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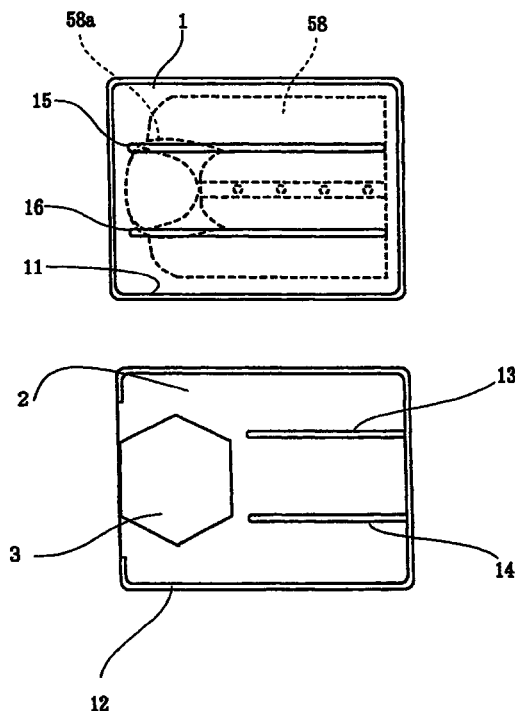
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(54) **SHIRT HOLDER**

(57) A shirt holder according to the invention comprises a back pressing planar portion (1) having a rectangular configuration for supporting a back face of a folded shirt, a front pressing planar portion (2) opposing the back pressing planar portion (1), and a shirt collar protection portion (3), the back and front pressing planar portions (1) and (2) being separately formed, the front pressing planar portion (2) integrally formed with the shirt collar protection portion (3). The shirt holder has a box-type configuration wherein the back pressing planar portion (1) has a peripheral wall (11) on its periphery to be fitted with an engagement projections (12) formed on the peripheral portions of the front pressing planar portion. Projections (15) and (16) of the back pressing planar portion (1) and projections (13) and (14) of the front pressing planar portion (2) are arranged alternately in an offset relation.

The shirt holder advantageously prevents the positional offset of a shirt held therein and even the sliding-down of a shirt held in the shirt holder hung on a rack for display at a shop. Thus, the shirt holder permits a men's shirt fresh from a maker's plant or a men's shirt, women's blouse, or a sports shirt such as a polo shirt, which is laundered and neatly folded, to be stacked in layers, to be hung on a rack for display at a shop, or to be compactly packed in a bag or a suitcase for carriage.

**Fig. 4**



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## Description

### BACKGROUND OF THE INVENTION

#### FIELD OF THE INVENTION

[0001] The present invention relates to a shirt holder for holding a men's shirt fresh from a manufacturer's plant, or a garment with a collar such as a men's shirt, a women's blouse, and a sports shirt such as a polo shirt laundered and neatly folded, the shirt holder permitting such a garment to be stored as stacked in layers, hung on a rack for display at a shop, or compactly packed in a suitcase or a trunk for carriage with the shape of the garment kept intact.

#### RELATED ART

[0002] In the laundry industry, it is a conventional practice to fold a laundered shirt and put it in a transparent soft plastic bag or wind a paper strap around it. This is disadvantageous in that the shirt is liable to lose its shape when it is packed in a suitcase or a trunk for carriage. When a plurality of shirts are stacked in layers, shirts in lower layers tend to lose their shapes and therefore, it is required to store the respective shirts on different shelves of a multi-shelf container. Further, new shirts shipped from a manufacturer are each packed in paper boxes stacked in layers, thus resulting in bulkiness, or imposing inconvenience on consumers trying to pick up desired shirts.

#### DISCLOSURE OF THE INVENTION

[0003] The present invention has adopted for improvement a shirt holder (which, hereinafter, may also be referred to as "separate-type shirt holder") comprising a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt; a front pressing planar portion opposing the back pressing planar portion; and a shirt collar protection portion; wherein the back pressing planar portion and the front pressing planar portion are formed separately, and the front pressing planar portion is integrally formed with the shirt collar protection portion.

[0004] That is, the shirt holder according to the invention comprises a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt, a front pressing planar portion opposing the back pressing planar portion, and a shirt collar protection portion, the back pressing planar portion and the front pressing planar portion being formed separately, the front pressing planar portion being integrally formed with the shirt collar protection portion.

[0005] More specifically, the shirt holder of the invention is adapted for storage and protection of a shirt by way of simple steps of placing a folded shirt on the back pressing planar portion (which, hereinafter, may

also be referred to as "lower planar portion"), and putting the front pressing planar portion (which, hereinafter, may also be referred to as "upper planar portion") together with the shirt collar protection portion thereover so as to hold the shirt therebetween. The shirt holder of the invention has quite a simple construction and facilitates packing and unpacking of a shirt. In addition, such shirt holders each containing shirts therein can compactly be packed in a suitcase or trunk, as stacked on one another, with the shirts kept intact. The shirt holder also prevents positional offset of a shirt held therein during storage or use. Further, the shirt holder can be fabricated at very low production costs.

[0006] The present invention has further adopted for improvement a shirt holder (which, hereinafter, may also be referred to as "unified shirt holder") comprising a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt; a front pressing planar portion opposing the back pressing planar portion; and a shirt collar protection portion; wherein the back pressing planar portion is integrally formed with the front pressing planar portion.

[0007] That is, the shirt holder according to the invention comprises a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt, a front pressing planar portion opposing the back pressing planar portion, and a shirt collar protection portion, the back pressing planar portion being integrally formed with the front pressing planar portion.

[0008] According to the aforesaid unified shirt holder, a portion bendably connecting the back pressing planar portion with the front pressing planar portion may be formed at place where the back and front pressing planar portions are unified. Such a shirt holder is adapted for storage and protection of a shirt by way of simple steps of opening the front pressing planar portion, placing a folded shirt on the back pressing planar portion, and closing the front pressing planar portion so as to hold the shirt therebetween. In such a unified shirt holder, the back and front pressing planar portions may be unified at any of the edges of the back and front pressing planar portions, respectively, such as lower edges of the back and front pressing planar portions, upper edges of the back and front pressing planar portions, left or right edges of the back and front pressing planar portions. That is, the back and front pressing planar portions may be interconnected at any one of the respective edges thereof and need not be combined at more than one edges thereof, respectively.

[0009] In this connection, the present invention has adopted for improvement a shirt holder (which, hereinafter, may also be referred to as "shirt holder unified at lower edges") comprising a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt; a front pressing planar portion opposing the back pressing planar portion; a shirt collar protection portion projecting from the front press-

ing planar portion; and a connector portion bendably interconnecting a lower edge of the back pressing planar portion and lower edges of the front pressing planar portion and of the shirt collar protection portion; wherein the back pressing planar portion, the front pressing planar portion, the shirt collar protection portion and the connector portion are integrally formed.

**[0010]** That is, the shirt holder according to the invention comprises a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt, a front pressing planar portion opposing the back pressing planar portion, a shirt collar protection portion projecting from the front pressing planar portion, and a connector portion bendably interconnecting the lower edge of the back pressing planar portion and the lower edges of the front pressing planar portion and of the shirt collar protection portion, the back pressing planar portion, the front pressing planar portion, the shirt collar protection portion and the connector portion being integrally formed. Similarly to the foregoing, the shirt holder of the invention is adapted for storage and protection of a shirt by way of simple steps of opening the front pressing planar portion, placing a folded shirt on the back pressing planar portion and closing the front pressing planar portion so as to hold the shirt therebetween.

**[0011]** The aforementioned shirt holder unified at lower edges also has quite a simple construction and facilitates packing and unpacking of a shirt. In addition, such shirt holders each containing shirts therein can compactly be packed in a suitcase or trunk, as stacked on one another, with the shirts kept intact. The shirt holder also prevents positional offset of a shirt held therein during storage or use. Particularly, this shirt holder can prevent or control sliding-down of a shirt hung on rack for display at a shop. Further, the shirt holder can be fabricated at very low production costs.

**[0012]** The present invention has adopted a shirt holder for improvement (which, hereinafter, may also be referred to as "shirt holder unified at upper edges) comprising a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt; a front pressing planar portion opposing the back pressing planar portion; a shirt collar protection portion projecting from the front pressing planar portion; and a connector portion bendably interconnecting an upper edge of the back pressing planar portion and the upper edges of the front pressing planar portion and of the shirt collar protection portion; wherein the back pressing planar portion, the front pressing planar portion, the shirt collar protection portion and the connector portion are integrally formed.

**[0013]** That is, the shirt holder according to the invention comprises a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt, a front pressing planar portion opposing the back pressing planar portion, a shirt collar protection portion projecting from the front pressing planar

nar portion, and a connector portion bendably interconnecting the upper edge of the back pressing planar portion and the upper edges of the front pressing planar portion and of the shirt collar protection portion, the back pressing planar portion, the front pressing planar portion, the shirt collar protection portion and the connector portion being integrally formed. Thus, the shirt holder of the invention is adapted for storage and protection of a shirt by way of simple steps of opening the front pressing planar portion, placing a folded shirt on the back pressing planar portion and closing the front pressing planar portion so as to hold the shirt therebetween.

**[0014]** The aforementioned shirt holder unified at upper edges also has quite a simple construction and facilitates packing and unpacking of a shirt. In addition, such shirt holders each containing shirts therein can compactly be packed in a suitcase or trunk, as stacked on one another, with the shirts kept intact. The shirt holder also prevents positional offset of a shirt held therein during storage or use. Particularly, this shirt holder can prevent or control sliding-down of a shirt hung on rack for display at a shop. Further, the shirt holder can be fabricated at very low production costs.

**[0015]** The invention has further adopted for improvement a shirt holder (which, hereinafter, may also be referred to as "shirt holder unified at lateral edges") comprising a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt; a front pressing planar portion opposing the back pressing planar portion; a shirt collar protection portion projecting from the front pressing planar portion; and a connector portion bendably interconnecting either a left or right edge of the back pressing planar portion and either left or right edges of the front pressing planar portion and of the shirt collar protection portion; wherein the back pressing planar portion, the front pressing planar portion, the shirt collar protection portion and the connector portion are integrally formed.

**[0016]** That is, the shirt holder according to the invention comprises a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt, a front pressing planar portion opposing the back pressing planar portion, a shirt collar protection portion projecting from the front pressing planar portion, and a connector portion bendably interconnecting either a left or right edge of the back pressing planar portion and either left or right edges of the front pressing planar portion and of the shirt collar protection portion, the back pressing planar portion, the front pressing planar portion, the shirt collar protection portion and the connector portion being integrally formed. Similarly to the foregoing, the shirt holder of the invention is adapted for storage and protection of a shirt by way of simple steps of opening the front pressing planar portion, placing a folded shirt on the back pressing planar portion and closing the front pressing planar portion so as to hold the shirt therebetween.

**[0017]** The aforementioned shirt holder unified at lateral edges also has quite a simple construction and facilitates packing and unpacking of a shirt. In addition, such shirt holders each containing shirts therein can compactly be packed in a suitcase or trunk, as stacked on one another, with the shirts kept intact. The shirt holder also prevents positional offset of a shirt held therein during storage or use. Particularly, this shirt holder can prevent or control sliding-down of a shirt hung on rack for display at a shop. Further, the shirt holder can be fabricated at very low production costs.

**[0018]** It is to be noted here that in the shirt holder of the invention, the connector portion for interconnecting the upper and lower planar portions may be formed at any place where the upper and lower planar portions are interconnected, or at any one of the respective edges of the planar portions. That is, the connector portion may be formed at any one of the respective lower, upper, left and right lateral edges of the planar portions depending upon the purpose served by the shirt holder or the way it is used.

**[0019]** A material for forming the shirt holder of the invention is not particularly limited but synthetic resin materials are preferably used. The use of the synthetic resin material facilitates the fabrication or cutting of a mold employed for injection molding or vacuum forming the shirt holder of the invention. In addition, this allows for the use of a smaller molding machine, such as an injection molder, for forming the shirt holder. Hence, further reduction of the production costs for the separate-type shirt holder is achieved.

**[0020]** The separate-type shirt holder can accommodate variations of the fabric thickness or collar shape of a shirt to be held therein. In case where there are two types of shirts having a common collar shape but different fabric thicknesses, for example, it is only required to utilize back pressing planar portions (lower planar portions) having depths corresponding to the respective fabric thicknesses of the shirts. In the case of shirts having the same fabric thickness but different collar shapes, it is only required to utilize front pressing planar portions (upper planar portions) with such shirt collar protection portions as are suitable for the respective collar shapes of the shirts. In short, it is only required to utilize such a lower or upper planar portion as to correspond to a fabric thickness or a collar shape. Therefore, as to the separate-type shirt holder, lower planar portions of various depths and shapes as well as upper planar portions of various shapes may be fabricated beforehand such that planar portions corresponding to a fabric thickness and a collar shape of each shirt can be selected when a shirt holder is used. As described above, the lower and upper planar portions of the separate-type shirt holder can be fabricated quite easily and at low production costs.

**[0021]** Further, the separate-type shirt holder allows for separate storage and transportation of the lower and upper planar portions. More specifically, lower planar portions having an identical or similar

shape or size can be stacked on one another for storage whereas upper planar portions having an identical or similar shape or size can be stacked on one another for storage. Thus, the separate-type shirt holders can be stored in a compact manner. Additionally, the lower and upper planar portions can separately be carried, resulting in easy transportation.

**[0022]** As a matter of course, the unified shirt holders (shirt holder unified at lower edges, shirt holder unified at upper edges, and shirt holder unified at lateral edges) can also be stored in a compact manner because shirt holders with the back and front pressing planar portions and the shirt collar protection portions, which are identically or similarly configured and dimensioned, can be stacked on one another for storage. The unified shirt holder is adapted for storage by way of only simple steps of placing a folded shirt on the back pressing planar portion, followed by closing the front pressing planar portion. Hence, the unified shirt holder can be easily used. Since the back and front pressing planar portions are unified, a shirt holder of a suitable configuration for a shirt or the like to be packed is readily selected by quick observation. Further the unified shirt holder eliminates a fear of losing at least a part thereof, such as the back pressing planar portion and the front pressing planar portion, while it is stored to be put to use again.

**[0023]** The invention has adopted for improvement a shirt holder (which, hereinafter, may also be referred to as "unifiable shirt holder") comprising a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt; a front pressing planar portion opposing the back pressing planar portion; and a shirt collar protection portion, the shirt holder wherein the back pressing planar portion and the front pressing planar portion are separately formed, the front pressing planar portion is integrally formed with the shirt collar protection portion, a connector portion is integrally formed with the back pressing planar portion for connecting the front pressing planar portion and shirt collar protection portion therewith, and a connector portion is integrally formed with the front pressing planar portion and shirt collar protection portion for connecting the back pressing planar portion therewith.

**[0024]** That is, the shirt holder according to the invention comprises a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt, a front pressing planar portion opposing the back pressing planar portion, and a shirt collar protection portion, the back pressing planar portion and the front pressing planar portion being separately formed, the front pressing planar portion being integrally formed with the shirt collar protection portion, a connector portion being integrally formed with the back pressing planar portion for connecting the front pressing planar portion and shirt collar protection portion therewith, a connector portion being integrally formed with the front pressing planar portion and shirt

collar protection portion for connecting the back pressing planar portion therewith. In the unifiable shirt holder, the connector portions for interconnecting the upper and lower planar portions may be formed at any one of the respective lower, upper, left and right edges of the upper and lower planar portions.

**[0025]** The unifiable shirt holder is adapted for storage and protection of a shirt by way of only simple steps of placing a folded shirt on the lower planar portion and putting the upper planar portion over the lower planar portion so as to hold the shirt therebetween. Incidentally, the upper and lower planar portions of the unifiable shirt holder may be previously connected so that the holder may be used in a similar manner to the shirt holder unified at lateral edges. Otherwise, the unifiable shirt holder may be used in a manner such that after a shirt is placed on the lower planar portion, the upper and lower planar portions are interconnected and the upper planar portion is closed.

**[0026]** Similarly to the aforementioned separate-type shirt holder and unified shirt holders, the unifiable shirt holder has quite a simple construction and facilitates packing and unpacking of a shirt. In addition, such shirt holders each containing shirts therein can compactly be packed in a suitcase or trunk, as stacked on one another, with the shirts kept intact. The shirt holder can facilely be fabricated at reduced costs and also serves to prevent positional offset of a shirt held therein during storage.

**[0027]** The unifiable shirt holder allows for separate fabrication of the lower and upper planar portions and therefore, similarly to the separate-type shirt holder, the unifiable shirt holder is injection molded or vacuum formed at lower costs utilizing a mold facilely formed. When the unifiable shirt holder is not used or stored, the lower and upper planar portions may be separately stored like the separate-type shirt holder, or otherwise, they may be stored in a connected state like the unified shirt holder. In either case, those which are identically or similarly configured may be stacked on one another for storage.

**[0028]** It is to be noted here that in the unifiable shirt holder, the connector portions interconnecting the back planar portion and the front planar portion may provide a tentative connection or a permanent connection. In the case of the tentative connection, subsequent to the removal of a shirt, the back and front planar portions can be separated from each other for storage. Accordingly, the shirt holder can be compactly stored like the separate-type shirt holder. On the other hand, in the case of the permanent connection, the unifiable shirt holder is stored in a similar manner to the unified shirt holder during a period of from the removal of a shirt to the reuse of the shirt holder. This eliminates a fear of losing either the back pressing planar portion or the front pressing planar portion thereof.

(Fitting portion)

**[0029]** According to a preferred embodiment of the invention, a shirt holder is integrally formed with a fitting portion for engaging the back pressing planar portion with the front pressing planar portion, particularly engagement projections, or more particularly linear engagement projections. The engagement projections may be formed along the respective edges of the back and front pressing planar portions. The engagement projections may be formed on a part of or on the overall length of the respective edges of both pressing planar portions. A shirt holder with such engagement projections allows the back and front planar portions to be readily engaged with or disengaged from each other, thus facilitating the packing or unpacking of a shirt. Incidentally, the engagement projection may also be formed on the upper edge of the shirt collar protection portion.

**[0030]** Particularly where the aforesaid engagement projections of the shirt holder each have a rounded edge on its side facing the central portion of the shirt holder, the engagement projections softly abut against a shirt, thus eliminating a fear of producing wrinkle in the shirt. Additionally, the aforesaid engagement projections each may be tapered in section on an inward side thereof, i.e., on a side thereof facing the central portion of the shirt holder. Such an arrangement is preferred because the inside volume of the shirt holder for holding a garment with a collar such as a shirt is increased.

**[0031]** It is to be noted here that, of the engagement projection of the front pressing planar portion, parts thereof extending laterally of the collar protection portion may each extend from the lateral edges (left edge and/or right edge) of the collar protection portion. Since a folded shirt is decreased in thickness at the left and right side-end portions, the engagement projections extending from the lateral edges of the collar protection portion can more firmly hold the shirt in the shirt holder.

(Engagement Portion)

**[0032]** In accordance with a preferred embodiment of the invention, a shirt holder is constructed such that the back and front pressing planar portions are integrally formed with engagement portions for bringing the planar portions into engagement. Such engagement portions may be provided on the respective edges of the back and front planar portions. The engagement portions may be formed on a part of or on the overall length of the edges of the planar portions. The shirt holder having such engagement portions allows the back pressing planar portion to be readily engaged with or disengaged from the front planar portion, facilitating the packing and unpacking of a shirt. Incidentally, the engagement portion may be formed on the upper edge of the collar protection portion.

(Configuration)

**[0033]** The configuration of the shirt holder of the invention is not particularly limited, but preferred is a box-type shirt holder including a peripheral wall formed on the periphery of the back pressing planar portion, or more specifically, the peripheral wall to be fitted with the engagement projection formed on the periphery of the front pressing planar portion.

(Projection)

**[0034]** In accordance with a preferred embodiment of the invention, a shirt holder includes projections integrally formed with the back pressing planar portion and/or the front pressing planar portion and projecting inwardly thereof, or more particularly projecting inwardly from the opposite surface portions of the back and front planar portions. With this construction, the shirt holder can more positively prevent the positional offset of a shirt held therein. Further, the projections serve as a rib to reinforce the back pressing planar portion and/or the front pressing planar portion.

**[0035]** In accordance with a more preferred embodiment of the invention, a shirt holder includes the aforesaid projections vertically extend on the back and front pressing planar portions, respectively. The vertical projections on the back pressing planar portion preferably alternate with those on the front pressing planar portion in a transversely offset relation or more particularly in a slightly offset relation. Such an arrangement of the projections provides a further enhanced effect of preventing the positional offset of a shirt so that a shirt hung on a rack for display at a shop is prevented from sliding down in the holder. Additionally to such an effect, the above arrangement of the projections on the back and front planar portions provides a greater inside volume of the shirt holder for holding a shirt because the projections alternating with each other in a slightly offset relation are spaced greater from each other than the projections in a directly opposing relation. More specifically, a thickness of a packable shirt depends upon a spacing between the projections in an opposite relation. The shirt holder with the projections in an offset relation can hold therein a thick shirt having a thickness equivalent to a spacing between the projection of the back planar portion and the top surface of the front planar portion, or a spacing between the bottom surface of the back planar portion and the projection of the front planar portion. On the other hand, the shirt holder can compactly pack a thin shirt by compressing down a vertical dimension of the folded shirt between the front and back planar portions. Hence, despite the projections, the shirt holder can compactly store a shirt therein.

**[0036]** The projections may be formed on either one of the back and front planar portions or on neither of the planar portions. The aforesaid projections may be formed on the back planar portion and/or the front planar

portion in a bent pattern extending parallel with edges of a lower half portion of the collar protection portion. Otherwise, the projections may extend transversely in a parallel relation. The projections having any configuration and extending in any direction, including the above, which are arranged alternately on the back and the front planar portions in an offset relation, or particularly in a slightly offset relation, serve to prevent the positional offset of a shirt and can accommodate a thick shirt or compactly pack a folded shirt with its vertical dimension compressed down.

**[0037]** According to the invention, the configuration of the projections is not particularly limited but edges of the projections are preferably rounded. The projections with rounded edges softly abut against a shirt held in the shirt holder, preventing the wrinkling of the shirt. Hence, with the projections rounded at their edges effectively prevent the positional offset of a shirt held in the shirt holder without producing wrinkle in the shirt.

(Collar Protection Portion)

**[0038]** According to the invention, the configuration of the collar protection portion of the shirt holder is not particularly limited as long as it is configured to protect the collar of a garment. For example, the collar protection may be embodied by a projection of any of various shapes such as a hexagonal shape (tortoise-shell shape), a tetragonal shape including a trapezoidal shape, a circular shape, a generally circular shape and the like. Alternatively, the collar protection portion may have a generally semispherical shape like a dome. Although the collar protection portion preferably projects outwardly, a collar protection frame having any of various shapes such as a hexagonal shape (tortoise-shell shape), a trapezoidal shape and a generally circular shape may be formed as the collar protection portion inside the shirt holder.

**[0039]** The collar protection portion projecting from the front planar portion may have a depression at the center thereof. The collar protection portion with the depression is rigid enough to protect a shirt held in the holder. Hence, if multiple shirt holders are vertically stacked, the collar protection portions do not suffer damage. Since the collar protection portion has a configuration in correspondence to the shape of a shirt or the like, the positional offset (transverse offset or vertical offset) of a shirt held in the holder can be controlled or prevented.

**[0040]** In the collar protection portion with depression at the center thereof, the bottom surface of the depression may be rounded. With the rounded bottom of the depression of the collar protection portion, a shirt holder softly abuts a shirt held therein, eliminating a fear of producing wrinkle in the shirt. Further, the depression at the center of the collar protection portion may be depressed lower than the front pressing planar portion. The bottom of the depression of the collar protection

portion is depressed lower than the front planar portion so as to come into contact with a shirt held in a shirt holder for fixing the shirt at place. Thus, the collar protection portion of such a configuration serves not only to protect a shirt collar but also to fix a shirt or the like at place in the shirt holder. Incidentally, the shirt holder with the collar protection portion of such a configuration need not be provided with the aforementioned projections.

#### (Fastener Portion)

**[0041]** According to the invention, the back and front pressing planar portions are preferably provided with fastener portions in an integral manner, respectively. In accordance with the invention, a shirt holder can be constructed such that the back and front planar portions are each integrally formed with the fastener portion. The back and front planar portions can be maintained in engagement by interfitting the back and front planar portions by way of the aforementioned engagement projections. However, the provision of the fastener portions further ensures the engagement between the back and front planar portions. Thus, the fastener portion serves to prevent the shirt holder from accidentally opening during storage of a shirt, which, in turn, falls off from the shirt holder. Usable as such a fastener portion is a male-female fastener and the like. In this case, the back and front planar portions can be fastened to each other by way of a male fastener integrally formed with either one of the back and front planar portions and a female fastener integrally formed with the remaining planar portion. Alternatively, a fastening projection and a fastening depression may be formed in contact surface portions of the engagement projections of the back and front planar portions for fastening the back planar portion to the front planar portion.

#### (Flange)

**[0042]** In accordance with a preferred embodiment of the invention, a shirt holder is constructed such that flanges are integrally formed with the back and front planar portions on the respective edges thereof (preferably on the overall length of the edges). The flanges not only serve to reinforce the back and front planar portions but also prevent the front planar portion itself from being caught in the back planar portion.

#### (Hanger Hook)

**[0043]** A hanger hook added to the shirt holder allows the shirt holder to be hung on a bar horizontally projected. Thus, multiple shirt holders each holding a shirt therein can be hung on the horizontal bar in a laterally overlapping relation for display of the shirts. In this case, the projections projecting inwardly of the front planar portion and/or the back planar portion firmly hold

the shirt between the front and back planar portions thereby to prevent the shirt from sliding down within the shirt holder. Particularly, where the spacing between the back and front planar portions is progressively reduced toward the bottom of the shirt holder, the shirt can be more firmly held between the front and back planar portions so that the shirt is more positively prevented from sliding down within the shirt holder.

**[0044]** The shirt holder of the invention may also be constructed such that the back and front portions are not provided with the engagement portions for bringing the back and front planar portions into engagement. In this case, positive packing of a garment with a collar is accomplished by the aforementioned fastener portions integrally formed on the respective edges (preferably, at least two edges for each planar portion) of the back and the front planar portions. Otherwise, the connector portions for interconnecting the edges of the back and front planar portions may be provided for ensuring the packing of a garment with a collar.

**[0045]** Two shirt holders each holding a shirt or the like therein may be combined with each other in an inverted relation with their collar protection portions held inside, thereby to form a rectangular parallelepiped as a whole. Hence, the shirt holders can be more compactly packed in a carriage bag, such as a bag, trunk and the like. Further, the collar protection portion may be formed with a projection, which fits in a trench defined by the projection of the front pressing planar portion. Since the collar protection portion can be fixed by fitting its projection in the trench defined on the surface of the front pressing planar portion, two shirt holders can easily be combined with each other with their respective collar protection portions held inside and hence, the shirt holders can be stored even more compactly.

