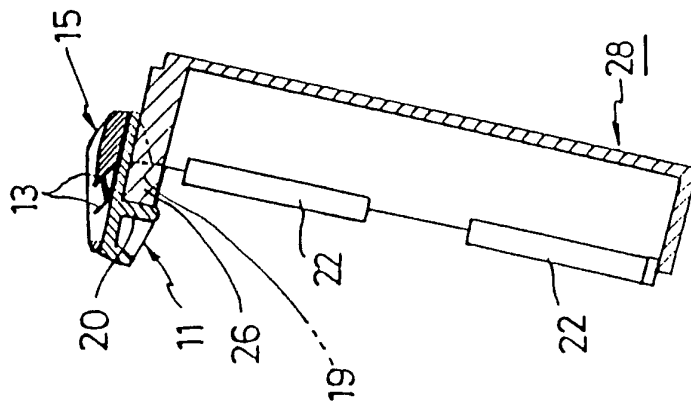


FIG. 5

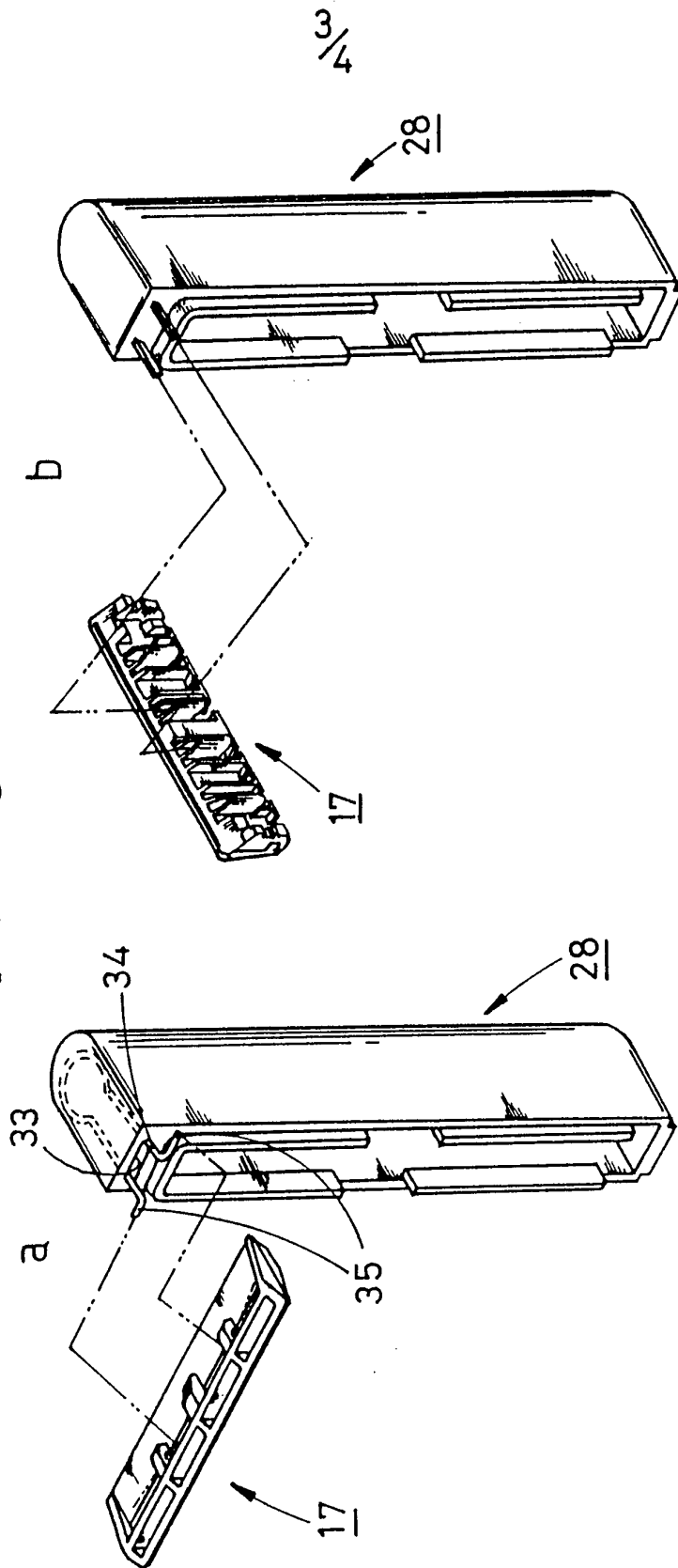
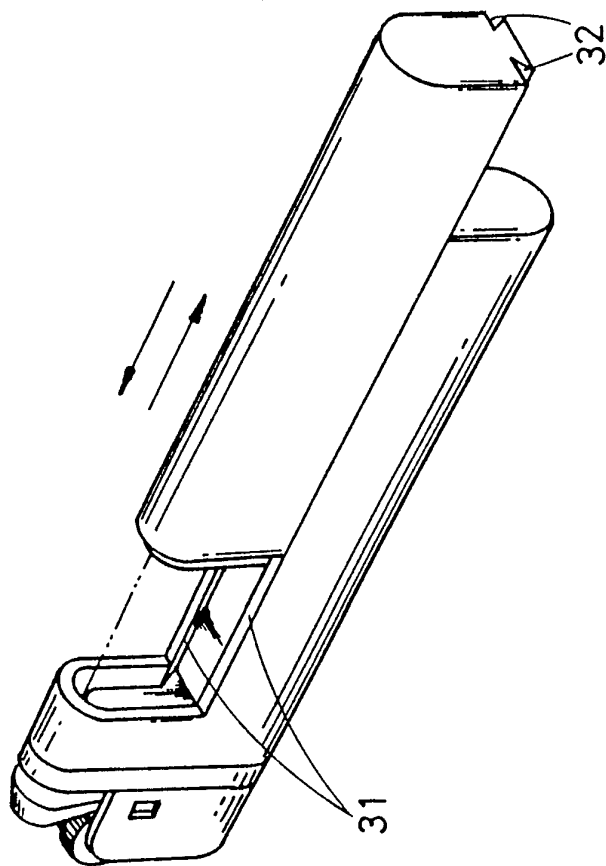


FIG. 6



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR 93/00088

## A. CLASSIFICATION OF SUBJECT MATTER

IPC<sup>5</sup>: F 23 Q 2/32, B 26 B 21/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC<sup>5</sup>: F 23 Q 2/00, 2/16, 2/32; B 26 B 21/00-21/60

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US, A, 2 828 855 (MOSCH) 01 April 1958 (01.04.58), totality.	1
A	US, A, 2 676 397 (BACCO) 27 April 1954 (27.04.54), totality.	1
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Date of the actual completion of the international search

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US A 2828855		keine - none - rien	
US A 2676397		keine - none - rien	