**[0046]** In the shirt holder of the invention, at least one of the back and front planar portions is preferably molded from a transparent plastic material in an integral manner. More preferably, the front pressing planar portion is molded from a transparent plastic material. A shirt holder with the front planar portion of a transparent plastic, in particular, allows a garment with a collar like as a shirt, to be viewed through the front planar portion, so that the kind and storage conditions of the shirt can be checked as it is. Alternatively, the shirt holder may be molded from an opaque plastic material in an integral manner. Such a transparent or opaque plastic material can be colored blue, red, yellow, brown or the like. Further, the shirt holder may be molded in an integral manner from a plastic material containing an additive such as a UV absorbing agent. The material for the shirt holder is not limited to these plastic materials, but a botanical material such as obtained from wood or leaves may be used. The shirt holder of the invention may be formed with a venthole, but the formation of the venthole is not critical. Further, the shirt holder of the invention is preferably imparted with an anti-bacterial property, but may be imparted with other properties.

[0047] Although the shirt holder of the invention having the engagement portions as described above is a closed box type shirt holder, the shirt holder may be constructed as an open non-box type shirt holder such that no side wall but for the connector portion is provided on the periphery of the shirt holder.

[0048] It is an object of the invention to provide a shirt holder of a very simple construction for holding a shirt, which ensures ready packing and unpacking of a shirt and can be packed in a suitcase or a trunk at a higher volumetric packing efficiency with the shape of the shirt kept intact. It is another object of the invention to provide a shirt holder which prevents the positional offset of a shirt during storage or use. It is further another object of the invention to provide a shirt holder which can be hung on a rack for display of a shirt at a shop while preventing the shirt from sliding down within the shirt holder, and can be fabricated at quite low production costs.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0049]

Fig. 1 is a perspective view illustrating a shirt holder in a closed state in accordance with one preferred embodiment of the present invention;

Fig. 2 is a front view of the shirt holder of Fig. 1;

Fig. 3 is a sectional view of the shirt holder taken along a line A-B in Fig. 2;

Fig. 4 is a plan view illustrating the shirt holder of Fig. 1 in an open state;

Fig. 5 is a perspective view illustrating a shirt holder in a closed state in accordance with another preferred embodiment of the invention;

Fig. 6 is a front view of the shirt holder of Fig. 5;

Fig. 7 is a sectional view of the shirt holder taken along a line A-B in Fig. 6;

Fig. 8 is a perspective view illustrating the shirt holder of Fig. 5 in an open state;

Fig. 9 is a perspective view illustrating a closed state of a shirt holder in accordance with another preferred embodiment of the invention;

Fig. 10 is a front view of the shirt holder of Fig. 9;

Fig. 11 is a sectional view of the shirt holder taken along a line A-B in Fig. 10;

Fig. 12 is a plan view illustrating the shirt holder of Fig. 9 in an open state;

Fig. 13 is a perspective view illustrating a closed state of a shirt holder in accordance with another preferred embodiment of the invention;

Fig. 14 is a front view of the shirt holder of Fig. 13;

Fig. 15 is a sectional view of the shirt holder taken along a line A-B in Fig. 14;

Fig. 16 is a plan view illustrating the shirt holder of Fig. 13 in an open state;

Fig. 17 is a plan view illustrating an open state of a shirt holder in accordance with another preferred

embodiment of the invention;

Fig. 18 is a plan view illustrating a disconnected state of connector portions of a shirt holder in accordance with one embodiment of the invention; Fig. 19 is a plan view illustrating the shirt holder of Fig. 18 in a connected state;

Fig. 20A is a side view of the connector portions whereas Fig. 20B is a perspective view thereof;

Fig. 21 is a plan view illustrating a connected state of connector portions of a shirt holder in accordance with another embodiment of the invention;

Fig. 22A is a schematic diagram illustrating a disconnected state of the connector portions of Fig. 21 whereas Fig. 22B is a schematic diagram illustrating a connected state thereof;

Fig. 23 schematically illustrates still another exemplary configuration of connector portions of a shirt holder in accordance with the invention, wherein Fig. 23A is a schematic diagram illustrating a disconnected state of the connector portions and Fig. 23B is a schematic diagram illustrating a connected state thereof;

Fig. 24 is a perspective view illustrating a shirt holder having no engagement portions in accordance with one embodiment of the invention;

Fig. 25 is a perspective view illustrating a shirt holder having no connector portions in accordance with another embodiment of the invention;

Fig. 26 is a sectional view illustrating a shirt holder with engagement projections having a tapered sectional form;

Fig. 27 is a sectional view illustrating a shirt holder including engagement projections extended from edges of the collar protection portion;

Fig. 28A is a sectional view illustrating a shirt holder including projections in an opposed relation whereas Fig. 28B is a sectional view illustrating a shirt holder including projections in a slightly offset relation;

Fig. 29 is a schematic sectional view illustrating a shirt contained in a shirt holder with its projections opposing each other in a slightly offset relation;

Fig. 30A is a plan view illustrating a disconnected state of a shirt holder including projections only on the front pressing planar portion thereof whereas Fig. 30B is a top plan view illustrating a disconnected state of a shirt holder including projections only on the back pressing planar portion thereof;

Fig. 31 is a plan view illustrating an exemplary configuration of projections of a shirt holder;

Fig. 32 is a plan view illustrating another exemplary configuration of projections of a shirt holder;

Fig. 33 is a top plan view illustrating a still another configuration of exemplary projections of a shirt holder;

Fig. 34 is a plan view illustrating an exemplary configuration of projections of shirt holder opposing each other in an offset relation;



Fig. 35 is a plan view illustrating another exemplary configuration of a shirt holder opposing each other in an offset relation;

Fig. 36 is a plan view illustrating a still another exemplary configuration of projections of a shirt holder in an offset relation; 5

Figs. 37A to 37F schematically illustrate various exemplary configurations of shirt collar protections of shirt holders;

Fig. 38 is a schematic diagram illustrating another exemplary configuration of a shirt collar protection; 10

Fig. 39 schematically illustrates a dome-like shirt collar protection portion of a streamlined exterior wall, wherein Fig. 39A is a plan view thereof as viewed from the upper edge of planar portions, Fig. 39B is a plan view thereof as viewed from lateral edges of the planar portions and Fig. 39C is a plan view thereof as viewed from the front; 15

Fig. 40A is a perspective view illustrating another exemplary configuration of a collar protection portion whereas Fig. 40B is a perspective view illustrating a used state of the shirt holder of Fig. 40A; 20

Fig. 41 is a plan view illustrating another exemplary configuration of a collar protection portion;

Fig. 42A is a sectional view of the shirt holder taken along a line E-F in Fig. 40A whereas Figs. 42B and 42C are sectional views each illustrating a further exemplary configuration of a collar protection portion; 25

Figs. 43A to 43C are sectional views illustrating shirt holders without projections in corresponding relation with Figs. 42A to 42C, respectively; 30

Figs. 44A to 44C are sectional views illustrating shirt holders respectively including a collar protection portion continuous to engagement projections and corresponding to Figs. 42A to 42C; 35

Figs. 45A to 45C are sectional views illustrating shirt holders respectively including a collar protection portion continuous to engagement projections and corresponding to Figs. 43A to 43C; 40

Fig. 46A is a sectional view illustrating another exemplary configuration of a collar protection portion whereas Fig. 46B is a sectional view illustrating another exemplary configuration of a collar protection portion of a shirt holder without projections; 45

Fig. 47 is a plan view illustrating a shirt holder having fastener portions;

Fig. 48 is a perspective view illustrating the fastener portions of Fig. 47;

Fig. 49 is a perspective view illustrating another exemplary configuration of fastener portions; 50

Fig. 50 is a fragmentary enlarged sectional view illustrating one exemplary configuration of engagement projections;

Fig. 51A is a front view illustrating a used state of a shirt holder with engagement portions whereas Fig. 51B is a sectional view of the shirt holder taken along a line C-D in Fig. 51A; 55

Fig. 52A is a fragmentary enlarged sectional view illustrating the engagement portions of Fig. 51 whereas Fig. 52B is a fragmentary enlarged sectional view illustrating another exemplary configuration of engagement portions; Fig. 53 is a plan view illustrating a disconnected state of a shirt holder with flanges; Fig. 54 is a sectional view of the shirt holder taken along a line C-D in Fig. 53; Figs. 55A to 55C are top plan views illustrating various exemplary configurations of flanges with hanger hooks; Fig. 56 is a perspective view illustrating one exemplary configuration of a hanger hook; Fig. 57 is a perspective view illustrating another exemplary configuration of a hanger hook; Fig. 58 is a fragmentary perspective view illustrating a hook of the hanger hook of Fig. 57; Fig. 59 is a perspective view illustrating one way of use of shirt holders in accordance with the invention; Fig. 60 is a side view illustrating another way of use of shirt holders in accordance with the invention; Fig. 61 is a plan view illustrating a disconnected state of a shirt holder having flanges formed with small through-holes for connection; Fig. 62 illustrates one exemplary configuration of a fastener member wherein Fig. 62A is a plan view thereof and Fig. 62B is a side view thereof; Fig. 63 illustrates another exemplary configuration of a fastener member wherein Fig. 63A is a plan view thereof and Fig. 63B is a side view thereof; Fig. 64 illustrates a disconnected state of a shirt holder having flanges integrally formed with fasteners for connection in accordance with the invention, wherein Fig. 64A is a plan view thereof and Fig. 64B is a side view thereof; Fig. 65 is a side view illustrating another exemplary configuration of integrally formed fasteners, wherein Fig. 65A is a side view illustrating the fastener on a back pressing planar portion and Fig. 65B is a side view illustrating the fastener on a front pressing planar portion; Fig. 66 is a schematic diagram illustrating another exemplary configuration of a shirt collar protection; Fig. 67A is a perspective view illustrating another exemplary configuration of a collar protection portion whereas Fig. 67B is a sectional view of the shirt holder taken along a line E-F in Fig. 67A; Fig. 68A is a perspective view illustrating another exemplary configuration of a collar protection portion whereas Fig. 68B is a sectional view of the shirt holder taken along a line E-F in Fig. 68A; Fig. 69A is a perspective view illustrating another exemplary configuration of an engagement projection of the front planar portions whereas Fig. 69B is a perspective view illustrating another exemplary configuration of an engagement projection of the back planar portions; Fig. 70A is a sectional view of the shirt holder taken along a line C-D in Fig. 69A whereas Fig. 70B is a sectional view of the shirt holder taken along a line E-F in Fig. 69B; Fig. 71A and 71B are schematic diagrams each illustrating

another exemplary configuration of a shirt collar protection; Fig. 72 schematically illustrates a configuration of a shirt collar protection in Fig.71A, wherein Fig. 72A is a plan view thereof as viewed from the upper edge of planar portions and Fig. 72B is a plan view thereof as viewed from lateral edges of the planar portions; Fig 73A is a perspective view illustrating another exemplary configuration of an engagement projection of the front planar portions. Fig 73B is a perspective view illustrating another exemplary configuration of an engagement projection of the back planar portions; Fig 74A is a sectional view of the shirt holder taken along a line C-D in Fig.73A whereas Fig. 74B is a sectional view of the shirt holder taken along a line E-F in Fig.73B; Fig.75 is a front view showing the other example of the fastener.Fig.76 is a front view showing the other example of the fastener.

Fig.77 is a front view showing the other example of the fastener; Fig.78 is the figure of the back pressing planar portion with the reinforcement portion of the ditch. Fig.78A is a front view whereas Fig.78B is a sectional view of the shirt holder taken along a line C-D in Fig.78A; Fig.79 is the figure of the back pressing planar portion with the stair-like reinforcement portion. Fig.79A is a front view whereas Fig.79B is a sectional view of the shirt holder taken along a line C-D in Fig.79A.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0050] The present invention will hereinafter be described in further detail with reference to the attached drawings.

(Separate-type Shirt Holder)

[0051] Fig. 1 is a perspective view illustrating a shirt holder in a closed state in accordance with one preferred embodiment of the invention. Referring to Fig. 1, a back pressing planar portion and a front pressing planar portion, which are separately formed, are fitted with each other. Fig. 2 is a front view of the shirt holder shown in Fig. 1 whereas Fig. 3 is a sectional view of the shirt holder taken along a line A-B in Fig. 2. Fig. 4 is a plan view illustrating the shirt holder of Fig. 1 in an open state, or a state in which the back pressing planar portion is disconnected from the front pressing planar portion. The shirt holder according to the embodiment of the invention is a box-type shirt holder entirely molded from a transparent plastic material.

[0052] A back pressing planar portion 1 is configured like a rectangular container having substantially the same dimensions as a folded shirt G. A front pressing planar portion 2 has substantially the same width and length as the back pressing planar portion 1. A collar protection portion 3 is of a tortoise-shell shape, as

viewed from the front, having an upper edge 8A, a lower edge 8B extending parallel to the upper edge 8A, and chevron-shaped edges 9A, 10A and 9B, 10B disposed in a symmetrical relation, and projects from the front pressing planar portion 2 in a parallel relation.

[0053] The back pressing planar portion 1 has its peripheral portion standing upright to form a peripheral wall 11 and is shaped like a flat tray as a whole. The front pressing planar portion 2 is formed with projections 12 (or trenches as viewed from the front in a closed state) as engagement projections 7, the projections engaged with the peripheral wall 11 of the back pressing planar portion 1. Inward edges of the projections 12 are continuous to the front pressing planar portion 2. Incidentally, the present invention includes a shirt holder with the engagement portions which are not formed of the projections 12.

[0054] The shirt holder according to the above embodiment is used in a manner as shown in Fig. 4. A shirt 58, for example, is loaded in the container-like back pressing planar portion 1, and the front pressing planar portion 2 is laid over the front face of the shirt. A cavity of the collar protection portion 3 is fitted around the outer periphery of a collar 58a of the shirt 58 and at the same time, the engagement projections 7 formed on the peripheral portion of the front pressing planar portion 2 are fitted along the peripheral wall 11 of the back pressing planar portion 1. Thus, the whole body of the shirt 58 is compactly packed in the shirt holder with its collar 58a protected by the collar protection portion 3. As shown in Figs. 2 to 4, the shirt 58 is supported between projections 13 and 14 projecting inwardly of the front planar portion 2 and projections 15 and 16 projecting inwardly of the back planar portion 1 and hence, stably held in the shirt holder.

[0055] As described above, the back planar portion 1 and the front planar portion 2 each have a pair of vertically extending projections 13, 14 and 15, 16 for prevention of positional offset of a shirt, as shown in Figs. 1 and 4. According to the embodiment hereof, the projections 13, 14 and the projections 15, 16 are formed on the front planar portion 2 and the back planar portion 1 in an opposed relation, respectively. Thus, the projections serve to prevent the positional offset of the shirt within the shirt holder, thereby ensuring stable packing of the shirt. Additionally, the projections contribute to an increased strength of the back and front planar portions.

(Shirt Holder Unified at Lower Edges)

[0056] Fig. 5 is a perspective view illustrating a shirt holder in a closed state according to another preferred embodiment of the invention. The shirt holder of Fig. 5 is constructed such that a lower edge of the back pressing planar portion and a lower edge of the front pressing planar portion are interconnected. Fig. 6 is a front view illustrating the shirt holder of Fig. 5 whereas Fig. 7 is a sectional view of the shirt holder taken along a line A-B

in Fig. 6. Fig. 8 is a plan view illustrating the shirt holder of Fig. 5 in an open state. The shirt holder of this embodiment is a box-type shirt holder entirely molded from a transparent plastic.

**[0057]** The back pressing planar portion 1 is configured like a rectangular container having substantially the same dimensions as a folded shirt G. The front pressing planar portion 2 has substantially the same width and length as the back pressing planar portion 1. The collar protection portion 3 is of a tortoise-shell shape, as viewed from the front, having the upper edge 8A, the lower edge 8B extending parallel to the upper edge 8A, and the chevron-shaped edges 9A, 10A and 9B, 10B disposed in a symmetrical relation, and projects from the front pressing planar portion 2 in a parallel relation.

**[0058]** A connector portion 38 is formed integrally with the back planar portion 1 and the front planar portion 2 to resiliently connect a lower edge 37a of the back planar portion 1 with a lower edge 37b of the front planar portion 2 for opening and closing of the front planar portion 2. The shirt holder is divided into a lower portion and an upper portion by the connector portion 38. The lower portion is shaped like a flat tray with a peripheral portion thereof standing upright to form the peripheral wall 11, while the upper portion has the projections 12 (or trenches as viewed from the front in a closed state) formed as the engagement projections 7 on the peripheral portion thereof for engagement with the peripheral wall 11 of the lower portion. The inward edges of the projections 12 are continuous to the front pressing planar portion 2. Incidentally, the present invention includes a shirt holder with the engagement portions which are not formed of the projections 12.

**[0059]** The shirt holder according to the above embodiment is used in a manner as shown in Fig. 8. A shirt 58, for example, is loaded in the container-like back pressing planar portion 1, and the front pressing planar portion 2 is folded along the connector portion 38. The cavity of the collar protection portion 3 is fitted around the outer periphery of a collar 58a of the shirt 58 and at the same time, the engagement projections 7 formed on the peripheral portion of the front planar portion 2 are fitted along the peripheral wall 11 of the back planar portion 1. Thus, the whole body of the shirt 58 is compactly packed in the shirt holder with its collar 58a protected by the collar protection portion 3. As shown in Figs. 6 to 8, the shirt 58 is supported between the projections 13 and 14 projecting inwardly of the front planar portion 2 and the projections 15 and 16 projecting inwardly of the back planar portion 1 and hence, stably held in the shirt holder.

(Shirt Holder Unified at Upper Edges)

**[0060]** Fig. 9 is a perspective view illustrating a shirt holder in a closed state according to another preferred embodiment of the invention. The shirt holder of Fig. 9

is constructed such that an upper edge of the back pressing planar portion and an upper edge of the front pressing planar portion are connected with each other. Fig. 10 is a front view of the shirt holder shown in Fig. 9 whereas Fig. 11 is a sectional view of the shirt holder taken along a line A-B in Fig. 10. Fig. 12 is a plan view illustrating the shirt holder of Fig. 9 in an open state. The shirt holder of this embodiment is a box-type shirt holder entirely molded from a transparent plastic.

**[0061]** The back pressing planar portion 1 is configured like a rectangular container having substantially the same dimensions as a folded shirt G. The front pressing planar portion 2 has substantially the same width and length as the back pressing planar portion 1. The collar protection portion 3 is of a tortoise-shell shape, as viewed from the front, having the upper edge 8A, the lower edge 8B extending parallel to the upper edge 8A, and the chevron-shaped edges 9A, 10A and 9B, 10B disposed in a symmetrical relation, and projects from the front pressing planar portion 2 in a parallel relation.

**[0062]** A connector portion 40 is formed integrally with the back pressing planar portion 1 and the front pressing planar portion 2 to resiliently connect an upper edge 39a of the back planar portion 1 with an upper edge 39b of the front planar portion 2 for opening and closing of the front planar portion 2. The shirt holder is divided into a lower portion and an upper portion by the connector portion 40. The lower portion is shaped like a flat tray with a peripheral portion thereof standing upright to form the peripheral wall 11, while the upper portion has the projections 12 (or trenches as viewed from the front in a closed state) formed as the engagement projections 7 on the peripheral portion thereof for engagement with the peripheral wall 11 of the lower portion. The inward edges of the projections 12 are continuous to the front pressing planar portion 2. Incidentally, the present invention includes a shirt holder with the engagement portions which are not formed of the projections 12.

**[0063]** The shirt holder according to the above embodiment is used in a manner as shown in Fig. 12. A shirt 58, for example, is loaded in the container-like back pressing planar portion 1, and the front pressing planar portion 2 is folded along the connector portion 40. The cavity of the collar protection portion 3 is fitted around the outer periphery of a collar 58a of the shirt 58 and at the same time, the engagement projections 7 formed on the peripheral portion of the front pressing planar portion 2 are fitted along the peripheral wall 11 of the back pressing planar portion 1. Thus, the whole body of the shirt 58 is compactly packed in the shirt holder with its collar 58a protected by the collar protection portion 3. As shown in Figs. 10 to 12, the shirt 58 is supported between the projections 13 and 14 projecting inwardly of the front planar portion 2 and the projections 15 and 16 projecting inwardly of the back planar portion 1 and hence, stably held in the shirt holder.

(Shirt Holder Unified at Lateral Edges)

**[0064]** Fig. 13 is a perspective view illustrating a shirt holder in a closed state according to another preferred embodiment of the invention. The shirt holder of Fig. 13 is constructed such that a left edge of the back pressing planar portion and a left edge of the front pressing planar portion are connected with each other. Fig. 14 is a front view illustrating the shirt holder of Fig. 13 whereas Fig. 15 is a sectional view of the shirt holder taken along a line A-B in Fig. 14. Fig. 16 is a plan view illustrating the shirt holder of Fig. 13 in an open state. The shirt holder of this embodiment is a box-type shirt holder entirely molded from a transparent plastic.

**[0065]** The back pressing planar portion 1 is configured like a rectangular container having substantially the same dimensions as a folded shirt G. The front pressing planar portion 2 has substantially the same width and length as the back pressing planar portion 1. The collar protection portion 3 is of a tortoise-shell shape, as viewed from the front, having the upper edge 8A, the lower edge 8B extending parallel to the upper edge 8A, and the chevron-shaped edges 9A, 10A and 9B, 10B disposed in a symmetrical relation, and projects from the front pressing planar portion 2 in a parallel relation.

**[0066]** A connector portion 4 is formed integrally with the back planar portion 1 and the front planar portion 2 to resiliently connect a left edge 5 of the back planar portion 1 with a left edge 6 of the front planar portion 2 for opening and closing of the front planar portion 2. The shirt holder is divided into a lower portion and an upper portion by the connector portion 4. The lower portion is shaped like a flat tray with a peripheral portion thereof standing upright to form the peripheral wall 11, while the upper portion has the projections 12 (or trenches as viewed from the front in a closed state) formed as the engagement projections 7 on the peripheral portion thereof for engagement with the peripheral wall 11 of the lower portion. The inward edges of the projections 12 are continuous to the front pressing planar portion 2. Incidentally, the present invention includes a shirt holder with the engagement portions which are not formed of the projections 12.

**[0067]** The shirt holder according to the above embodiment is used in a manner as shown in Fig. 16. A shirt 58, for example, is loaded in the container-like back planar portion 1, and the front planar portion 2 is folded along the connector portion 4. The cavity of the collar protection portion 3 is fitted around the outer periphery of a collar 58a of the shirt 58 and at the same time, the engagement projections 7 formed on the peripheral portion of the front planar portion 2 are fitted along the peripheral wall 11 of the back planar portion 1. Thus, the whole body of the shirt 58 is compactly packed in the shirt holder with its collar 58a protected by the collar protection portion 3. As shown in Figs. 14 to 16, the shirt 58 is supported between the projections 13 and 14 pro-

jecting inwardly of the front planar portion 2 and the projections 15 and 16 projecting inwardly of the back planar portion 1 and hence, stably held in the shirt holder.

**[0068]** Incidentally, the shirt holder of the invention may be constructed such that a connector portion 4a is integrally formed with the planar portions 1 and 2 to resiliently interconnect the respective right edges thereof, whereby the same effect as the above can be attained. Fig. 17 is a front view illustrating such a shirt holder in an open state. This shirt holder includes the projections 12 as the engagement projections 7 but not the aforementioned projections 13 to 16. This shirt holder is used in a manner as shown in Fig. 17. A shirt, for example, is loaded in the container-like back planar portion 1, and the front planar portion 2 is folded along the connector portion 4a. The cavity of the collar protection portion 3 is fitted around the outer periphery of a collar of the shirt and at the same time, the projections 12 as the engagement projections 7 formed on the peripheral portion of the front planar portion 2 are fitted along the peripheral wall 11 of the back planar portion 1. Thus, the whole body of the shirt is compactly packed in the shirt holder with its collar protected by the collar protection portion 3.

(Unifiable Shirt Holder)

**[0069]** In accordance with the invention, there may be provided a shirt holder (unifiable shirt holder) comprising the back pressing planar portion and the front pressing planar portion, which are formed as separate components but unifiable when a shirt is packed in the shirt holder.

**[0070]** Fig. 18 is a plan view illustrating a disconnected state of the back and front pressing planar portions of a unifiable shirt holder according to one embodiment of the invention. The shirt holder of Fig. 18 is adapted for connection between the lower edge of the back planar portion 1 and the lower edge of the front planar portion 2. Fig. 19 is a front view illustrating an open state of the shirt holder of Fig. 18 having the back and front pressing planar portions connected to each other.

**[0071]** This shirt holder is adapted for connection between a connector portion 61 of the back planar portion and a connector portion 59 of the front planar portion and likewise, between connector portions 62 and 60. Fig. 20 illustrates an exemplary configuration of the connector portion 61 of the back planar portion and the connector portion 59 of the front planar portion of the shirt holder of Fig. 18, the connector portions are interconnected. Fig. 20A is a side view illustrating the connector portions 59 and 61 in a connected state whereas Fig. 20B is a perspective view illustrating the connector portions 59 and 61 in a connected state. More specifically, the connection between the back and front planar portions can be established by engaging a distal end of the connector portion 59 of the front planar portion with

a cylinder body of the connector portion 61 of the back planar portion. With this connection method, the connection between the back and front planar portions can be canceled when the shirt holder is not used so that the back planar portion is separated from the front planar portion.

**[0072]** According to the invention, the unifiable shirt holder may include the connector portions of the back and front planar portions configured like those shown in Figs. 21 and 22. Fig. 22A schematically illustrates connector portions in a disconnected state whereas Fig. 22B schematically illustrates the connector portions in a connected state.

**[0073]** Referring to Fig. 22, a connector portion 63 of the front planar portion 2 is inserted in a connector portion 64 of the back planar portion 1 and subsequently, a connector pin 65 is inserted through a through hole 66 of the connector portion 63 and through holes 67, 68 of the connector portion 64. Thus, the back planar portion is connected with the front planar portion. Incidentally, the connector pin 65 so inserted may be bonded to the through holes 67 and/or 68 of the connector portion 64 by means of an adhesive for prevention of slip-off of the connector pin.

**[0074]** Alternatively, there may be employed a pair of connector pins 65, each having a length smaller than a half of the minimum distance between the through holes 67 and 68 and greater than a length of each through hole. In this case, the connector portion 63 of the front planar portion is inserted in the connector portion 64 of the front planar portion. Subsequently, one of the connector pins 65 is inserted through the through hole 67 and into the through hole 66 while the other connector pin 65 is inserted through the through hole 68 and into the through hole 66, whereby the back and front planar portions can be interconnected. Similarly to the aforementioned connector pin 65, the connector pins 65 may be bonded to the through holes (67, 68) by means of an adhesive for prevention of slip-off of the connector pins.

**[0075]** Fig. 23 schematically illustrates still another exemplary configuration of connector portions according to the invention. Fig. 23A is a schematic diagram illustrating a disconnected state of the connector portions whereas Fig. 23B is a schematic diagram illustrating a connected state thereof. As shown in Fig. 23, connector portions 631 of the front planar portion are already formed with projections 632 adapted to fit into the through holes 67, 68 of the connector portion 64, thereby establishing the connection between the planar portions in a snap.

(Shirt Holders in Other Modes)

**[0076]** According to the invention, the shirt holder may also be constructed such that the engagement projections for engagement between the back and front planar portions are not provided. As shown in Fig. 24,

for example, the shirt holder of the invention may be constructed such that the shirt holder includes a connector portion 46 bendably interconnecting an upper edge 42 of the back planar portion and upper edges of the front planar portion and of the shirt collar protection portion and integrally formed therewith, and projections 47 projecting inwardly of opposite surfaces of the back and front planar portions, respectively. Since this shirt holder is not formed with the engagement portions, there is provided a connector member 50 for interconnecting lower portions 48 and 49 of the back and front planar portions 41 and 43, thereby assuredly holding therein a garment with a collar, such as a shirt. It is to be noted here that reference numerals 51 and 52 in Fig. 24 denote an open space, respectively.

**[0077]** It should be appreciated that the shirt holder of Fig. 24 may not include the connector portion 46. In this case, the shirt holder may include a connector member for interconnecting the upper edge 42 of the back planar portion 41 and the upper edge of the front planar portion 43 and shirt collar protection portion 44, the connector member being used in combination with the connector member 50 for interconnection between the lower portions 48 and 49 of the back and front planar portions 41 and 43. Alternatively, the shirt holder may have a connector member for interconnection between the left edges of the back and front planar portions 41 and 43 and a connector member for interconnection between the right edges of the back and front planar portions 41 and 43.

**[0078]** According to another embodiment of the invention, a shirt holder, as shown in Fig. 25, may be provided with another form of connector member 53 for fastening the lower portions 48 and 49 of the back and front planar portions 41 and 43 to each other. The connector member 53 has a detachable facial fastener 54 disposed in a middle portion thereof and comprises a pair of belt members 55 and 56 which are respectively attached to opposite side edges of the back planar portion 41. Thus, the front planar portion 43 is fastened to the back planar portion by the belt members 55 and 56.

**[0079]** As shown in Fig. 26, the shirt holder according to the invention may preferably include projections 12a as the engagement portions 7, each of which has a generally V-shaped sectional form or tapered cross section 57 on an inward side thereof, i.e., on a side facing the central portion of the shirt holder. Such an arrangement is preferred because the inside volume of the shirt holder for holding a garment with a collar such as a shirt is increased.

**[0080]** The collar protection portion may be formed continuously to the engagement projections formed on the peripheral portion of the front pressing planar portion. Fig. 27A is a sectional view illustrating a shirt holder constructed such that the collar protection portion 3 continues to the projections 12b of the engagement portion 7 on the peripheral portion of the front planar portion via the lateral end portions of the collar

protection portion, and that the engagement projections 12b are tapered in section. A folded shirt defines lateral sides reduced in thickness and therefore, the shirt holder of a construction shown in Fig. 27A can more firmly hold the lateral sides of the folded shirt. As shown in Fig. 27B, the back pressing planar portion 1 is projected at the peripheral portion thereof so that a spacing between the opposite surfaces of the back and front planar portions 1 and 2 is reduced at the peripheral portions thereof.

(Projection)

**[0081]** Referring to Figs. 1 to 16, the back pressing planar portion 1 and the front pressing planar portion 2 are respectively formed with the projections 13 to 15 for prevention of positional offset of a shirt. The projections on the planar portions 1 and 2 may be arranged in an overlapping relation or in a slightly offset relation when the shirt holder is closed. The projections of Figs. 1 to 16 are formed on opposite surface portions of both planar portions and extend longitudinally thereof in an overlapping relation, as shown in Fig. 28A. On the other hand, the projections of Fig. 28B are arranged in a transversely slightly offset relation. In Fig. 28B, the projections on the back pressing planar portion 1 and those on the front pressing planar portion 2 are transversely offset relative to each other. That is, projections 15a and 16a on the back planar portion are positioned inwardly, or closer to the center of the shirt holder, relative to projections 13a and 14a on the front planar portion. Such projections arranged in an offset relation are more effective to prevent the positional offset of a shirt within the shirt holder, thus ensuring stable packing of the shirt.

**[0082]** As shown in Fig. 29, particularly preferred is a shirt holder constructed such that the projections 15b and 16b on the back planar portion 1 and the projections 13b and 14b on the front planar portion 2 are arranged alternately on the opposite surface portions thereof in a transversely slightly offset relation. Such an arrangement of the projections is more preferred because the projections are in an alternating relation with the engagement projections 12 on the peripheral portion of the front pressing planar portion 2.

**[0083]** In either cases as shown in Figs. 28B and 29, the projections formed alternately on the opposite surface portions of the back and front pressing planar portions 1 and 2 in a slightly offset relation are effective to prevent the positional offset of a shirt held in the shirt holder. Additionally, as compared with the arrangement of the projections on the back and front planar portions in an opposing relation, the projections on the back planar portion are spaced farther from those on the front planar portion so that the inside volume of the shirt holder for holding a shirt can be increased. A reference numeral 58 in Fig. 29 denotes the shirt.

**[0084]** Although the projections of the invention are

preferably formed on the surface portions of both the back and front planar portions, they may be formed on either of the two planar portions or on neither of them. Fig. 30 is a plan view illustrating the projections formed on either of the planar portions. More specifically, Fig. 30A illustrates the projections formed only on the front pressing planar portion whereas Fig. 30B illustrates the projections formed only on the back pressing planar portion. The shirt holders of such configurations are also effective to prevent the positional offset of a shirt. The effect of preventing the positional offset of a shirt can be further enhanced by controlling a spacing between the planar portions.

**[0085]** The projections of the invention may be configured in various ways. As shown in Fig. 30, projections 17, 17 may each be configured into a bent pattern extending parallel to edges of a lower half portion of the tortoise-shell shaped collar protection portion 3. As shown in Fig. 32, projections 18, 18 may each extend transversely in parallel to each other. As shown in Fig. 33, projections 19 may be formed in an X shape on the back pressing planar portion 1. As shown in Figs. 34 and 35, projections 171 or 181 are preferably formed on the back pressing planar portion 1 in a slightly offset relation with the projections 17 or 18 formed on the front pressing planar portion 2. In the case of the projections 19 formed in an X shape on the back pressing planar portion 1, it is preferred to form generally L-shaped projections 191 and a generally V-shaped projection 192 on the front pressing planar portion 2 in a slightly offset relation with the X-formed projections 19 on the back pressing planar portion 1, as shown in Fig. 36. The generally L-shaped projections 191 are configured so as to circumvent the shirt collar protection portion 3.

(Shirt Collar Protection Portion)

**[0086]** The collar protection portion according to the invention may be configured in any one of various ways besides the tortoise-shell shape shown in Fig. 1. For example, the collar protection portion may be shaped like a disk 3a with its top and bottom portions cut off as shown in Fig. 37A, or may be of a trapezoidal shape 3b as shown in Fig. 37B, of a circular or generally circular shape 3c as shown in Fig. 37C, of a generally rectangular shape 3d as shown in Fig. 37D, of a pentahedral shape 3e as shown in Fig. 37E, or may have an arcuate portion 3f extending from the right edge to the left edge of the planar portion 2 as shown in Fig. 37F, or may be of any one of other polygons, such as a triangle, a quadrangle and the like. Incidentally, the polygonal shape is not limited to a regular polygonal shape, such as a regular hexagonal shape, but may be any suitable form that conforms to the shape of a collar. In a collar protection portion 302 of a tortoise-shell shape, as shown in Fig. 38 for example, a side 302a thereof is greater than a side 302d in length, a side 302b or 302f thereof is smaller than a side 302c or a side 302e in length. In any

of the aforesaid cases, the collar protection portion 3 preferably has a vertical length M thereof which is not greater than L/2 (L is a vertical length of the front pressing planar portion 2).

**[0087]** The configuration of the collar protection portion may be the configuration as shown in Fig. 66A and B, which provides the cutting configuration protecting the lower side of the shirt neck.

**[0088]** Referring to Figs. 37 and 38, both collar protection portions 3 are each defined by walls standing upright from the front pressing planar portion 2. However, in the light of soft protection of a shirt collar, the collar protection portion 3 preferably has rounded edges extending from the top surface thereof to the wall surfaces.

**[0089]** According to the invention, the shirt holder may include a collar protection portion 301 configured generally like a semisphere with a streamlined exterior wall, such as a dome. Such a collar protection portion provides a more soft protection of a shirt collar. Fig. 39 illustrates an exemplary configuration of the dome-shaped collar protection portion. Fig. 39A is a plan view as viewed from the upper edge of the front pressing planar portion, Fig. 39B is a plan view as viewed from a lateral edge of the front pressing planar portion and Fig. 39C is a plan view as viewed from the front.

**[0090]** According to the invention, the configuration of the collar protection portion is not particularly limited as long as it is so configured as to protect a collar. The collar protection portion may project from the surface of the front pressing planar portion and be depressed at the center thereof. Figs. 40A and 40B illustrates an exemplary configuration of a collar protection portion 303 shaped like a tortoise shell and depressed at the central portion thereof. As shown in Fig. 40A, the tortoise-shell shaped collar protection portion 303 has a depressed central portion 303a. Fig. 40B is a perspective view illustrating a shirt holder having a tortoise-shell shaped collar protection portion with the depressed central portion and holding therein a shirt. Such a collar protection portion defines a space conforming to the shape of a collar of a shirt or the like, thereby contributing to more positive protection of the collar. The depressed central portion of the collar protection portion ensures the prevention of the positional offset (in both the lateral and vertical directions) of a shirt held in the shirt holder. Hence, the shirt holder with the collar protection portion 303 of such a configuration ensures stable packing of a shirt even if the back and front planar portions 1 and 2 are not formed with the projections 13 to 16 projecting inwardly therefrom. According to the invention, the collar protection portion may be constructed such as to have the depression at the center thereof. Further, with such a collar protection portion, the shirt holder may include the projections projecting inwardly from the back and/or the front planar portions or may include no projections. Fig. 41 illustrates an open state of a shirt holder constructed such that the

back and front planar portions 1 and 2 are not provided with the inwardly projecting projections and the collar protection portion 303 is depressed at the central portion thereof. The collar protection portion 303 can securely hold a shirt at place and therefore, the lateral and vertical offset of the shirt held therein can be controlled or prevented.

**[0091]** Further, the collar protection portion comprising the outward projection from the front planar portion and the depression at the center thereof has such a great strength as to reduce damage imposed thereon by a pressure due to vertical stacking of shirt holders. Thus, the shirt holder with such a collar protection portion provides more positive protection of the collar of a shirt held therein. The collar protection portion of such a configuration is included in preferred embodiments of the invention. Incidentally, a reference character G in Fig. 39 denotes a folded shirt.

**[0092]** Fig. 42A is a sectional view of the shirt holder taken along a line E-F in Fig. 40. In the collar protection portion 303, the bottom of the central depression 303a has a tortoise-shell shape similarly to the outer periphery of the collar protection portion. Figs. 42B and 42C are sectional views taken along the same line with that of Fig. 42A, which illustrate exemplary configurations of collar protection portions with central depressions, respectively. As shown in Fig. 42B, a central depression 303b may have a rounded bottom. As seen in Fig. 42C, the collar protection portion may comprise a rounded projection 303c and a rounded depression 303d.

**[0093]** With the collar protection portions of such configurations, the shirt holder may include the projections projecting inwardly from the back and front planar portions 1 and 2 or may include no projections at all. Figs. 43A to 43C are sectional views illustrating shirt holders wherein the collar protection portions are depressed at the center thereof and the back and front planar portions are not provided with inwardly projecting projections. The shirt holders of Figs. 43A to 43C correspond to those shown in Figs. 42A to 42C, respectively. The collar protection portions with the central depressions each serve to protect a shirt and prevent the lateral and vertical positional offset of the shirt held in the shirt holder.

**[0094]** Similarly to the shirt holders of Figs. 27A to 27C, the collar protection portions with the central depressions may continue to the engagement projections on the peripheral portion of the front pressing planar portion. Figs. 44A to 44C are sectional views illustrating shirt holders constructed such that the collar protection portion continues to the engagement projections 7 on the peripheral portion of the front planar portion via lateral end portions of the collar protection portion, and the engagement projections are tapered in section. Figs. 45A to 45C are sectional views corresponding to Figs. 44A to 44C, respectively, and illustrating shirt holders constructed such that the back and

front planar portions 1 and 2 are not formed with projections projecting inwardly therefrom. The central depressions of the collar protection portions may be constructed, as shown in Figs. 67A, 67B, 68A, 68B, 71A, 71B, 72A and 72B. Figs. 46A and 46B are sectional views illustrating shirt holders constructed such that the central depressions of the collar protection portions are lower than the level of the front pressing planar portions. As seen in Fig. 46A, the bottom of a central depression 303f of the collar protection portion may be depressed lower than the level of the front planar portion so as to contact a shirt held in the holder. Fig. 46B illustrates a modification from the shirt holder of Fig. 46A constructed such that the back and front planar portions 1 and 2 are not formed with the projections inwardly projecting therefrom. The collar protection portions with such central depressions function not only to protect the collar of shirts therein but also fix the shirts at place.

#### (Fastener Portion)

**[0095]** In accordance with the invention, a fastener portion may be provided for fastening or engaging the back pressing planar portion to or with the front pressing planar portion. The faster portion serves to more efficiently maintain the engagement between the back and front planar portions. Such a fastener portion may be provided at least one edge (e.g., upper edge, lower edge, left edge, or right edge) of the back and front pressing planar portions, respectively. In the separate-type shirt holder as shown in Fig. 1, for example, the fastener portions are preferably formed at opposite edges (e.g., upper and lower edges, or left and right edges) of the back and the front pressing planar portions, respectively. In the unified shirt holder or the unifiable shirt holder, the back and front planar portions are preferably provided with the fastener portions at the respective edges thereof in an opposing relation to the connector portion.

**[0096]** Referring to Fig. 47, the separate-type shirt holder of Fig. 1 includes the fastener portions 201 and 202 integrally formed with the respective upper edges and lower edges of the back and front pressing planar portions 1 and 2. Fig. 48 is a perspective view illustrating the fastener portion 203 of Fig. 47. Specifically, a shirt is placed in the back pressing planar portion 1 and then is closed with the front pressing planar portion 2 by interfitting the engagement projections of the back and front pressing planar portions 1 and 2. Subsequently, the fastener portion 203 of the front pressing planar portion 2 is bent to fit its distal end in a recess in the back side of the back pressing planar portion 1 thus fastening the front planar portion to the back planar portion.

**[0097]** Alternatively, the back pressing planar portion 1 may be formed with a fastener portion 20a with a so-called bent at an edge (e.g., lower edge) thereof, as shown in Fig. 49. The fastener portion 20a is inserted in

a loop-like fastener portion 20b on the front pressing planar portion 1 for engagement between the planar portions 1 and 2.

**[0098]** Otherwise, as shown in Fig. 50, projections 68 and 69 may be formed on respective fitting surfaces of the engagement projections of the back and front pressing planar portions 1 and 2 thereby establishing the engagement between the planar portions 1 and 2. Such projections 68 and 69 may be formed on the overall length of the peripheries of the fitting surfaces of the engagement projections or on either a place or multiple places of the respective peripheries of the fitting surfaces of the engagement projections.

**[0099]** Such fastener projection portions can be provided on either side of the planar portions of the back and front pressing planar portions 1 and 2.

**[0100]** As shown in Fig. 75 A and B, the inserting piece 78 formed on the flange portion of the front pressing planar portion 2 can be inserted the plugging hole 79 formed on the flange of the back pressing portion 1, thereby fixing both the front pressing portion 2 and the back pressing portion 1. Other modes of embodiment include the configurations shown in the figures 76A, 76B, 77A, and 77B.

#### (Engagement Portion)

**[0101]** According to the invention, the back and front pressing planar portions may be combined by way of the aforementioned engagement projections of the back and front planar portions, but, as shown in Fig. 51, the front planar portion may be formed with an engagement portion at its edge (e.g., lower edge, upper edge, left edge and right edge) for engagement with the back planar portion. Like the engagement projections, such an engagement portion facilitates the engagement and disengagement between the back planar portion and the front planar portion. This leads to an easy packing or unpacking of a shirt or the like. The engagement portion may be formed partially on the edges of the back and front planar portions or on the overall lengths thereof. As a matter of course, the collar protection portion may be formed with the engagement portion at its upper edge. In case where the engagement projections are provided, the engagement portions may be omitted, and vice versa.

**[0102]** Fig. 51 illustrates a separate-type shirt holder according to the invention, for example, wherein the engagement projections of Fig. 1 are replaced by engagement portions 75. Specifically, Fig. 51A is a front view illustrating an embodiment of the shirt holder provided with the engagement portions 75 whereas Fig. 51B is a sectional view of the shirt holder taken along a line C-D in Fig. 51A. Fig. 52A is a fragmentary enlarged side view illustrating the engagement portions 75 and portions adjacent thereto. The shirt holder of Fig. 51 is constructed such that the engagement portions 75 are formed on the overall edges of the back planar portion 1



and the front planar portion 2 and on the upper edge of the collar protection portion 3. That is, the front pressing planar portion 2 is placed on the back pressing planar portion 1 and subsequently, engagement portions 751 formed on the edges of the front planar portion 2 and the upper edge of the collar protection portion 3 are engaged with engagement portions 752 formed on the edges of the back planar portion, thus establishing the engagement therebetween.

**[0103]** The configuration of the engagement portions 75 is not particularly limited and besides that shown in Fig. 52A, there may be constructed engagement portions 753 and 754 as shown in Fig. 52B. The engagement projections may be the configuration shown in Figs. 69A, 69B, 70A, 70B, 73A, 73B, 74A, and 74B.

(Flange)

**[0104]** According to the invention, flanges may be integrally formed on the edges of the back and front planar portions, respectively. For example, Fig. 53 is a plan view illustrating an exemplary configuration of flanges 70 and 71 respectively formed on the overall edges of the back and front planar portions 1 and 2 of the separate-type shirt holder. A notch 72 defined in at an edge of the flange 70 of the back planar portion 1 facilitates opening of the front planar portion 2. The notch may be formed at a flange edge of the front planar portion 2.

**[0105]** Incidentally, a so-called bent may be added to the flange of the front planar portion so as to positively prevent the front planar portion from being caught in the back planar portion. Fig. 54 is a sectional view of the shirt holder taken along a line C-D in Fig. 53. When the front planar portion 2 is closed, bents 73 and 74 of the flanges serve to dramatically prevent the front planar portion 2 from being caught in the back planar portion 1.

**[0106]** Incidentally, this invention has the function of reinforcing the front pressing planar portion and/or back pressing planar portion. In addition, in order to prevent the peripheral wall 11 from deviating outside by reinforcing the peripheral wall 11 of the back pressing planar portion 1, the ditch 80 as shown in the Fig. 78A and B can be formed at the bottom of the inner side of the peripheral wall 11. Such a ditch can be provided all inner around of or the part of the peripheral wall 11 of the back pressing planar portion 1.

**[0107]** Further, as shown in the Fig 79 A and B, the peripheral wall 11 can be reinforced by forming the stair-like reinforcing portion 81 between the back pressing planar portion 1 and the peripheral wall 11

(Hanger Hook)

**[0108]** In case where the shirt holder of the invention is hung on a rack for display of a shirt, a hanger hook may be added to the central portion of the respec-

tive upper edges of the front and back planar portions 2 and 1. For example, the flange 70 at the upper edge of the back planar portion 1 and/or the flange 71 at the upper edge of the front planar portion 2 may each be injection molded into a flange integrating a hanger hook as those 711 to 713 shown in Figs. 55A to 55C. With such hanger hooks, the shirt holders can each be hung on a bar or the like, as holding a shirt therein.

**[0109]** Otherwise, as shown in Fig. 56A, flanges 21 are formed on the respective upper edges of the back and front planar portions 1 and 2 and are each formed with a pair of small through-holes 22 at a predetermined interval in intermediate portions of the flanges 21. A fastener for clamping the flanges 21 includes a fastening portion 23 of an inverted U in cross section which is formed with a pair of projection pins projecting from an inner face thereof and adapted to be fitted through the pair of small through-holes 22. The inverted-U-shaped fastening portion 23 is resiliently opened to fit the projection pins into the small through-holes to clamp the flanges as shown in Fig. 56B. A hanger hook 24 may be integrally formed on top of the fastening portion 23. A fastener having only the fastening portion 23 may be used to keep the planar portions 1 and 2 closed as shown in Fig. 56C.

**[0110]** The fastener of the invention is not limited to the above, but preferably includes a fastening portion having inner faces adapted to oppose to each other with the flanges interposed therebetween and resiliently openable, projection pins projecting from one of the inner faces of the fastening portion and adapted to be fitted through the small through-holes of the flanges, and engagement holes formed in the other inner face of the fastening portion and adapted to receive the projection pins. For example, as shown in Figs. 57 and 58, there may be provided a fastener 33 which includes a fastening portion 26 and a hanger hook 27 engaged with the fastening portion 26 and extending upright therefrom, the fastening portion 26 having a bridge 30 bridging a gap 31 between the inner faces 28 and 29 thereof, the hanger hook 27 having a fastener piece 32 to be inserted into the gap 31 of the fastening portion 26 for engagement with the bridge 30 of the fastening portion 26. In Figs. 57 and 58, a reference numeral 35 denotes projection pins formed on the inner face 29 of the fastening portion 26, whereas a reference numeral 36 denotes engagement holes formed in the inner face 28 of the fastening portion 26. The projection pins 35 are inserted through the small through-holes in the flanges of the shirt holder and brought into engagement with the engagement holes 36 of the fastening portion 26. Thus, the shirt holder is fastened by the fastener 33.

**[0111]** Fig. 59 is a perspective view illustrating a multitude of transparent shirt holders hung on a horizontally projecting bar 25 in a laterally overlapping relation for display of shirts. If shirts are packed and displayed in this manner, customers can readily recognize the colors, designs and the like of products without

spoiling them.

**[0112]** As another means for preventing a shirt from sliding down within the shirt holder hung on a rack or the like, the spacing between the back and front planar portions 1 and 2 may progressively be decreased from the top to the bottom with the planar portions 1 and 2 inclined at a small angle with respect to each other. Alternatively, the heights of the projections may progressively be increased toward the bottom, while the planar portions 1 and 2 are kept parallel to each other.

**[0113]** When a plurality of shirt holders of the invention each containing a shirt are bundled, each two shirt holders are combined with each other in an inverted relation as shown in Fig. 60. In the figure, the back pressing planar portion is indicated at 1 and the front pressing planar portion is at 2.

**[0114]** The material for the shirt holder of the invention is not particularly limited and a synthetic resin material can be used, for example. Examples of the synthetic resin material include polyolefins such as polyethylene, polypropylene and the like, polyesters such as polyethylene terephthalate and the like, high polymers such as polyvinyl chloride, polystyrene and the like. Preferred synthetic resin materials include polyethylene, polypropylene and polyesters such as polyethylene terephthalate. The synthetic resin materials may be used alone or in combination of two or more types.

**[0115]** Where a synthetic resin material is used for production of the shirt holder of the invention, for example, injection molding, vacuum forming or the like may be employed. For example, a thin-walled shirt holder can be produced by the vacuum forming of polyethylene, polyethylene terephthalate, polypropylene or the like. Such shirt holders can be conveniently used and stored. In addition, they can be produced at lower production costs.

**[0116]** In the case of forming the shirt holder of the invention from a synthetic resin material, the engagement portions, flanges and the like can be integrally formed with the back and front planar portions and therefore, the shirt holder can be fabricated quite readily and efficiently.

**[0117]** The shirt holder of the invention designed for holding a men's shirt fresh from a maker's plant, or all kinds of garments with collars, such as men's shirts, women's blouses, sports shirts like polo shirts and the like, which are laundered and neatly folded, permits the shirt or the like to be stored as stacked on one another, hung on a rack for display at a shop, or compactly packed in a suitcase or a trunk for carriage with the shape of the shirt kept intact.

**[0118]** Fig. 61 is a plan view illustrating a shirt holder in a disconnected state constructed such that flanges 714 and 715 formed on the respective edges of the back and front planar portions 1 and 2 include small through-holes 716 and 717, respectively. A fastener member 718 is illustrated in Fig. 62 wherein Fig. 62A is a plan view of the fastener member and Fig. 62B is a

side view thereof. The fastener member 718 of Fig. 62 includes a projection pin 719 to be inserted through the small through-holes 716 and 717 in the flanges, a resiliently bendable connector portion 720, and a fastener hole 721 for fittedly receiving the projection pin 719, thus adapted to connect the back and front planar portions 1 and 2.

**[0119]** As shown in Fig. 63, an alternative fastener member 725 including one projection pin 722 to be inserted through the small through-holes 716 and 717 in the flanges, a resiliently bendable connector portion 723 and a fastener hole 724 for fittedly receiving the projection pin 722 may be employed to connect the back and front planar portion 1 and 2.

**[0120]** Incidentally, such fastener members may also serve as the aforesaid fastener.

**[0121]** Although the back and front planar portions can be connected by way of the small through-holes in the flanges and the fastener, press-stud or button type fastener may be integrally formed in the flanges or at portions adjacent to the flanges of the back and front planar portions, respectively, thereby interconnecting both planar portions. Fig. 64A is a plan view illustrating a shirt holder in a disconnected state constructed such that flanges 77 on the edges of the back planar portion 1 include small through-holes 771 and flanges 76 on the edges of the front planar portion and on the upper edge of the collar protection portion 3 include projection pins 761. Fig. 64B is a side view illustrating the small through-hole 771 and the projection pin 761 shown in Fig. 64A. With the front planar portion 2 placed on the back planar portion 1, the projection pins 761 are pressed in the small through-holes 771, thereby interconnecting the both planar portions.

**[0122]** The configuration of the fastener is not particularly limited. The small through-hole 771 of Fig. 64 may be a depression 772 as shown in Fig. 65A. On the other hand, the projection pin may be configured like a projection pin 762 as shown in Fig. 65B, for example.

**[0123]** As to the shirt holder of the invention, the thicknesses of the back pressing planar portion, the front pressing planar portion and the collar protection portion are not particularly limited and any suitable thickness may be arbitrarily selected depending upon purposes thereof, such as use, storage, display and the like. Preferable thicknesses of the back planar portion, the front planar portion and the collar protection portion are, for example, in the range of between 0.2 and 3 mm, and more preferably between 0.2 and 2 mm. For example, where a shirt holder is vacuum formed from polyethylene terephthalate, the thickness thereof may be adjusted in the range of between 0.2 and 1 mm (preferably between 0.3 and 0.5 mm). Such a thin-walled shirt holder can replace plastic bags such as of nylon and polyvinyl which have conventionally been used as packaging materials. Having such a thin wall, the shirt holder can be fabricated at a reduced material cost or thus, at lower production costs as compared with the aforesaid

plastic bags such as of nylon and polyvinyl. Certainly, despite such a small thickness, the shirt holder of the invention can be reused at home or recycled in various industrial fields. Where a shirt holder is injection molded from polypropylene, the thickness thereof may be adjusted in the range of between 1 and 2 mm (preferably between 1.4 to and 1.6 mm). Particularly, such thick-walled shirt holders are rigid enough to bear stacking in multiple layers, thus dramatically reducing fear of causing wrinkle in shirts held therein or lost collar shape. Further, the shirt holder can be used repeatedly at home, thus contributing to the reduction of wastes. Specifically, the shirt holder permits a shirt or the like to be stored in a chest of drawers, a closet, or a container, or to be compactly packed in a suitcase or the like for carriage.

**[0124]** The shirt holder of the invention is quite helpful for a shirt maker, a shirt laundry, a laundry, a hotel laundry agent, a traveler and the like in that laundered shirts and the like, each held in the holders, can be vertically stacked for storage or packed in a bag or a suitcase as kept intact.

**[0125]** Because of the very simple configuration and construction, the shirt holder of the invention can be fabricated at very low production costs. In addition, the shirt holder is reusable and, therefore, is advantageous in terms of resource saving and economy. For example, a person, who received his shirt in a shirt holder of the invention from a laundry during his stay at a hotel, can reuse the shirt holder at home repeatedly. That is, the shirt holder serves to prevent a shirt or the like stored in a chest of drawers, closet, or container from suffering wrinkling, lost shape, or other adverse changes. Additionally, he can reuse this shirt holder to pack his shirt in his suitcase or the like for carriage. In this case, too, his shirt is facilely and positively protected from wrinkling, lost shape or the like during carriage (such as in business trip). Thus, the shirt holder of the invention can be put to reuse at home in various ways, contributing to resource saving and economy. Further, a shirt holder formed of a material containing an additive such as a UV absorbing agent is highly effective at controlling or preventing the change in color of a shirt or the like held therein.

**[0126]** Since the shirt holder of the invention can be formed of a synthetic resin material, the shirt holder can be recycled, or reused as a material for other industrial field. The shirt holders formed of resin materials such as polyethylene, polypropylene, polyethylene terephthalate and the like can readily be recycled. Thus, the shirt holder of the invention allows for reuse at home as well as industrial recycling, greatly contributing to resource saving and reduction of wastes.

**[0127]** Where a synthetic resin material is used for the production of the shirt holder of the invention, for example, injection molding, vacuum forming or the like may be employed. For instance, a thin-walled shirt holder can be produced at lower production costs by the

vacuum forming of polyethylene, polyethylene terephthalate, polypropylene or the like. Such a shirt holder can conveniently used and stored.

**[0128]** Where the shirt holders of the invention, the box-type shirt holders, in particular, are stacked in layers for storage, a shirt or the like at a lower layer of the stack can be protected from wrinkling, lost shape, and other adverse changes by selection and adjustment of the material therefor and the thickness thereof. Hence, the shirt holders each holding a shirt or the like therein can be packed in a cardboard box or the like for storage or carriage, facilitating the management of inventory of shirts including stock calculation. More specifically, the maximum number of shirt holders to be packed in one cardboard box is determined depending upon the configuration of the shirt holder (dimensions and configurations of the back planar portion, front planar portion and collar protection portion) and the way to pack the shirt holders and therefore, the number of shirts contained in the box or the quantity of shirts in stock can be readily calculated. Likewise, the number of fabricated shirts can readily be calculated at a plant. Incidentally, a shirt holder formed of a transparent material allows for quick recognition of the type and size of a shirt held therein when shirts in stock are calculated.

**[0129]** Serving to prevent the wrinkling, lost shape and the like of a shirt held therein, the shirt holder of the invention negates the need for the conventional practice for retailers and the like to protect collars by using collar protectors, such as of a cardboard, plastic and the like, in combination with pins. Hence, the shirt holder of the invention provides efficient packing of shirts or the like while saving consumers the inconvenience of removing collar protectors and pins. In addition, the shirt holder using no pins notably improves the safety of consumers.

**[0130]** Packed in the shirt holder of the invention, particularly the box-type shirt holder, a shirt on sale at the shop is protected from dust. Further, dust on the outer surfaces of the shirt holder can readily be wiped off with a cloth or the like. Accordingly, the retailers can provide consumers with convenience of easy visual recognition of the materials, colors, designs of shirts displayed at shops while impressing them neat and tidy display of products. Further, the retailers of shirts or the like can adopt creative style for displaying shirts, giving favorable impression on consumers.

**[0131]** Furthermore, an illustration, a photograph, a corporate advertisement, a tourist map or the like can be printed on the inner or outer surface of the back or the front planar portion of the shirt holder. If all or part of the front portion is made transparent, a consumer can see a shirt through the shirt holder to check the material, color and design of the shirt.

**[0132]** As described in the foregoing, the shirt holder of the invention for holding a men's shirt fresh from a maker's plant, or a men's shirt, women's blouse or a sports shirt such as a polo shirt laundered and neatly folded permits the shirt or the like to be stored as

vertically stacked, hung on a rack for display at a shop, or compactly packed in a suitcase or a trunk for carriage with the shape of the shirt kept intact.

## Claims

### 1. A shirt holder comprising:

a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt; 10

a front pressing planar portion opposing the back pressing planar portion; and  
a shirt collar protection portion;

the back pressing planar portion and the front pressing planar portion being separately formed, 15

the front pressing planar portion and the shirt collar protection portion being integrally formed. 20

### 2. A shirt holder comprising:

a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt; 25

a front pressing planar portion opposing the back pressing planar portion; and  
a shirt collar protection portion;

the back pressing planar portion and the front pressing planar portion being integrally formed. 30

### 3. A shirt holder as set forth in Claim 2 comprising:

the back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt, 35

the front pressing planar portion opposing the back pressing planar portion,

a collar protection portion projecting from the front pressing planar portion, and 40

a connector portion bendably connecting a lower edge of the back pressing planar portion with lower edges of the front pressing planar portion and of the shirt collar protection portion, 45  
the back pressing planar portion, the front pressing planar portion, the shirt collar protection portion and the connector portion being integrally formed.

50

### 4. A shirt holder as set forth in Claim 2 comprising:

the back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt; 55

the front pressing planar portion opposing the back pressing planar portion;

a collar protection portion projecting from the

front pressing planar portion; and

a connector portion bendably connecting an upper edge of the back pressing planar portion with upper edges of the front pressing planar portion and of the shirt collar protection portion, the back pressing planar portion, the front pressing planar portion, the shirt collar protection portion and the connector portion being integrally formed.

### 5. A shirt holder as set forth in Claim 2 comprising:

the back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt;

the front pressing planar portion opposing the back pressing planar portion;

a shirt collar protection portion projecting from the front pressing planar portion; and

a connector portion bendably connecting a left or right edge of the back pressing planar portion with left or right edges of the front pressing planar portion and of the shirt collar protection portion;

the back pressing planar portion, the front pressing planar portion, the shirt collar protection portion and the connector portion being integrally formed.

### 6. A shirt holder comprising:

a back pressing planar portion having a rectangular configuration for supporting a back face of a folded shirt,

a front pressing planar portion opposing the back pressing planar portion; and

a shirt collar protection portion; wherein the back pressing planar portion and the front pressing planar portion are separately formed, the front pressing planar portion and the shirt collar protection portion are integrally formed, a connector portion is integrally formed with the back pressing planar portion for connecting the front pressing planar portion and the shirt collar protection portion therewith, and a connector portion is integrally formed with the front pressing planar portion and the shirt collar protection portion for connecting the back pressing planar portion therewith.

### 7. A shirt holder as set forth in any one of Claims 1 to 6, wherein a projection is integrally formed with the back pressing planar portion and/or the front pressing planar portion, respectively, as inwardly projecting therefrom.

### 8. A shirt holder as set forth in Claim 7, wherein the projection is integrally formed with the back press-

- ing planar portion and/or the front pressing planar portion, as inwardly projecting from the opposite surface portions thereof, respectively.
9. A shirt holder as set forth in any one of Claims 1 to 7, wherein a fitting portion is integrally formed with the back pressing planar portion and the front pressing planar portion, respectively, for interfitting the back and front pressing planar portions. 5
  10. A shirt holder as set forth in Claim 9, wherein an engagement projection is integrally formed with the front pressing planar portion for engagement between the back and front pressing planar portions. 10
  11. A shirt holder as set forth in Claim 10, wherein the engagement projection is tapered in section at an inner surface portion thereof. 15
  12. A shirt holder as set forth in any one of Claims 1 to 11, wherein an engagement portion is integrally formed on the respective edges of the back pressing planar portion and of the front pressing planar portion for engagement between the back pressing planar portion and the front pressing planar portion. 20
  13. A shirt holder as set forth in any one of Claims 1 to 12, wherein the back pressing planar portion has a peripheral wall on its periphery for fitting with the engagement projection on the peripheral portion of the front pressing planar portion, whereby said shirt holder form a box-type configuration. 25
  14. A shirt holder as set forth in any one of Claims 1 to 13, wherein a flange is integrally formed on the respective edges of the back pressing planar portion and of the front pressing planar portion. 30
  15. A shirt holder as set forth in Claim 14, wherein the flange is integrally formed on the overall edges of the back pressing planar portion and of the front pressing planar portion, respectively. 35
  16. A shirt holder as set forth in any one of Claims 1 to 14, wherein the shirt collar protection portion projecting from the front pressing planar portion includes a depression at the center thereof. 40
  17. A shirt holder as set forth in Claim 16, wherein the central depression of the shirt collar protection portion has a rounded bottom surface. 45
  18. A shirt holder as set forth in Claim 17, wherein the central depression of the shirt collar protection portion has its bottom surface positioned lower than a level of the front pressing planar portion. 50
  19. A shirt holder as set forth in any one of Claims 1 to 18, wherein, of the engagement projections on the front pressing planar portion, engagement projection segments extend transversely from the left edge and the right edge of the shirt collar protection portion, respectively. 55
  20. A shirt holder as set forth in Claim 6, wherein the connector portion of the back pressing planar portion and that of the front pressing planar portion establish a reversible connection or a irreversible connection.
  21. A shirt holder as set forth in any one of Claims 1 to 11, wherein a fastener portion is integrally formed with the back pressing planar portion and the front pressing planar portion, respectively.
  22. A shirt holder as set forth in Claim 8, wherein the projections on the opposite surface portions of the back pressing planar portion and of the front pressing planar portion extend vertically.
  23. A shirt holder as set forth in Claim 8, the projections on the opposite surface portions of the back and front pressing planar portions are each configured into a bent pattern extending parallel to edges of the lower half portion of the shirt collar protection portion.
  24. A shirt holder as set forth in Claim 8, wherein the projections on the back and front pressing planar portions each extend transversely in a parallel relation.
  25. A shirt holder as set forth in any one of Claims 8 and 22 to 24, wherein the projections on the back pressing planar portion and those on the front pressing planar portion are arranged alternately in an offset relation.
  26. A shirt holder as set forth in Claim 7, wherein the shirt collar protection portion is formed with a projection fitted in a trench in the surface of the front pressing planar portion, the trench defined by the engagement projection on the front pressing planar portion.
  27. A shirt holder as set forth in Claim 7, wherein the projection is rounded.
  28. A shirt holder as set forth in Claim 10, wherein the engagement projections are each rounded at its inner surface facing the central portion of the holder.
  29. A shirt holder as set forth in any one of Claims 1 to 6, wherein a spacing between the opposite sur-

faces of the back and front pressing planar portions is progressively decreased toward the bottoms thereof.

30. A shirt holder as set forth in any one of Claims 1 to 6, wherein at least either one of the back and front pressing planar portions is formed from a transparent plastic material. 5
31. A shirt holder as set forth in any one of Claims 1 to 6, wherein the front pressing planar portion is formed from a transparent plastic material. 10
32. A shirt holder as set forth in any one of Claims 1 to 6, wherein a vent hole is provided. 15
33. A shirt holder as set forth in any one of Claims 1 to 6 characterized by being imparted with an anti-bacterial property. 20
34. A shirt holder as set forth in any one of Claims 1 to 6, wherein the flanges are formed at the respective upper edges of the back and front pressing planar portions and are each formed with a depressed fastening portion and/or a projected fastening portion to be fitted with the depressed fastening portion for joining the flanges with each other. 25
35. A shirt holder as set forth in any one of Claims 1 to 6, wherein the flanges are formed at the respective upper edges of the back and front pressing planar portions and each include a small through-hole, the flanges provided with a fastener having a projection pin insertable into the small through-holes. 30
36. A shirt holder as set forth in Claim 35, wherein the fastener includes a fastening portion having inner surfaces opposing to each other with the flanges interposed therebetween and resiliently openable, one of the inner surfaces of the fastening portion being formed with a projection pin insertable into the small through-holes in the flanges, the other inner surface thereof being formed with an engagement hole for receiving the projection pin. 35
37. A shirt holder as set forth in Claim 36, wherein the fastener includes the fastening portion and a hanger hook standing upright from the fastening portion in an engaged relation, the fastening portion including a bridge portion interconnecting the pair of inner surfaces thereof across a gap, the hanger hook including an engagement piece inserted in the gap of the fastening portion for engagement with the bridge portion of the fastening portion. 40
38. A fastener for use in a shirt holder comprising a fastening portion including inner surfaces opposing to each other as holding therebetween flanges on the 45

upper edges of the back and front pressing planar portions, and a hanger hook standing upright from the fastening portion in an engaged relation, one of the inner surfaces of the fastening portion including a projection pin insertable into small through-holes in the flanges, the other inner surface of the fastening portion including an engagement hole for receiving the projection pin, a resiliently openable bridge portion interconnecting the inner surfaces of the fastening portion across a gap therebetween, the hanger hook including an engagement piece insertable in the gap of the fastening portion for engagement with the bridge portion of the fastening portion. 50

Fig. 1

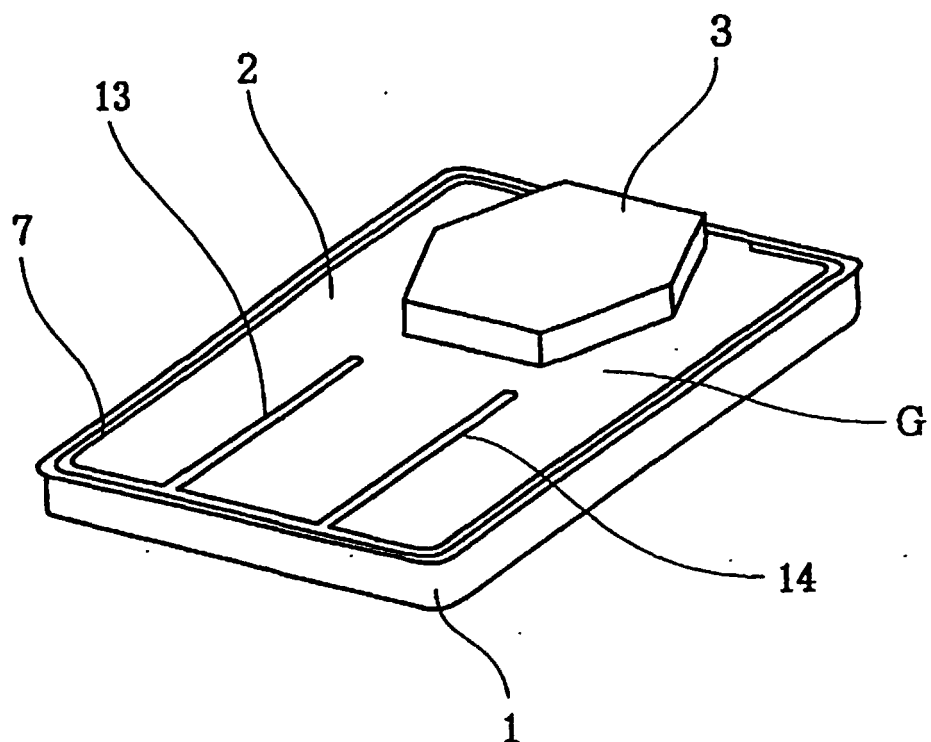


Fig. 2

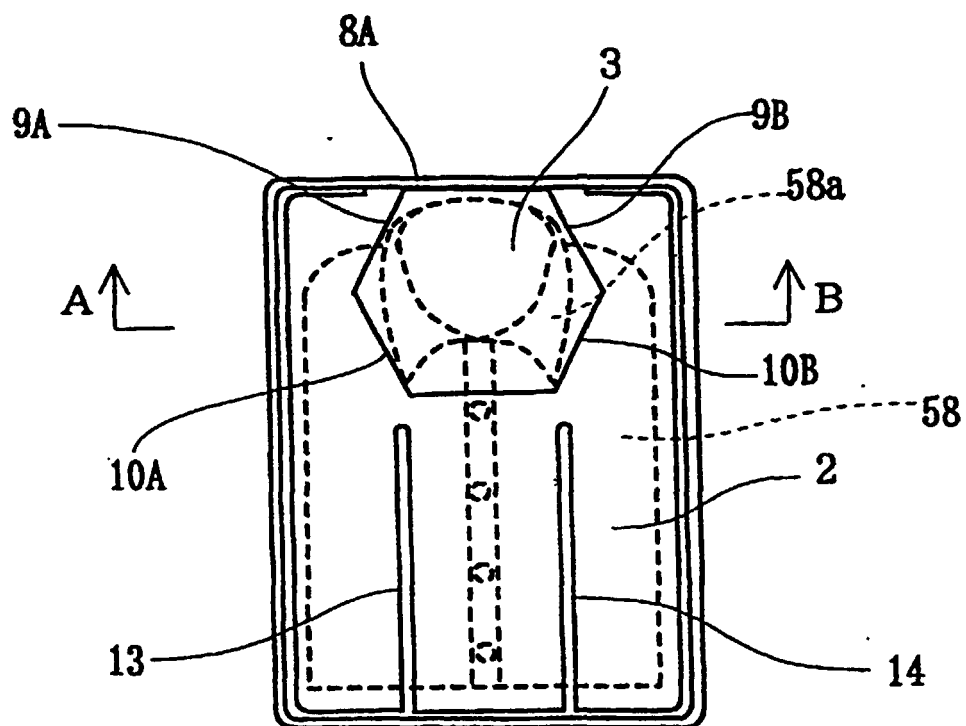


Fig. 3

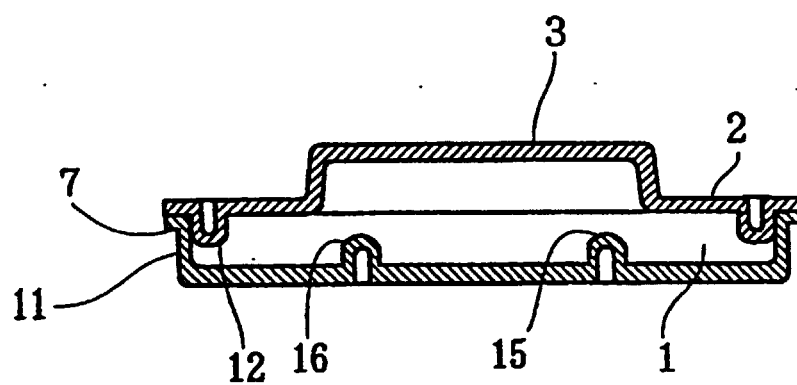
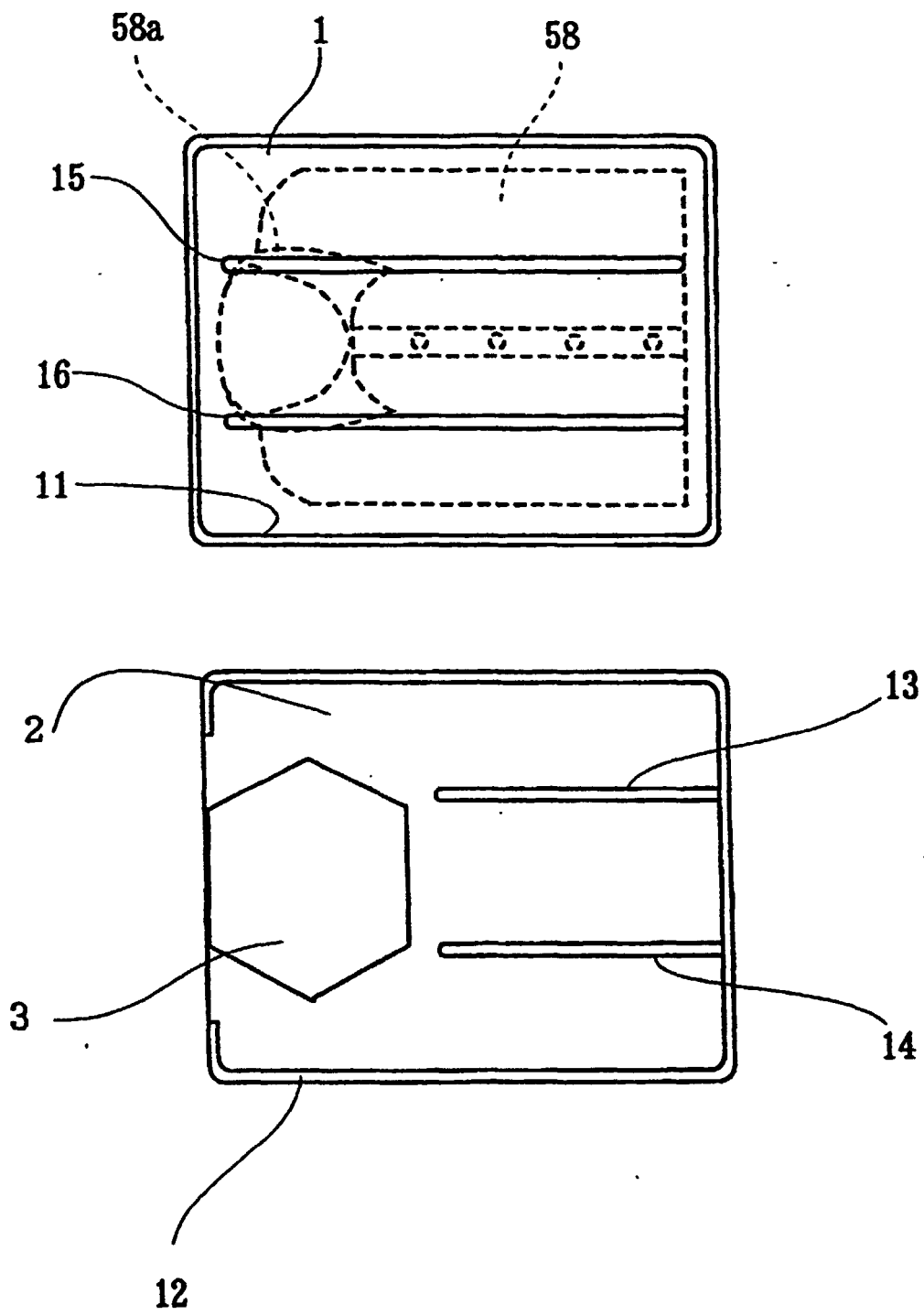
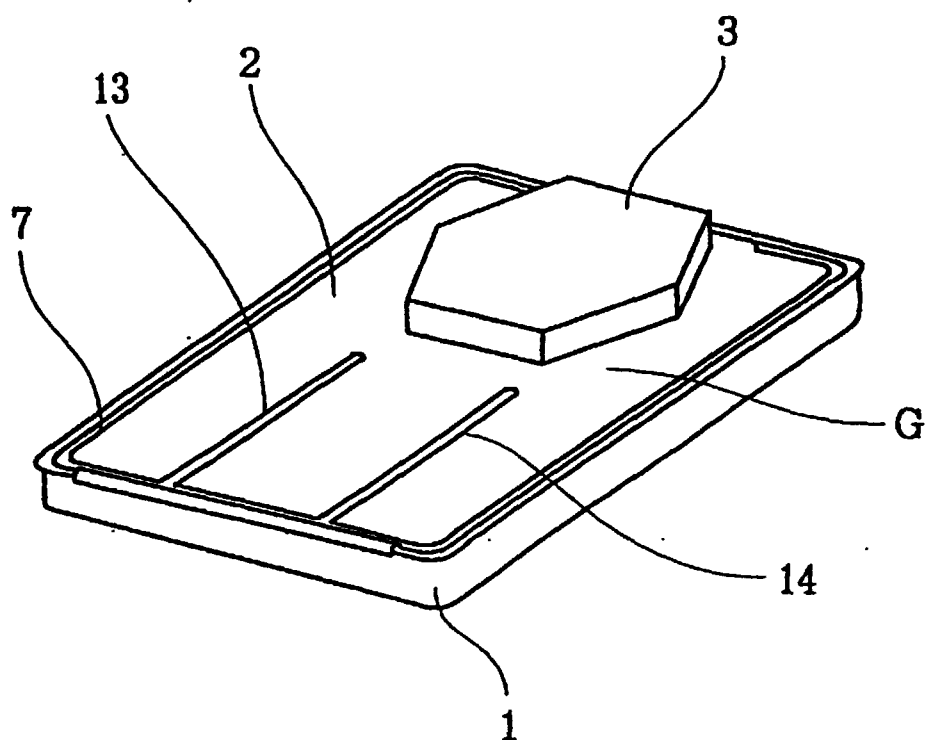




Fig. 4



**Fig. 5**



**Fig. 6**

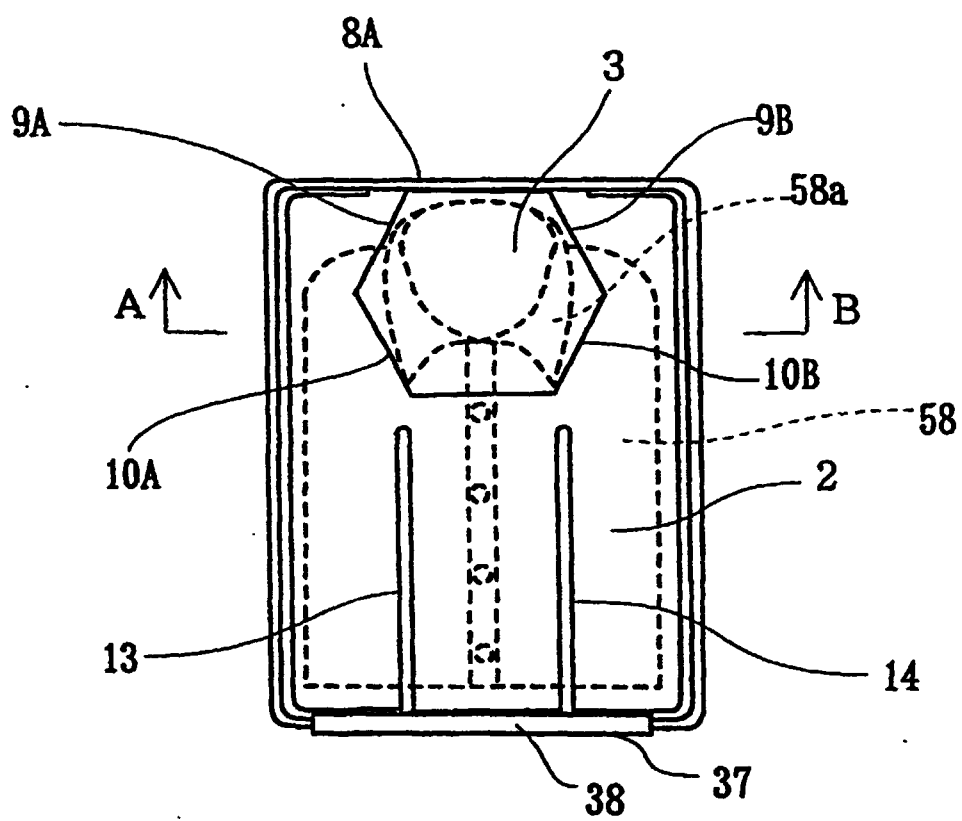


Fig. 7

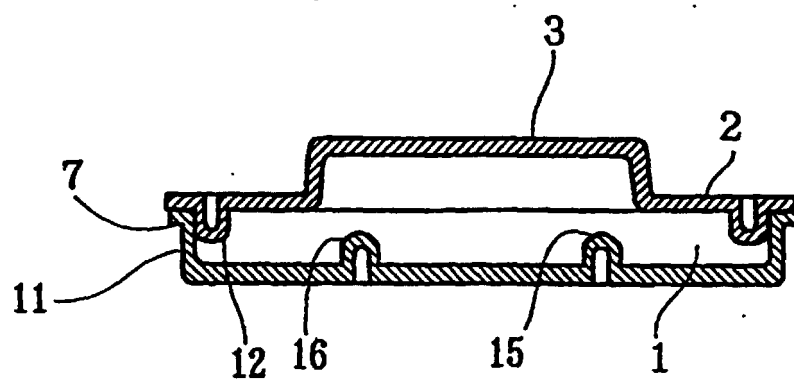


Fig. 8

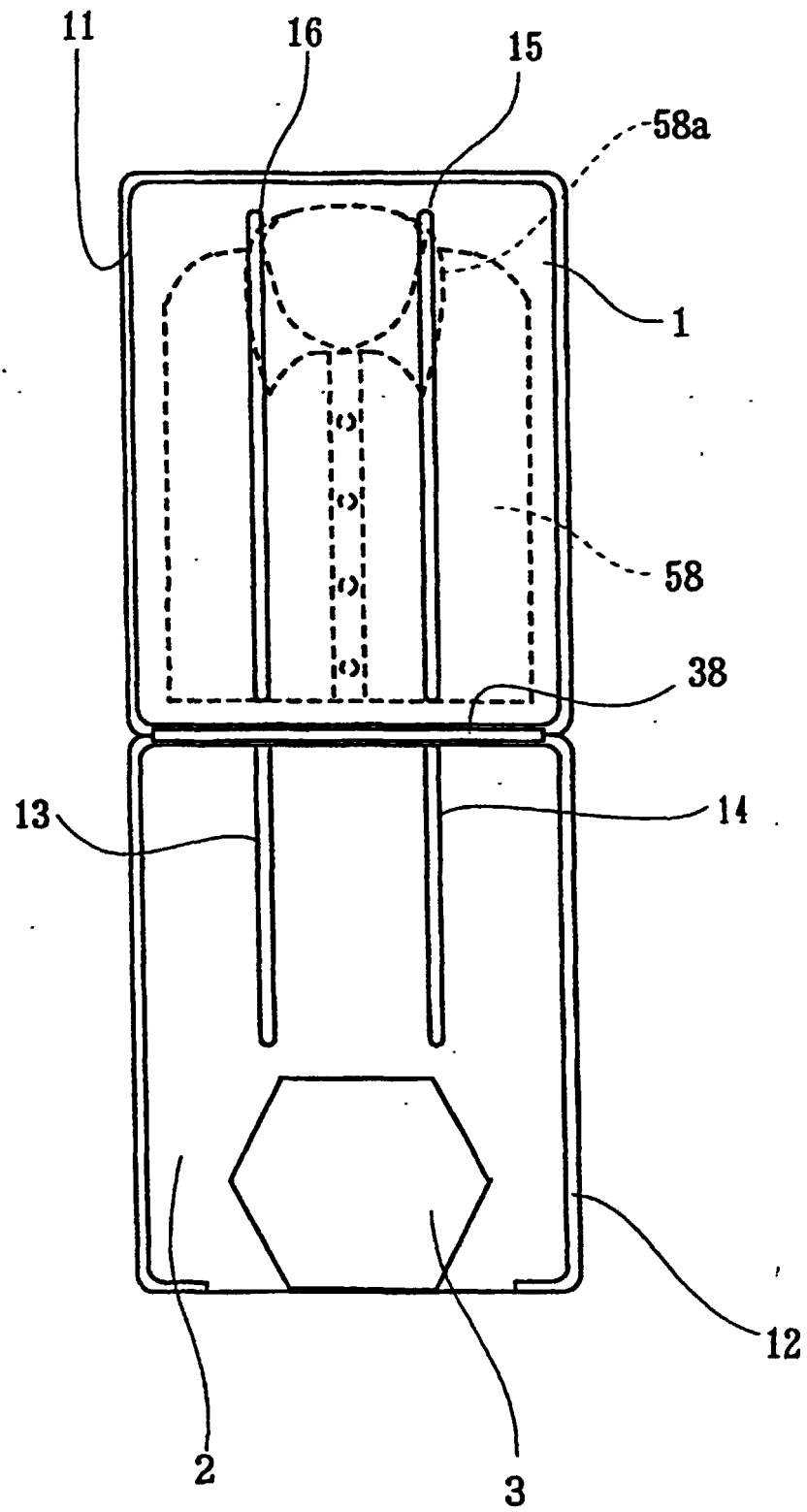


Fig. 9

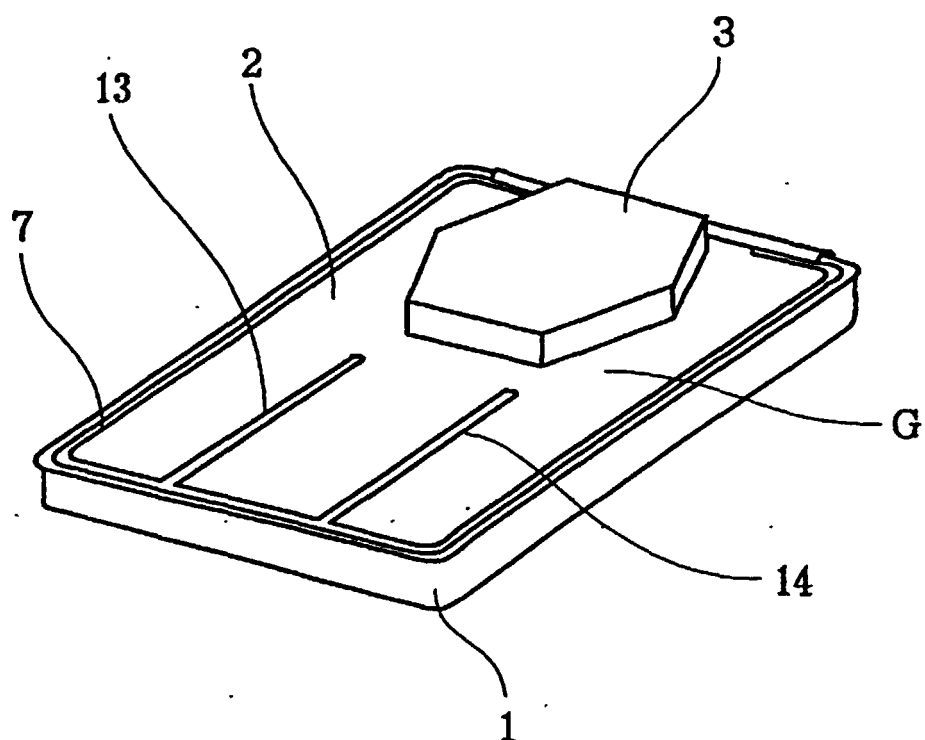


Fig. 10

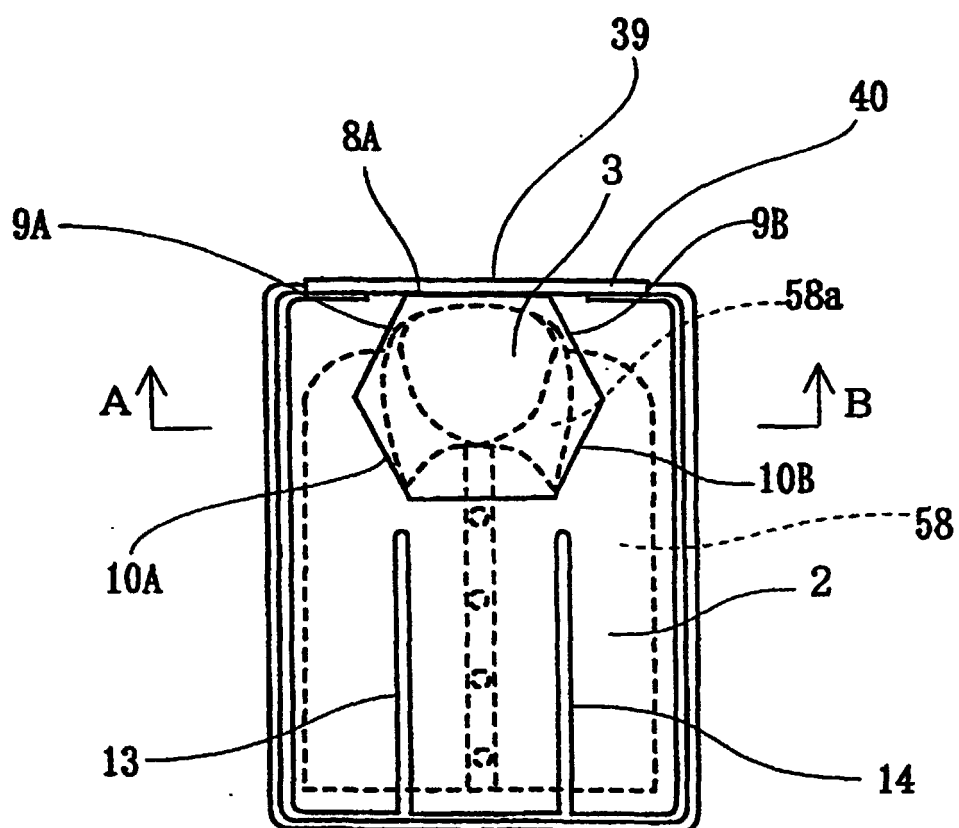


Fig. 11

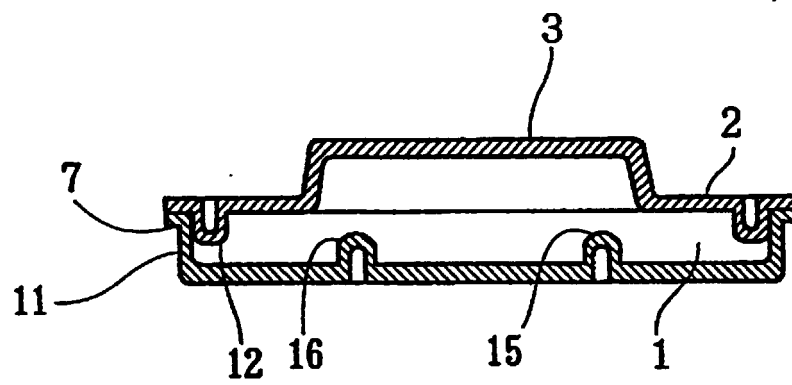


Fig. 12

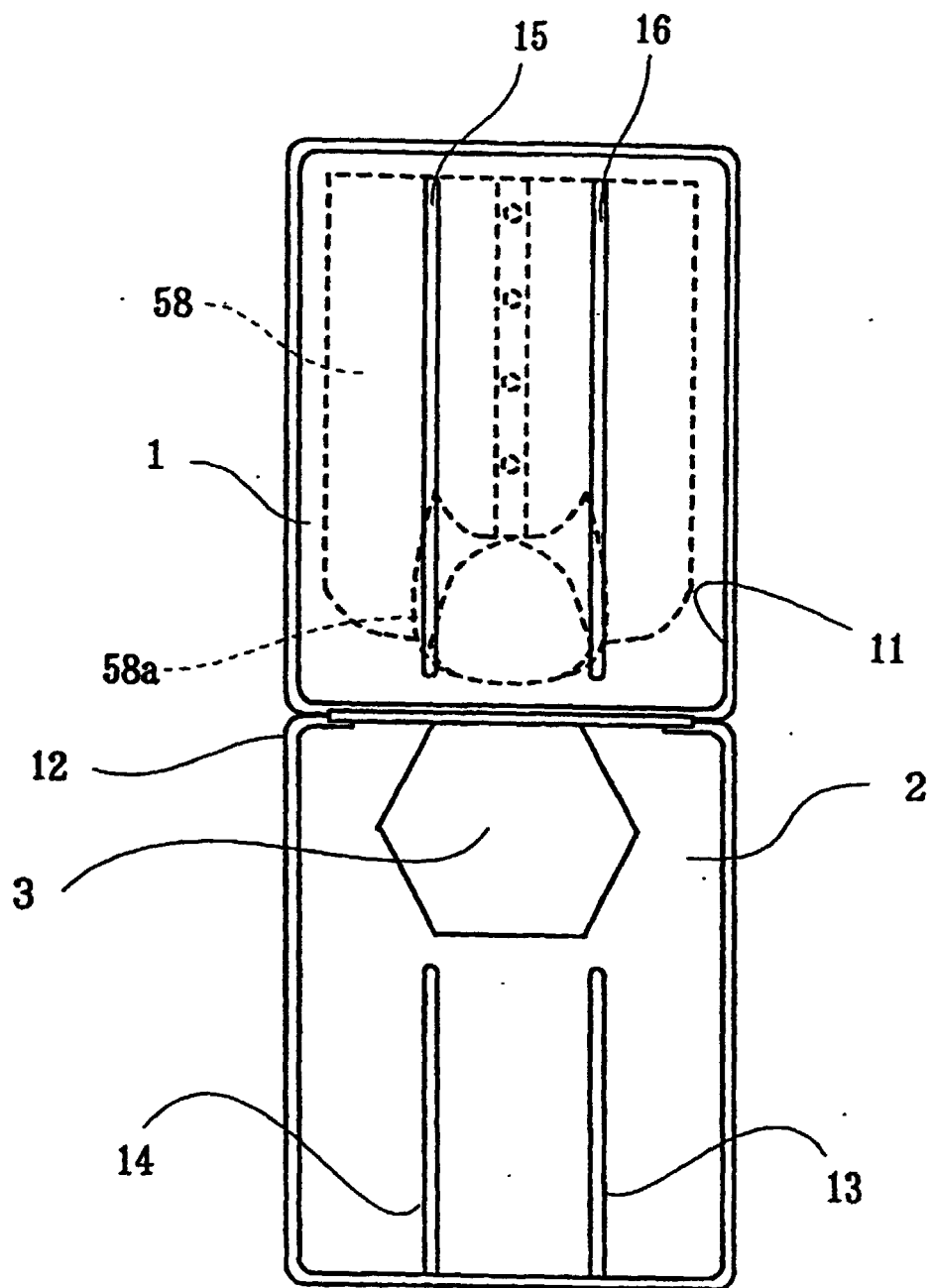


Fig. 13

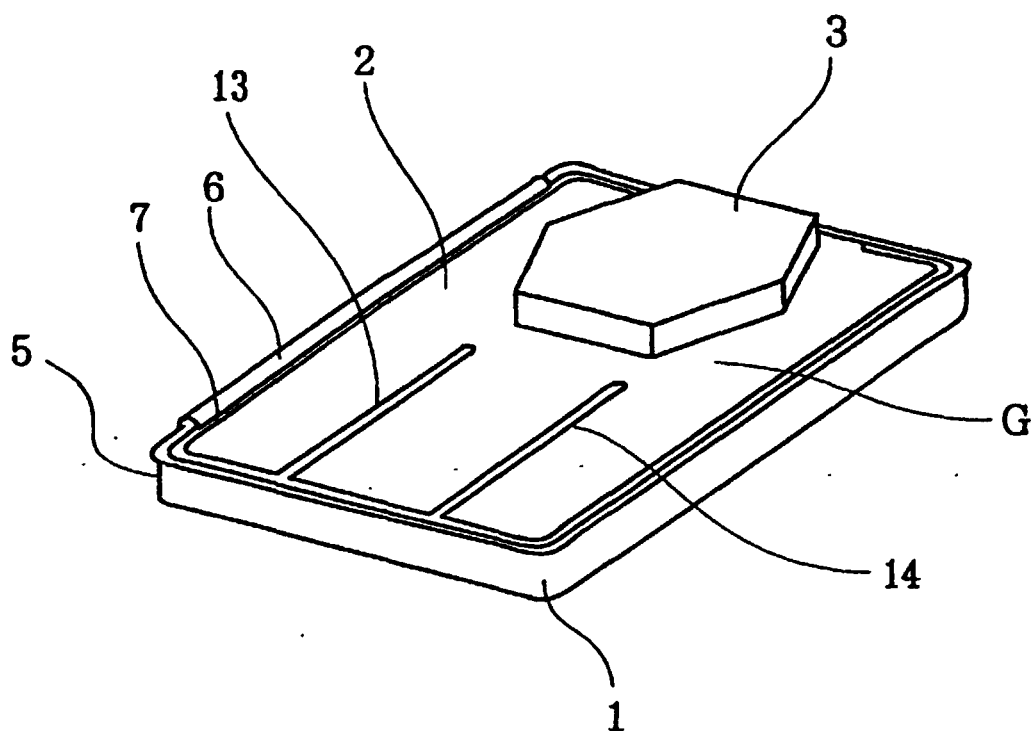


Fig. 14

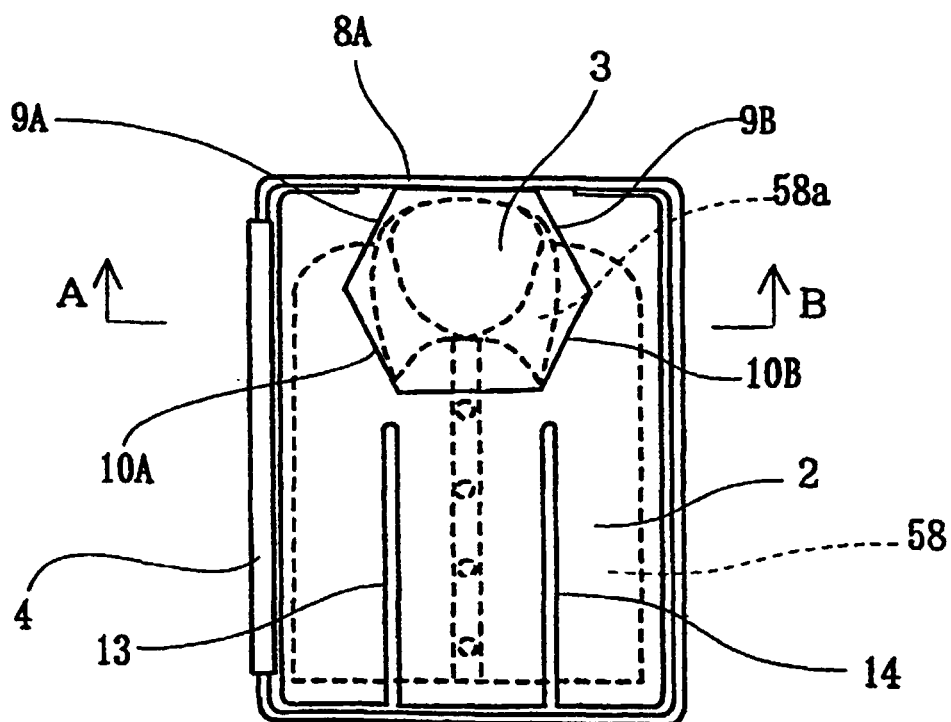




Fig. 15

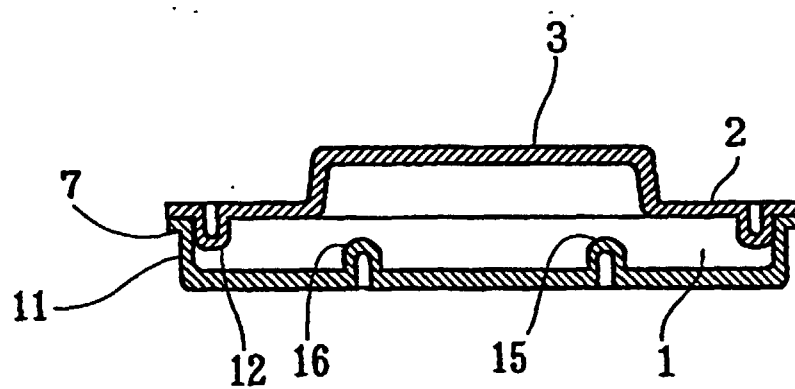


Fig. 16

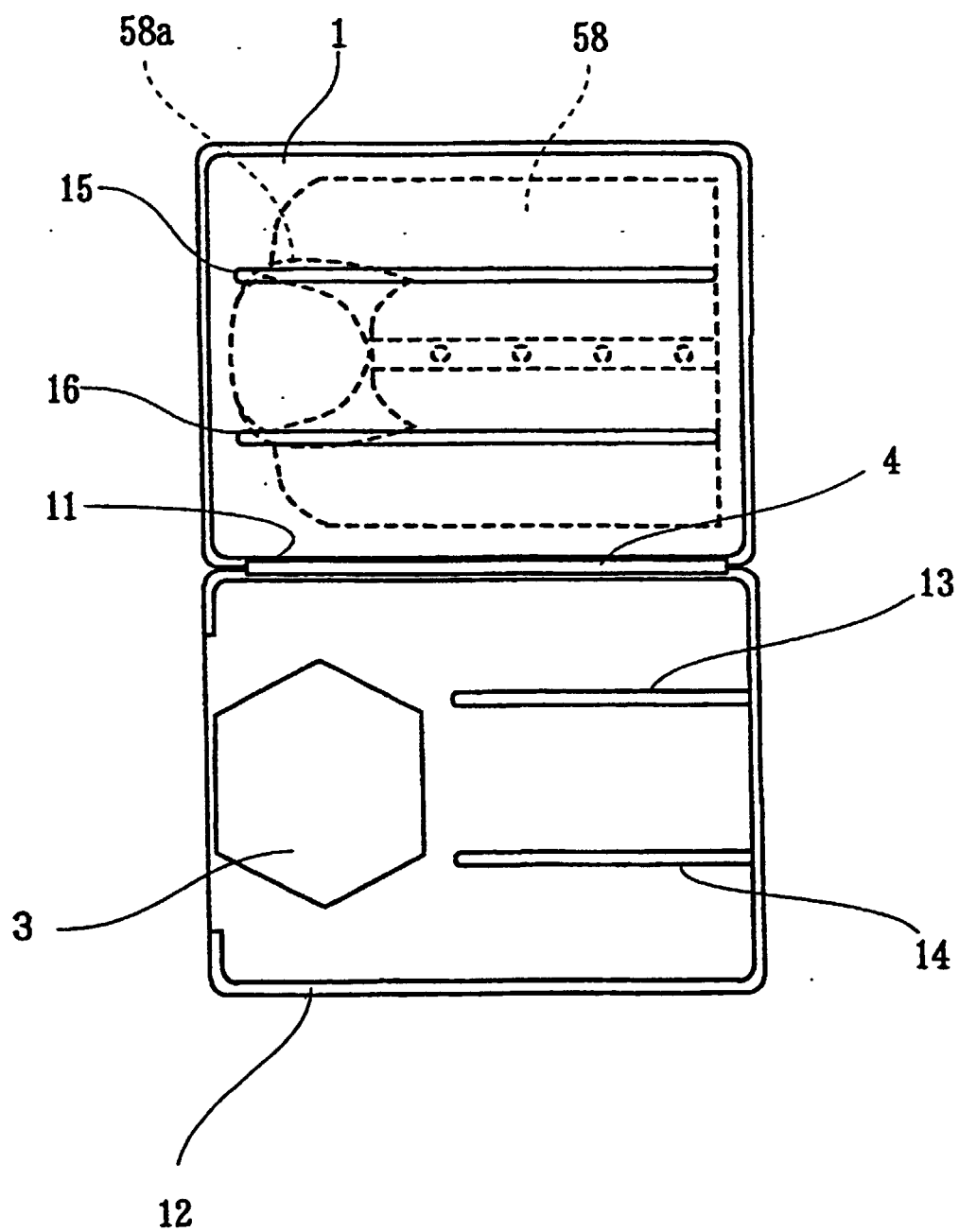


Fig. 17

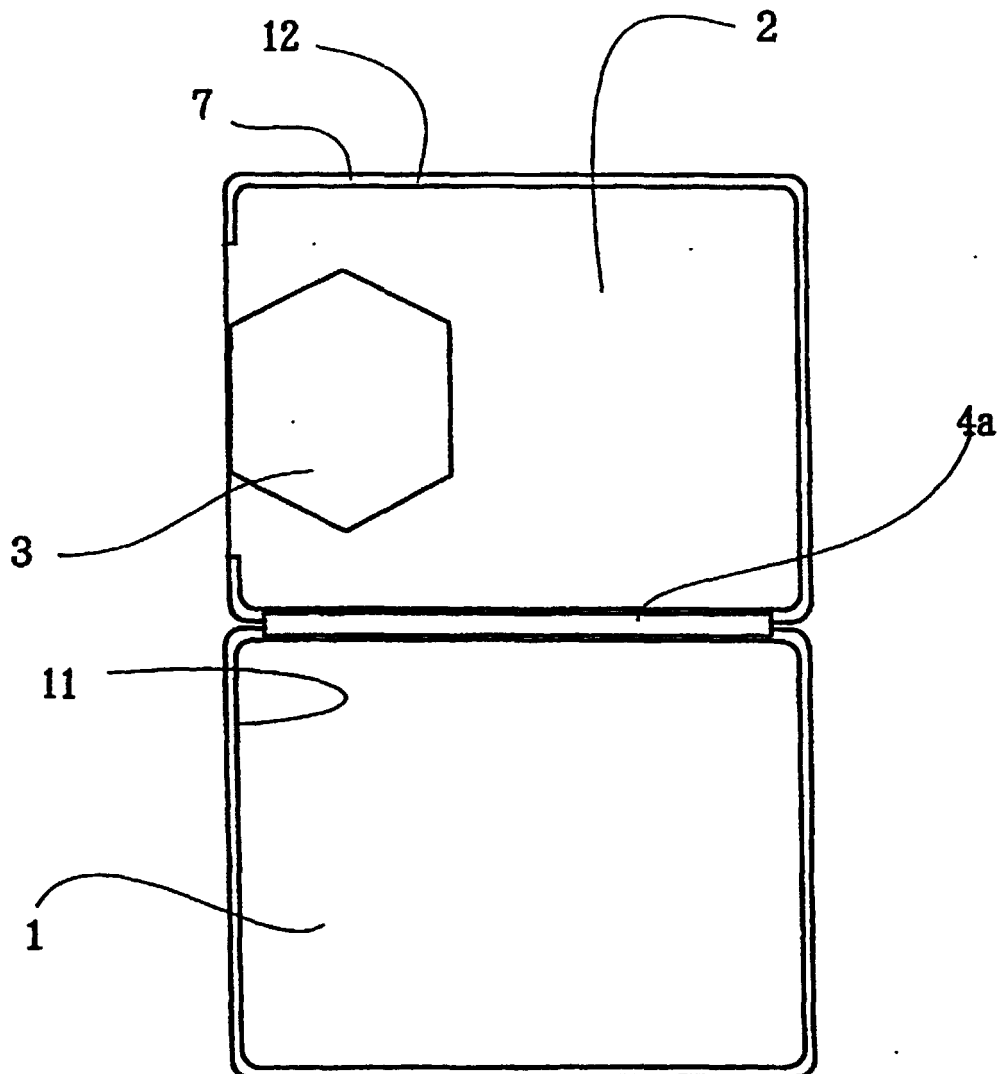


Fig. 18

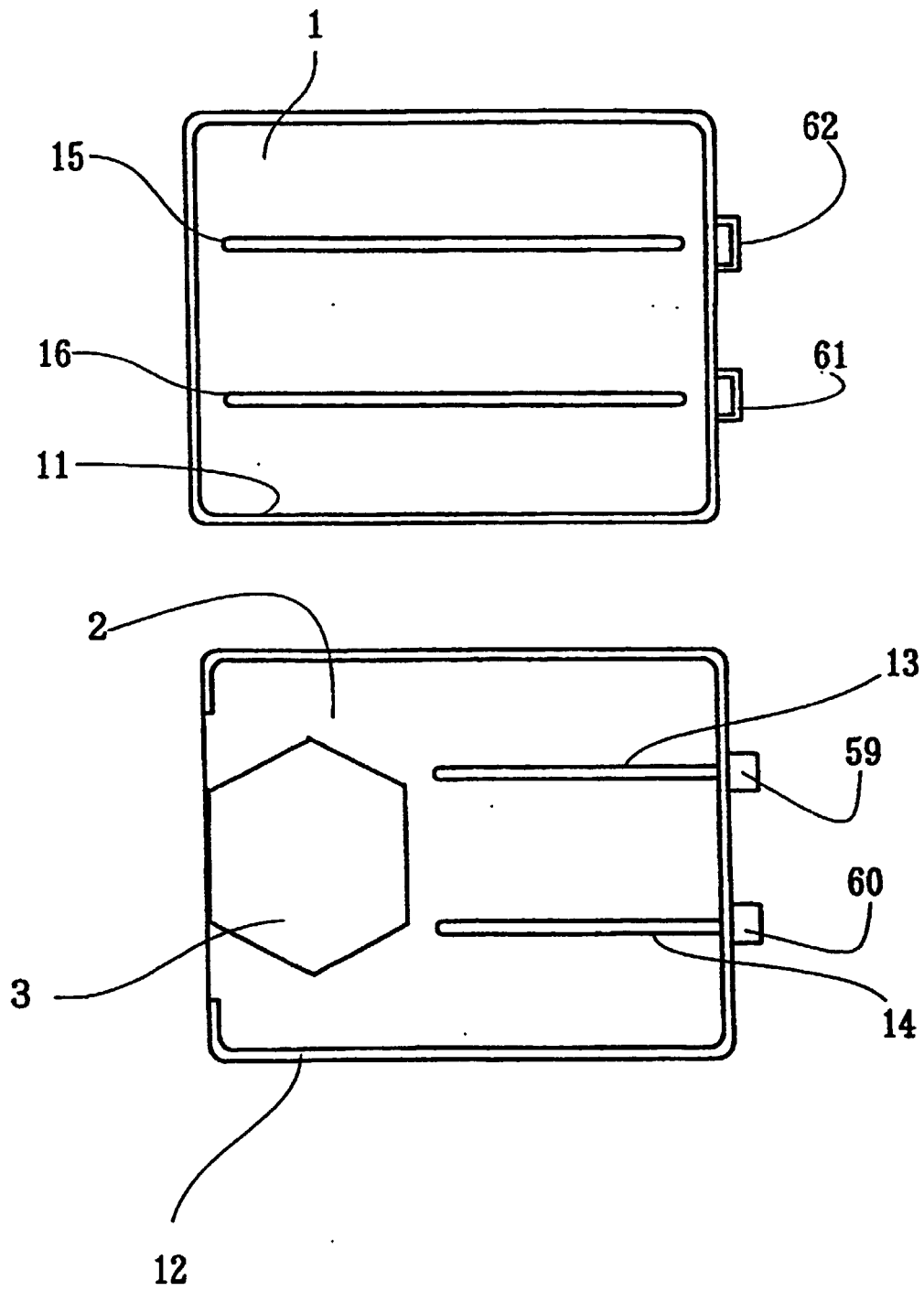


Fig. 19

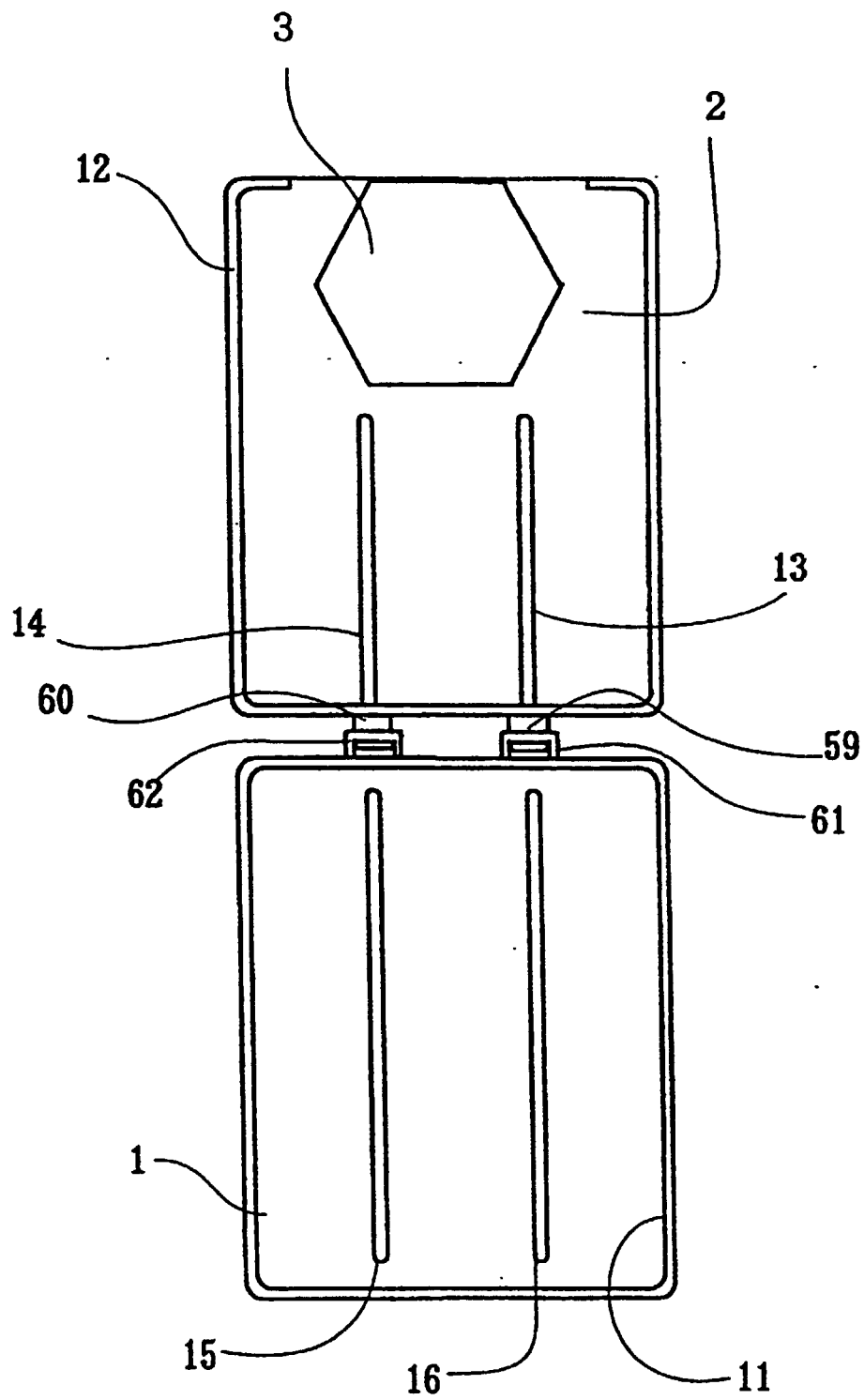
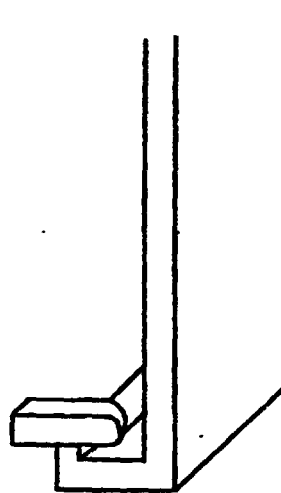


Fig. 20



(A)



(B)

Fig. 21

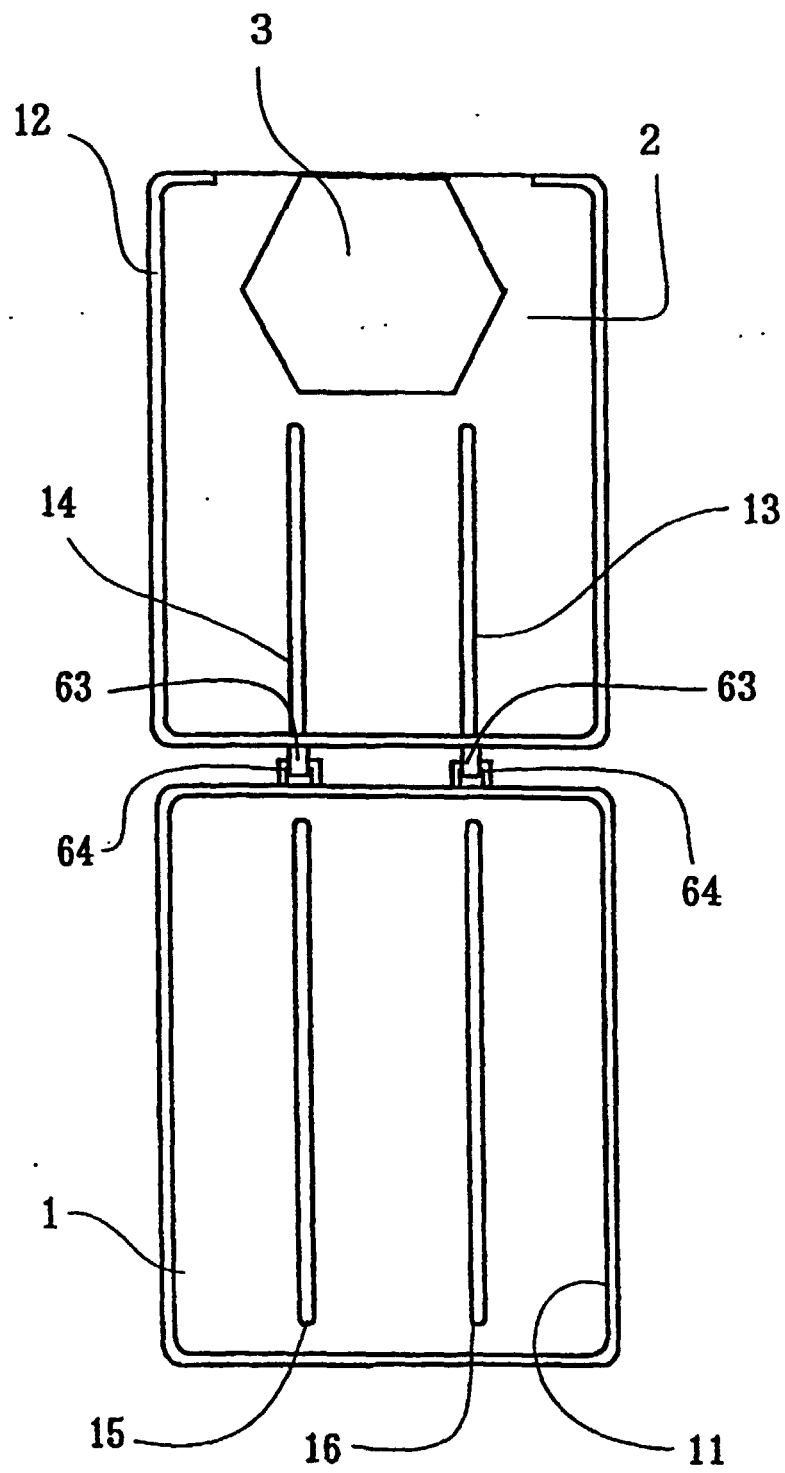
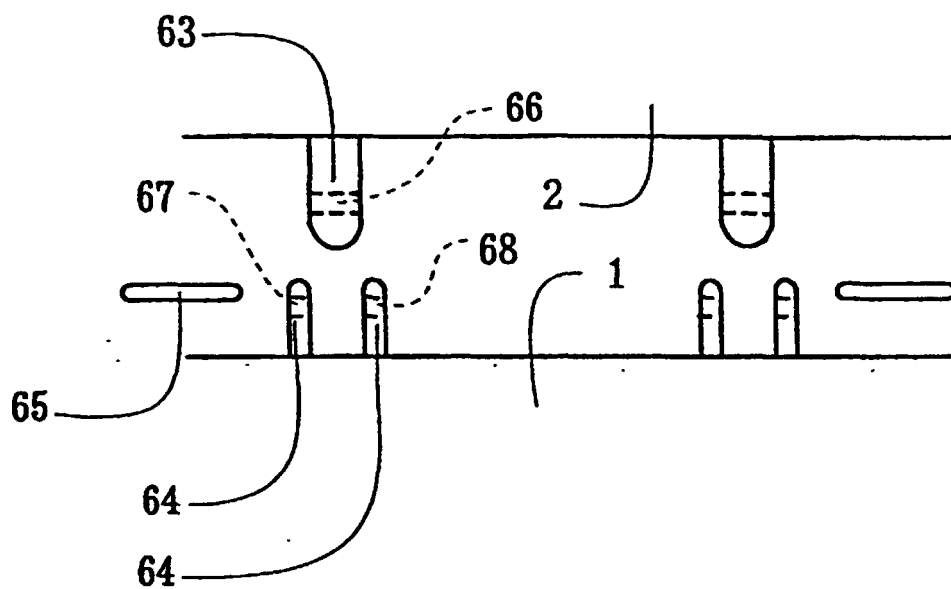
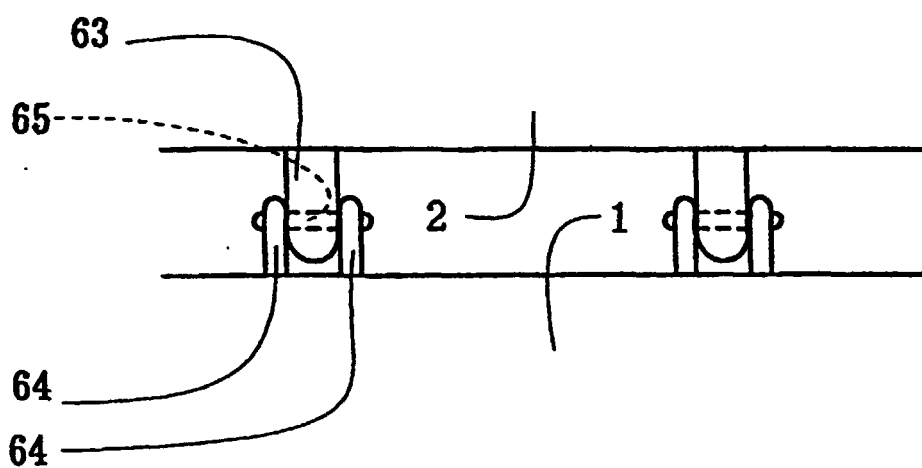


Fig. 22



(A)



(B)



Fig. 23

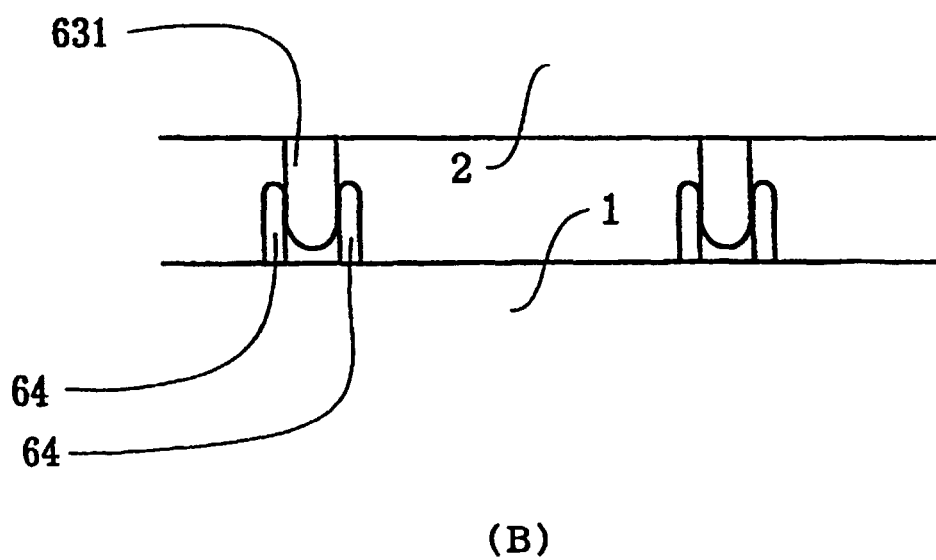
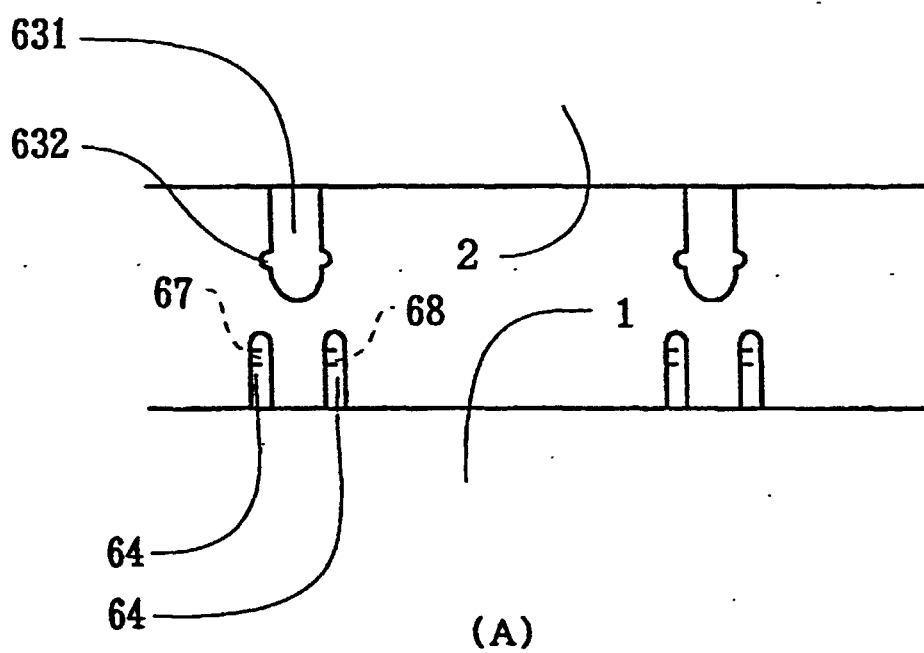


Fig. 24

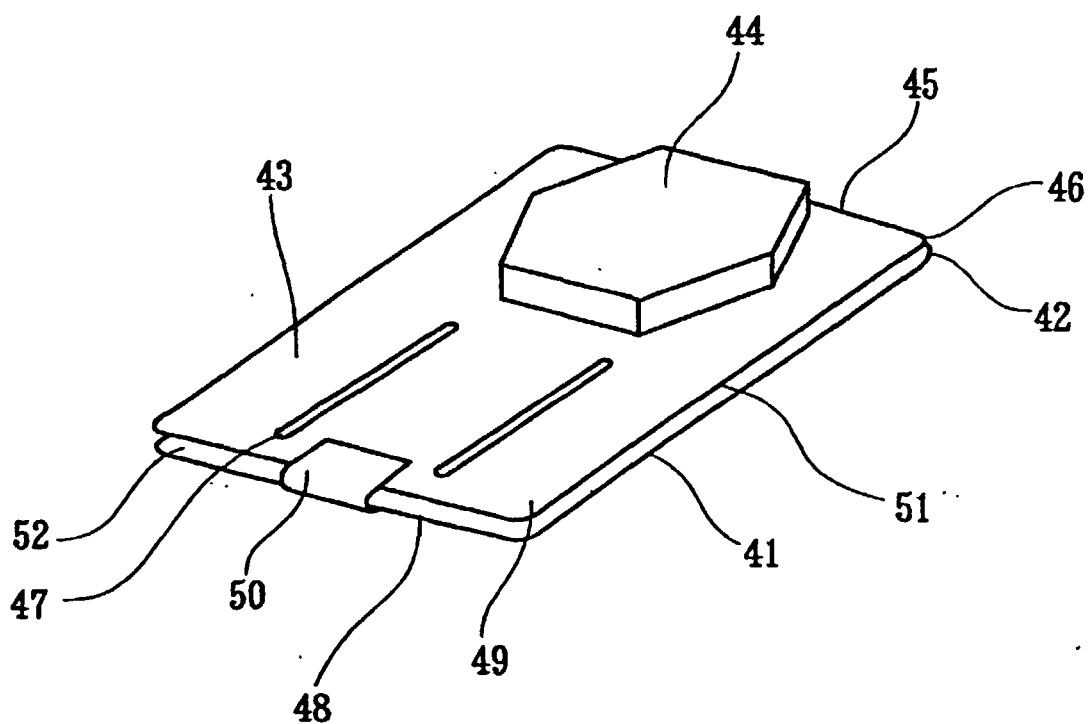


Fig. 25

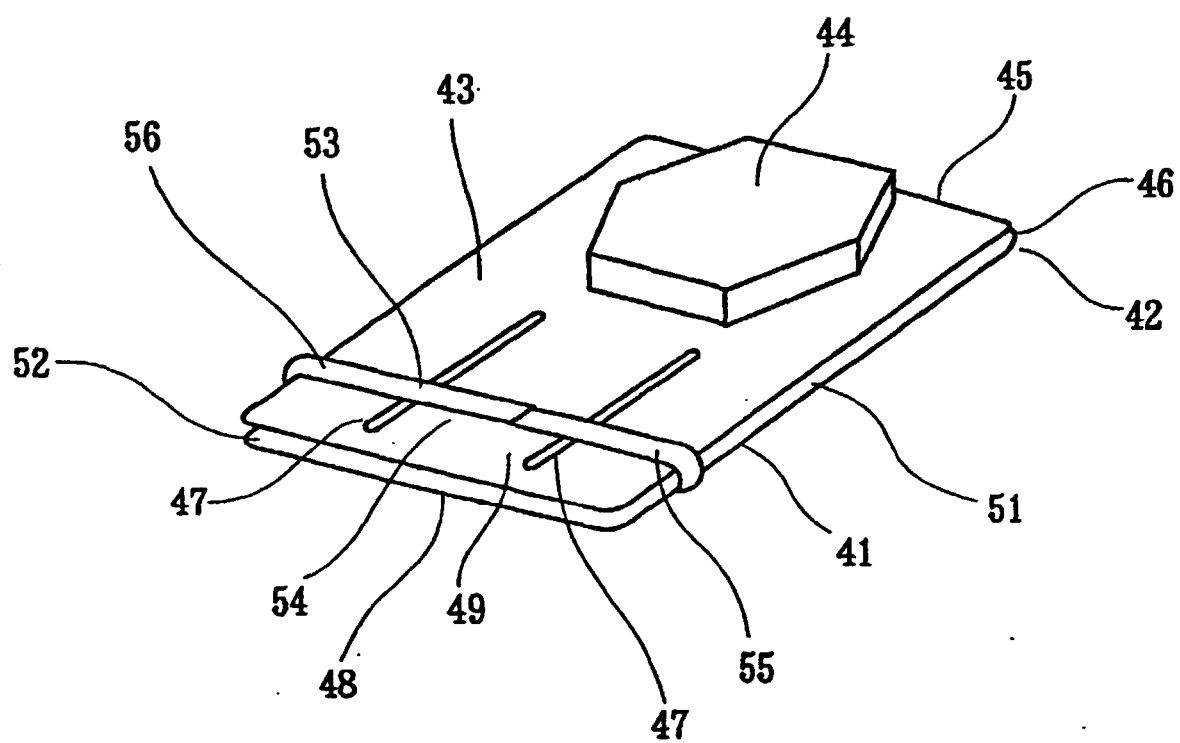


Fig. 26

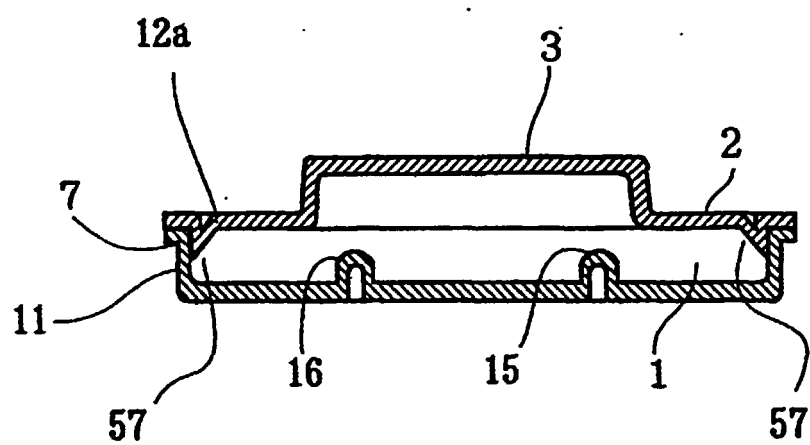
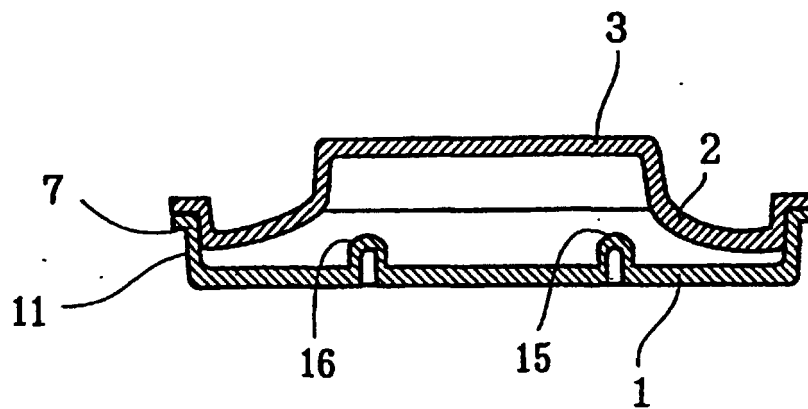
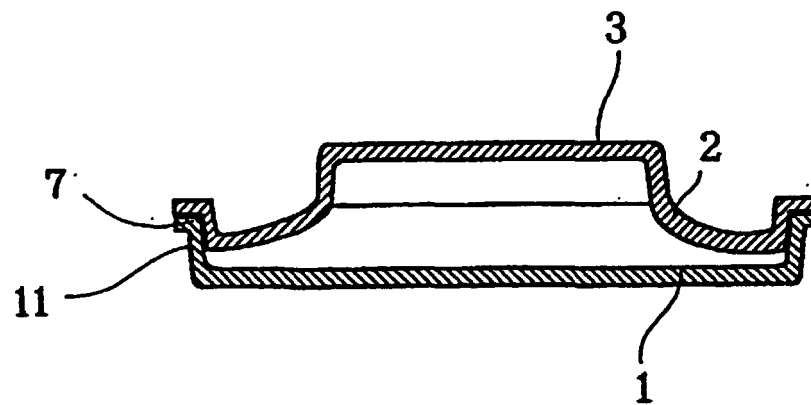


Fig. 27

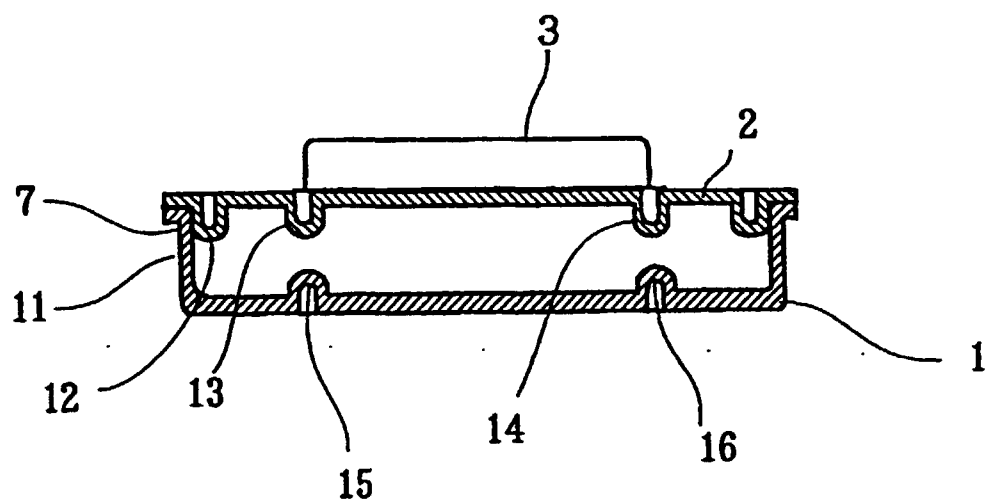


(A)

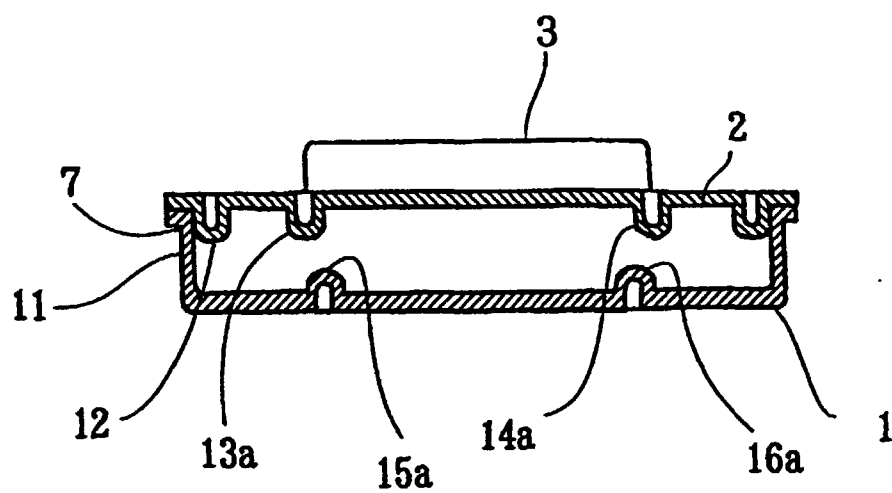


(B)

Fig. 28



(A)



(B)

Fig. 29

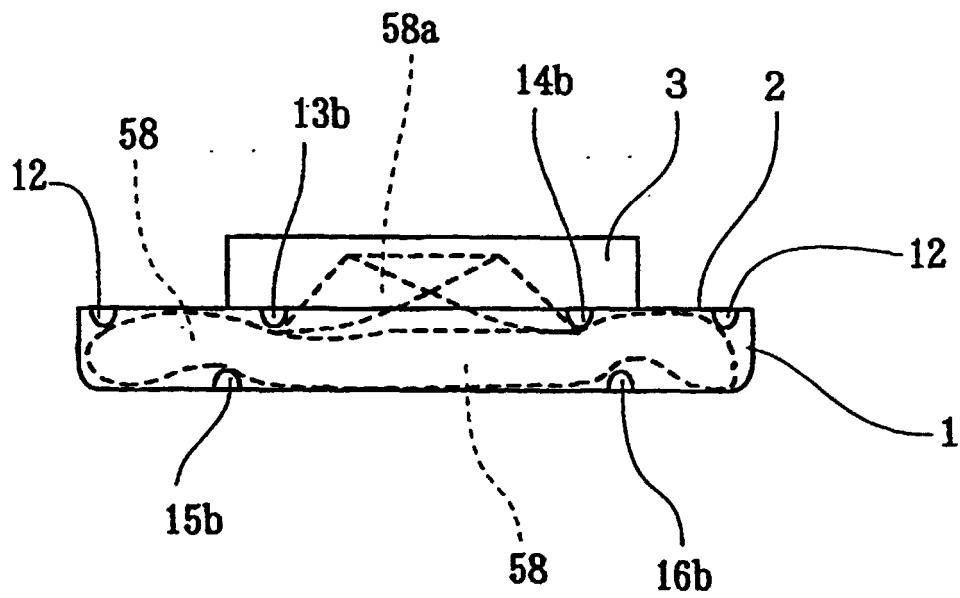
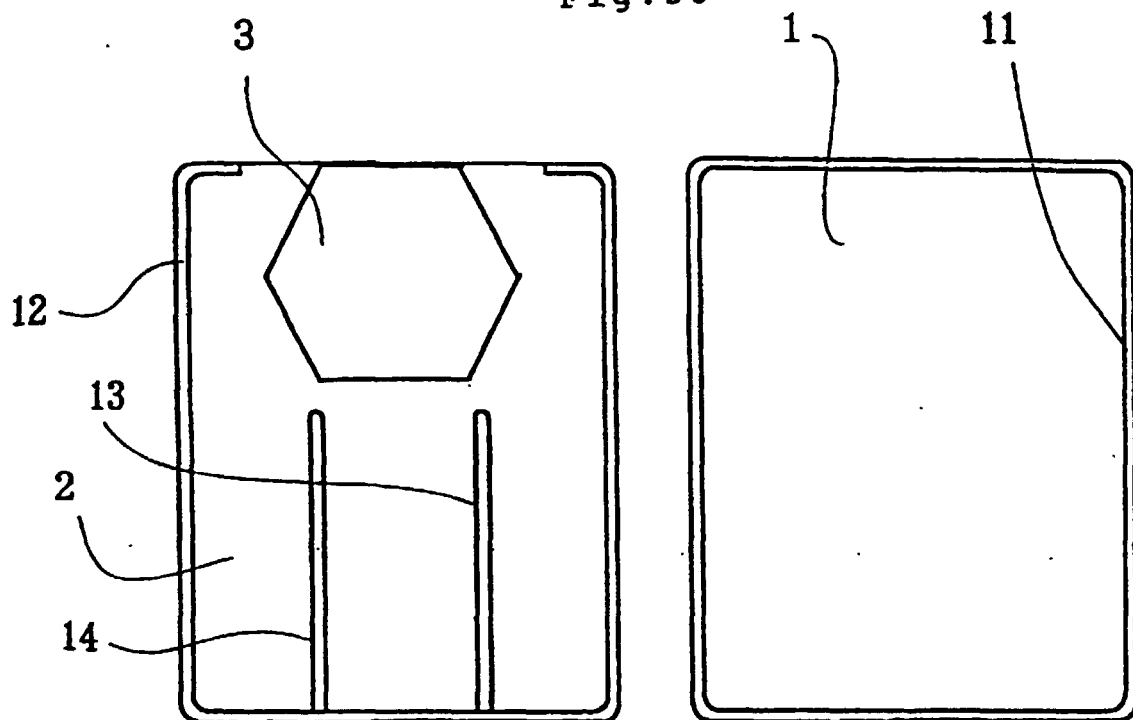
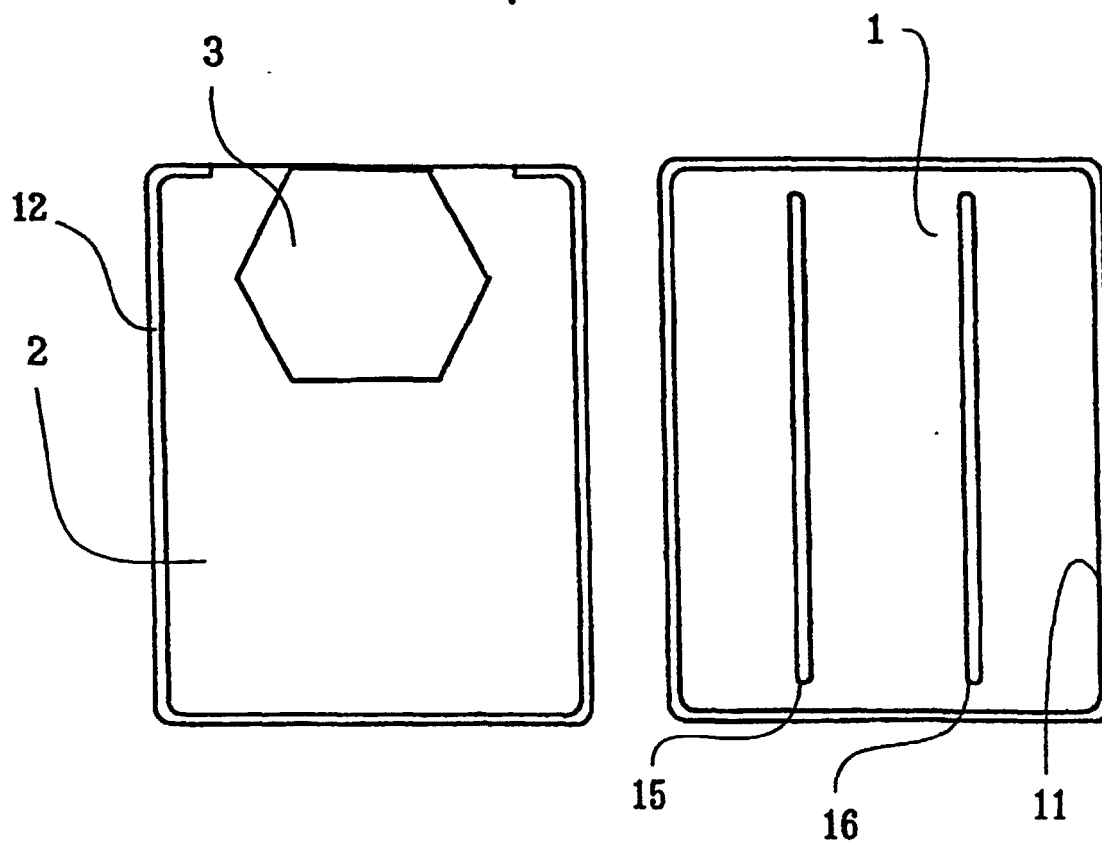


Fig. 30



(A)



(B)

Fig. 31

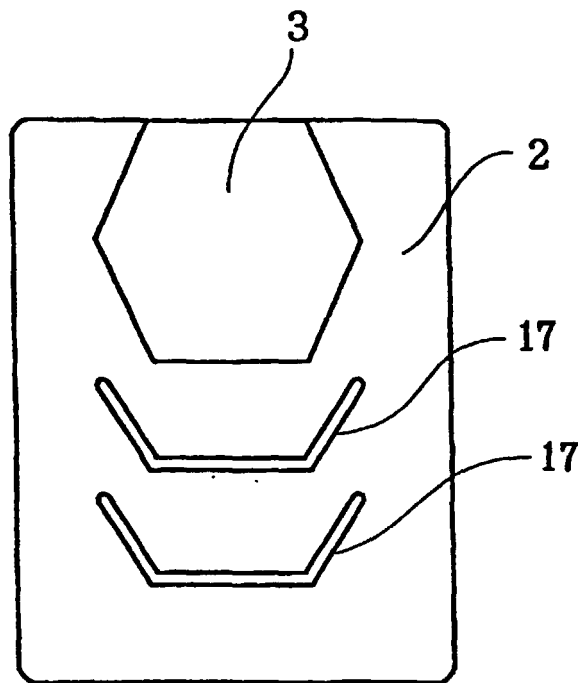


Fig. 32

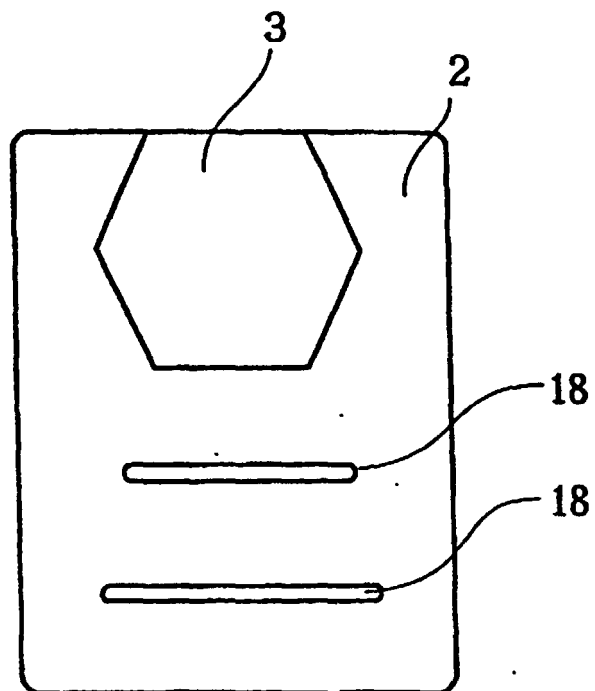




Fig. 33

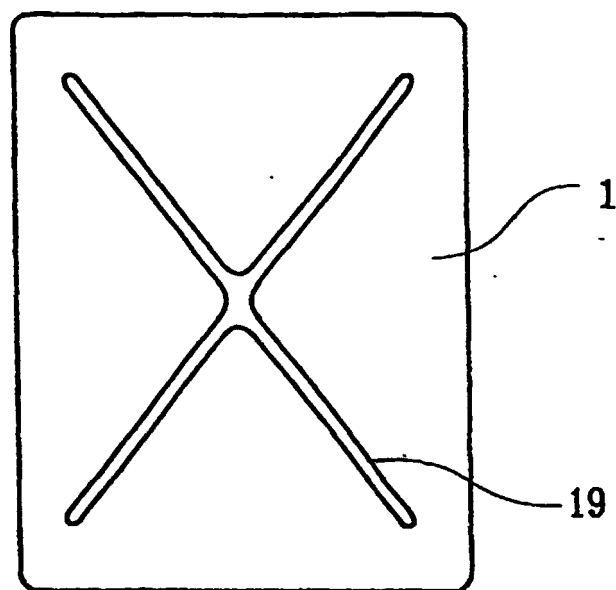


Fig. 34

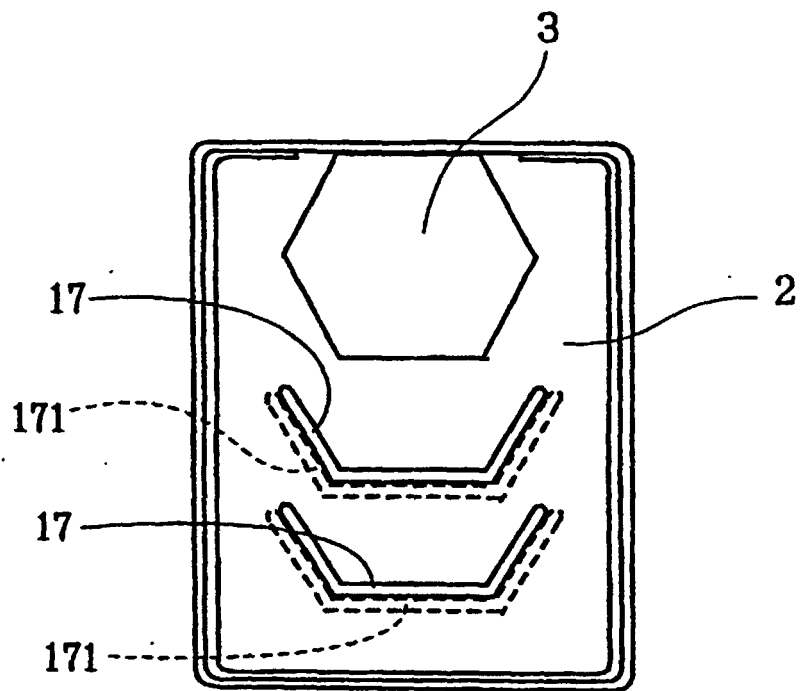


Fig. 35

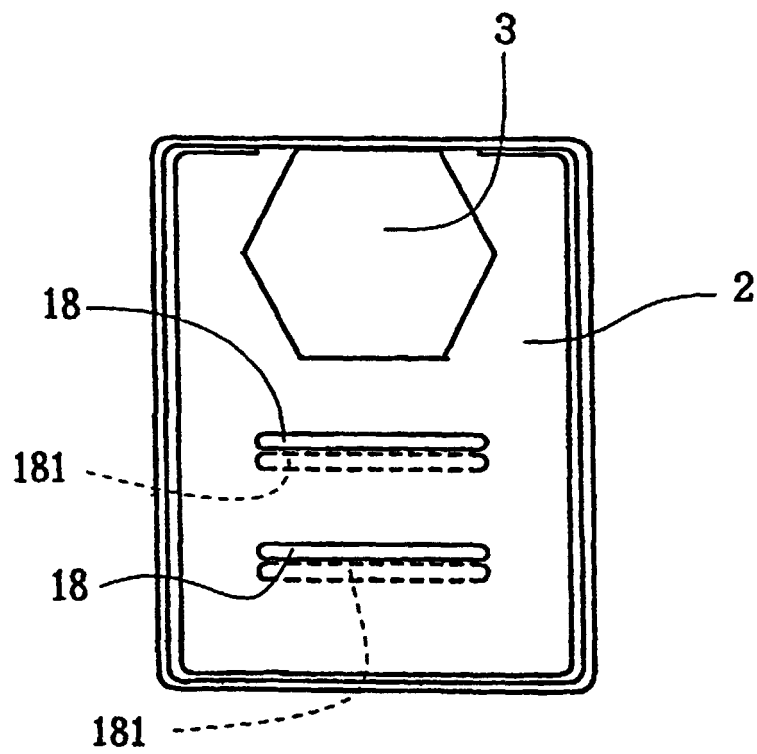


Fig. 36

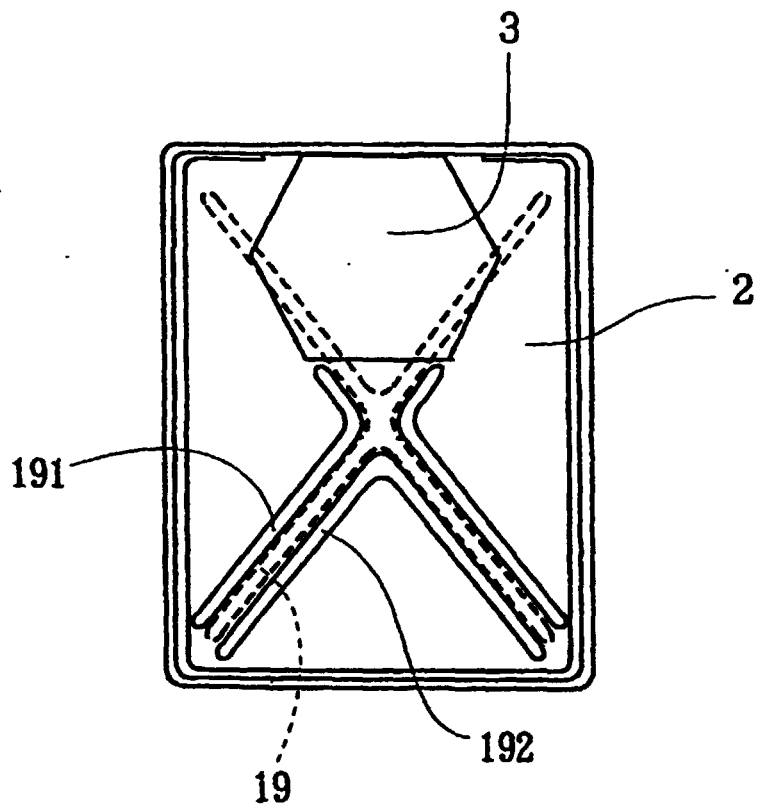


Fig. 37

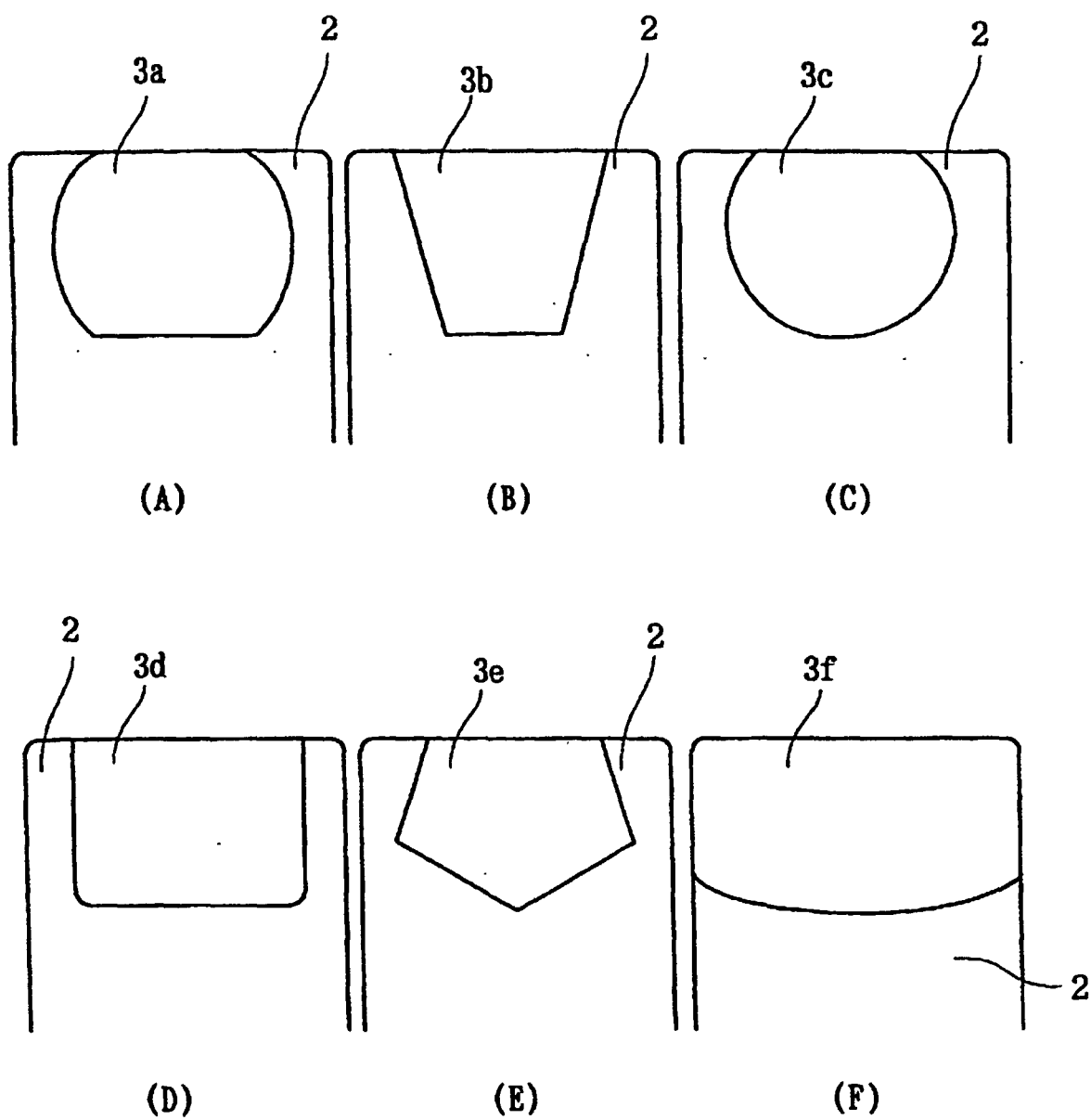


Fig. 38

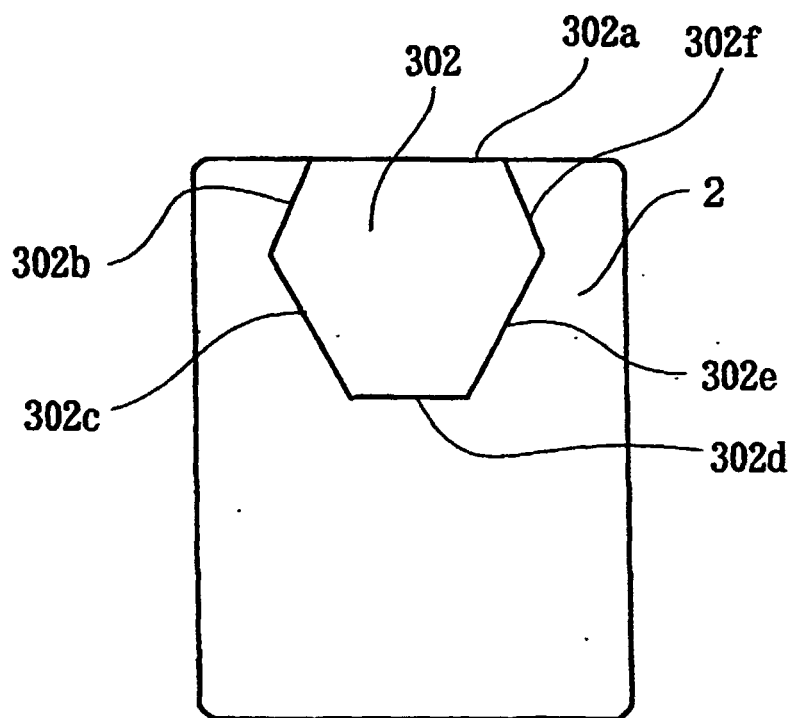
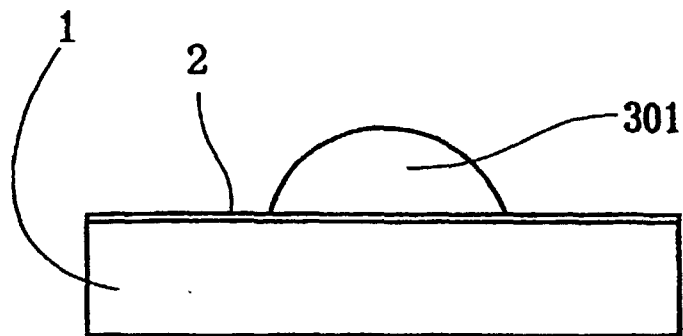
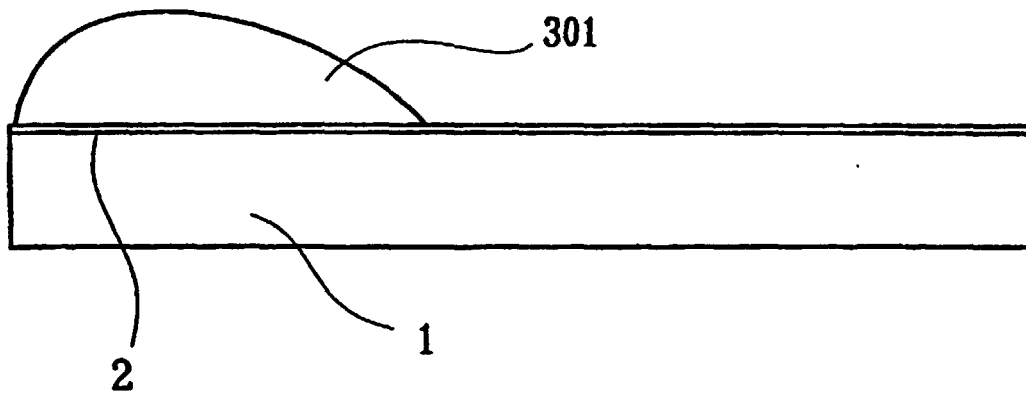


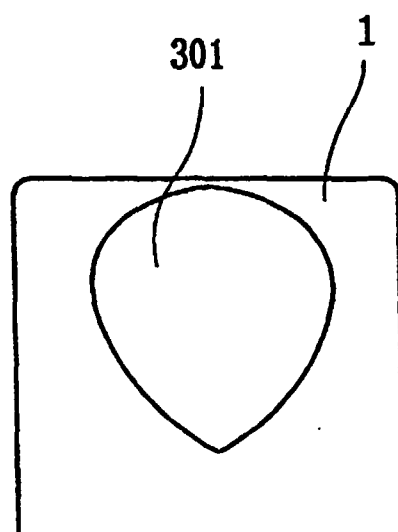
Fig. 39



(A)

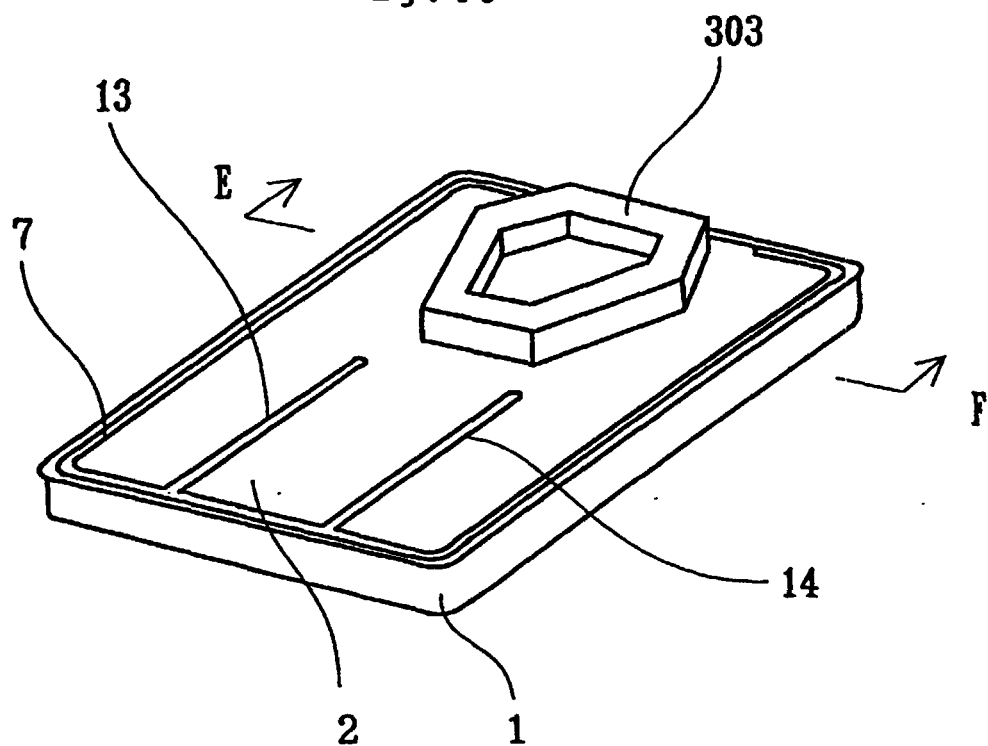


(B)

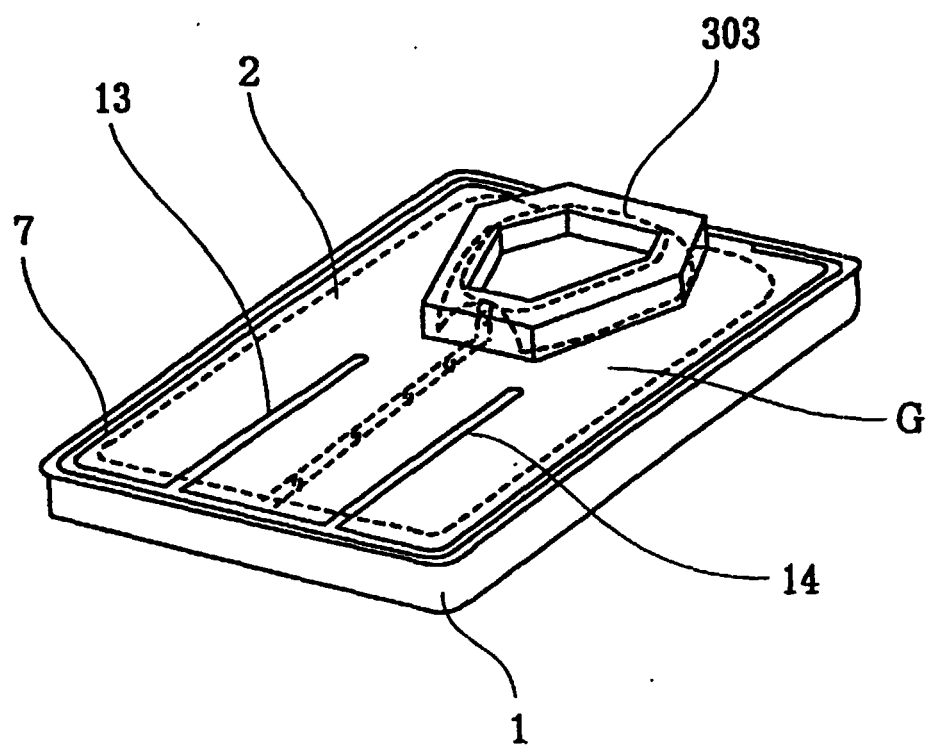


(C)

Fig. 40



(A)



(B)

Fig. 41

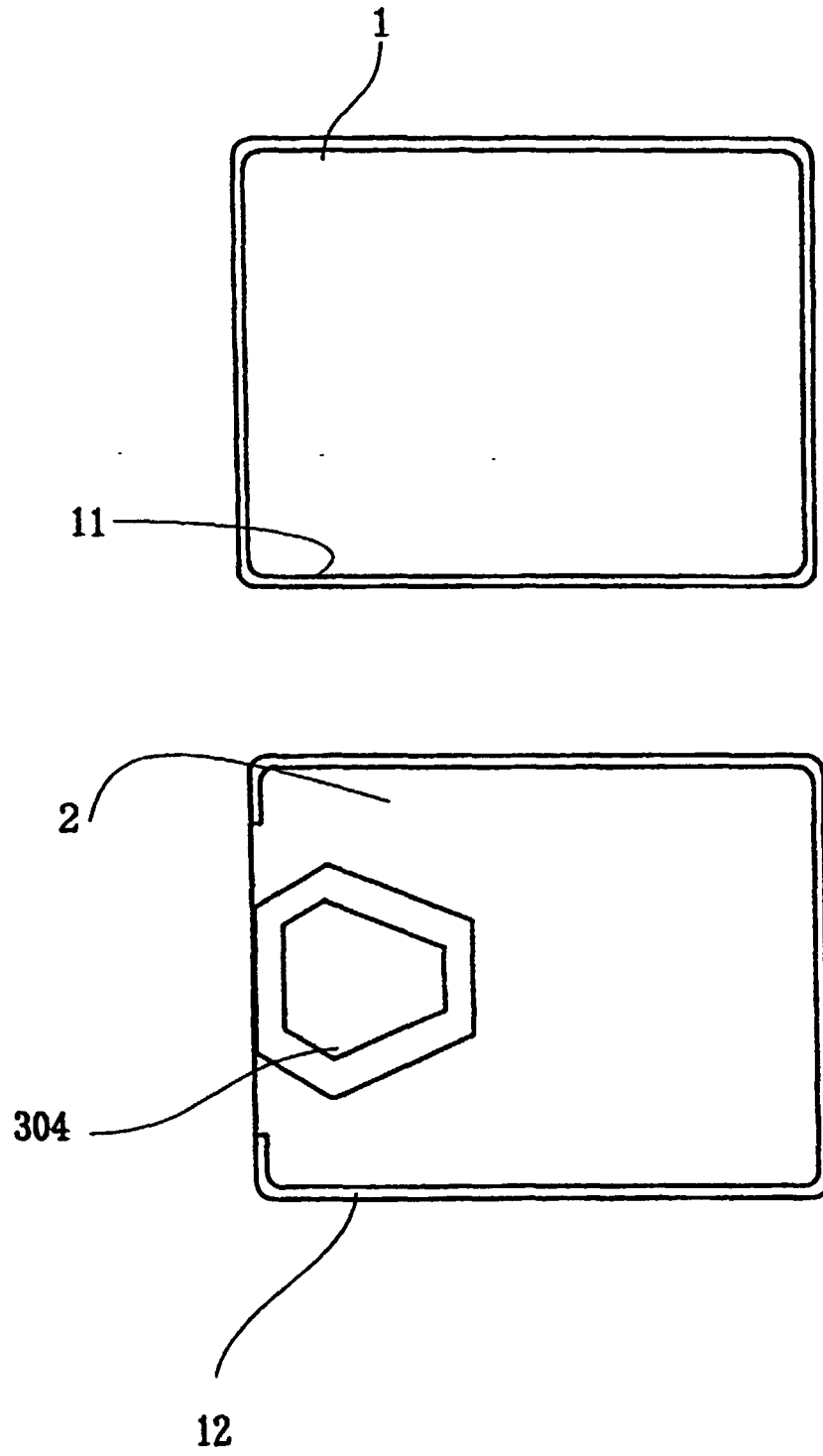
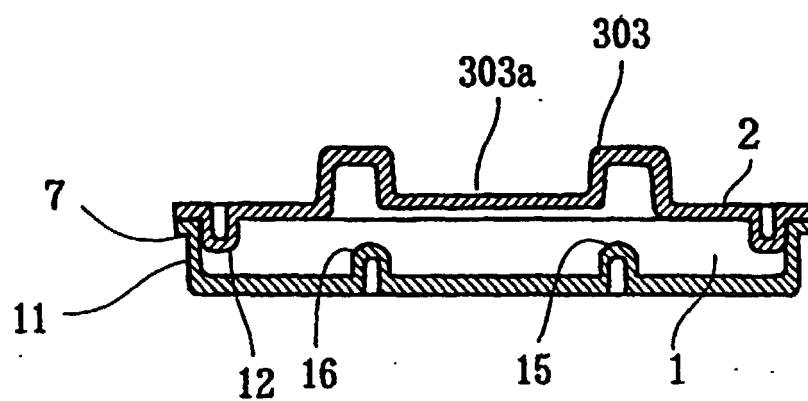
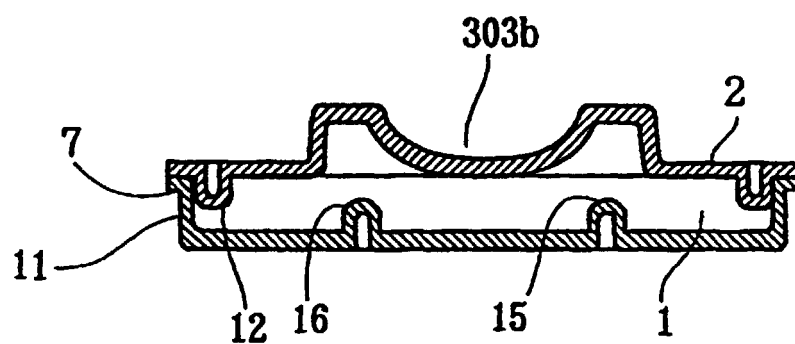




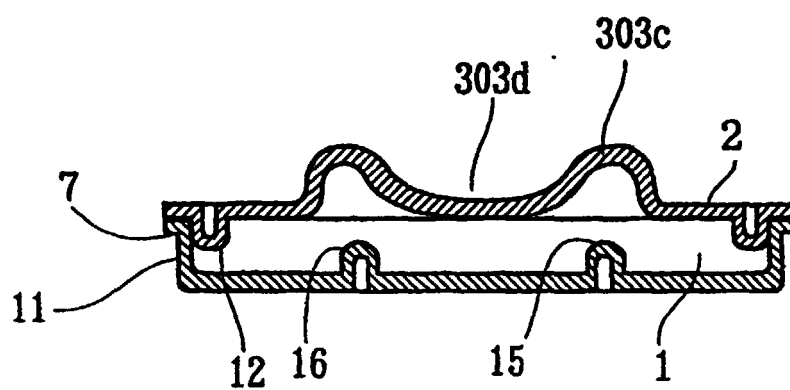
Fig. 42



(A)



(B)



(C)

Fig. 43

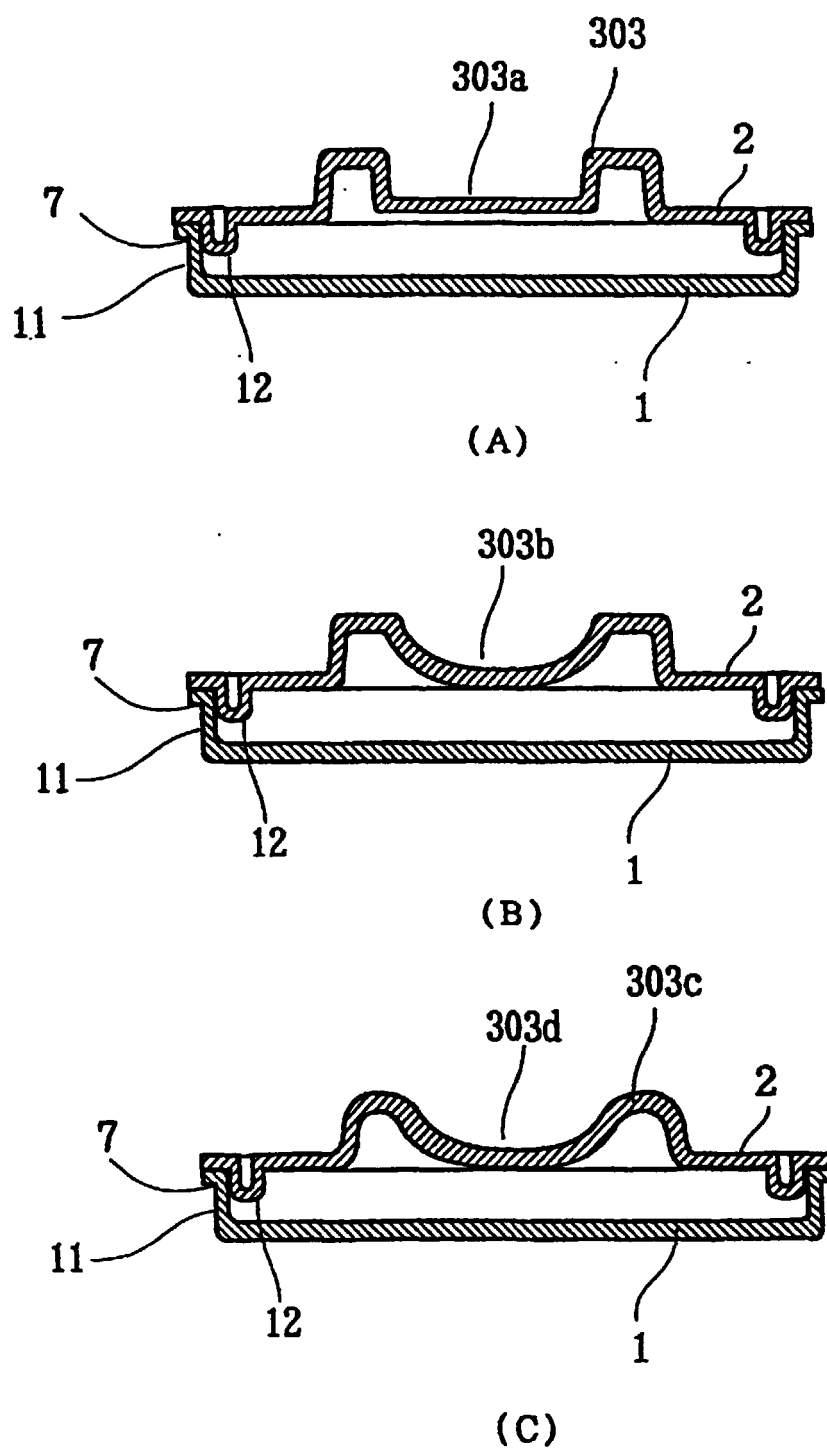
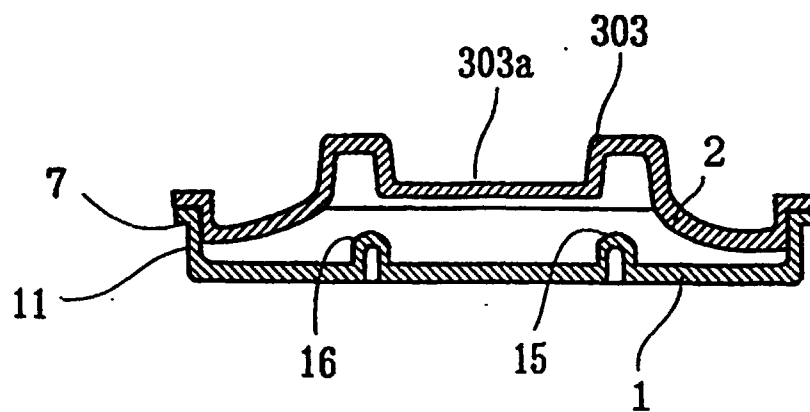
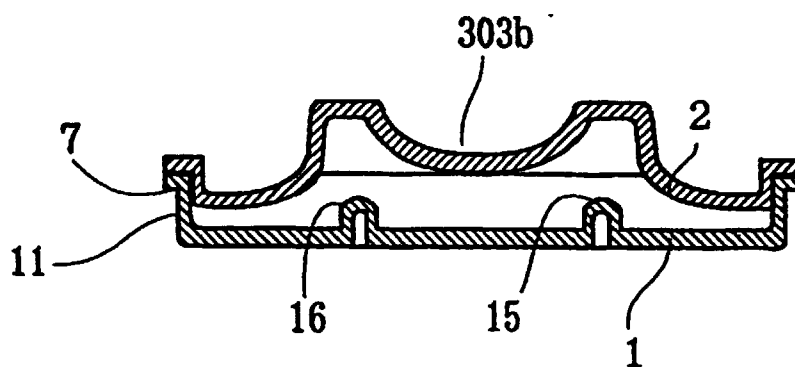


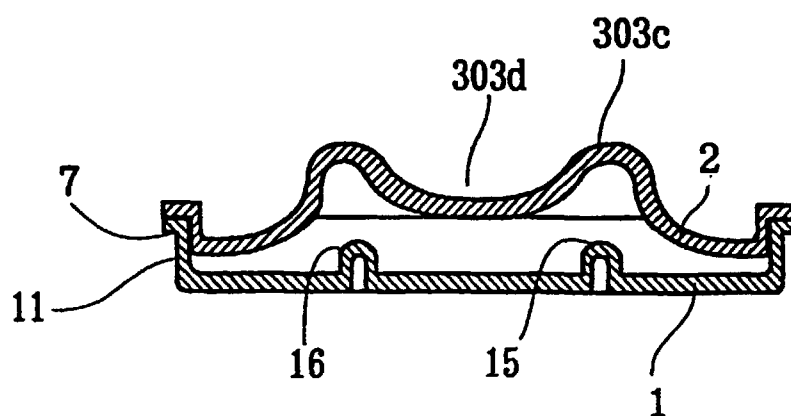
Fig. 44



(A)



(B)



(C)

Fig. 45

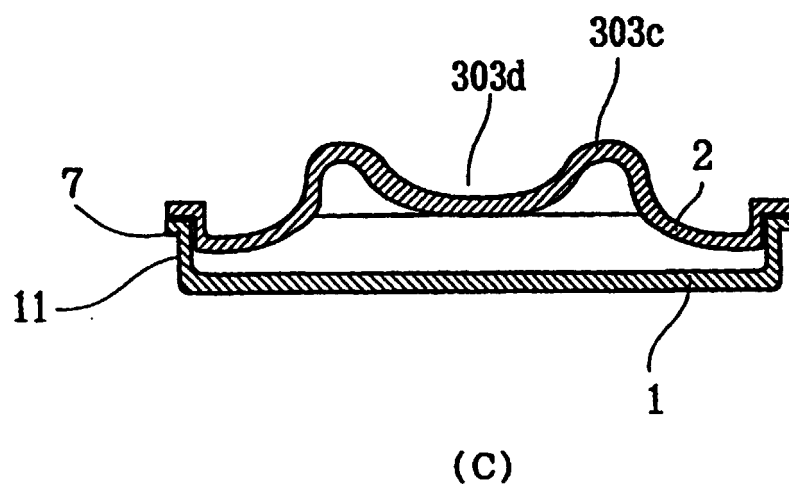
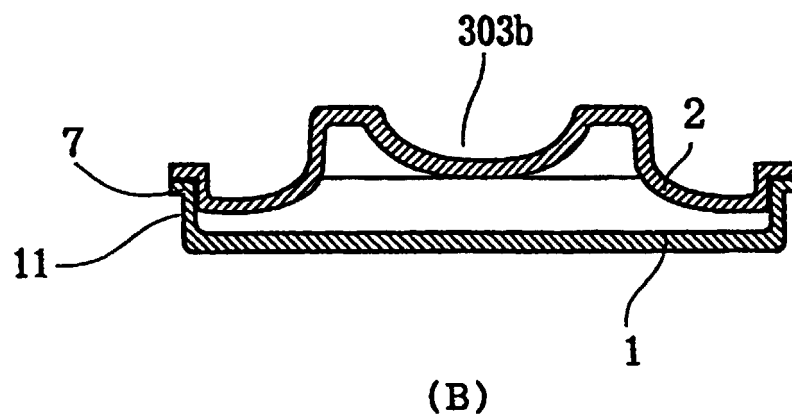
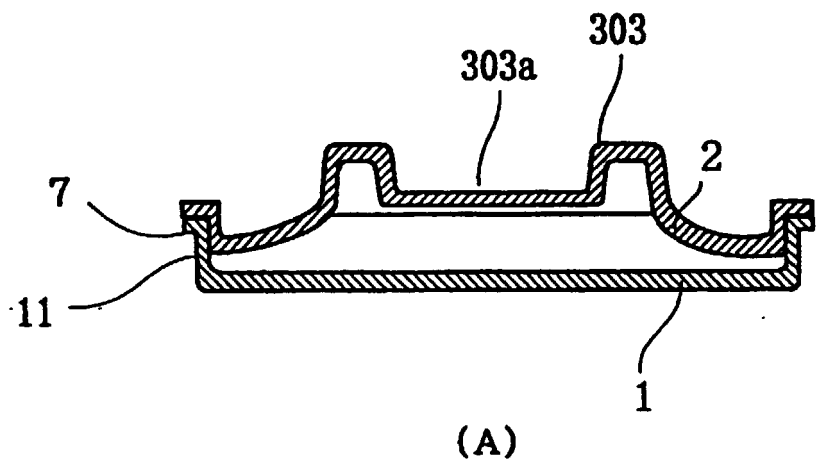
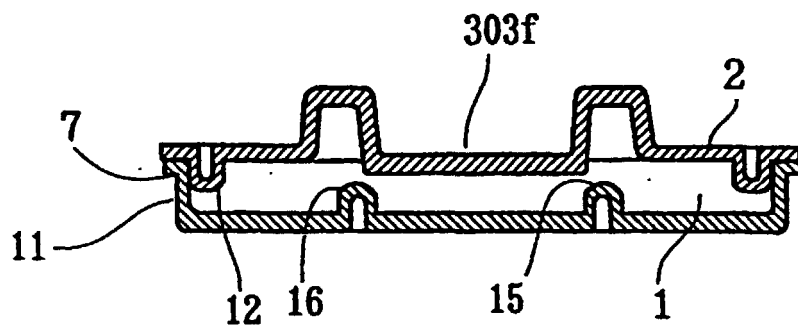
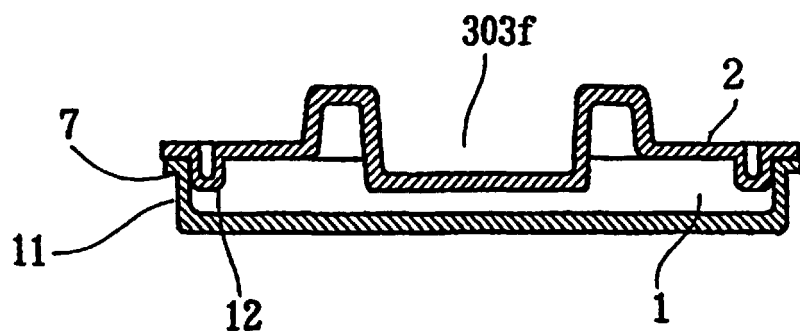


Fig. 46



(A)



(B)

Fig. 47

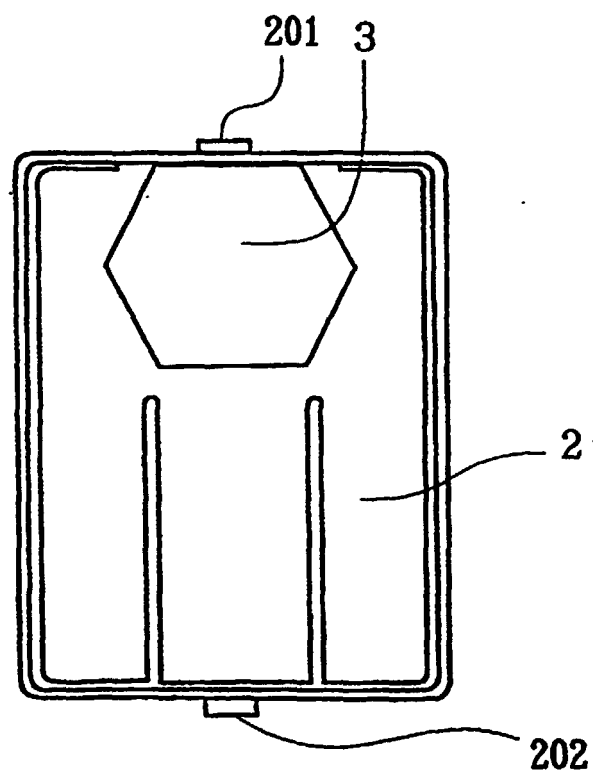


Fig. 48

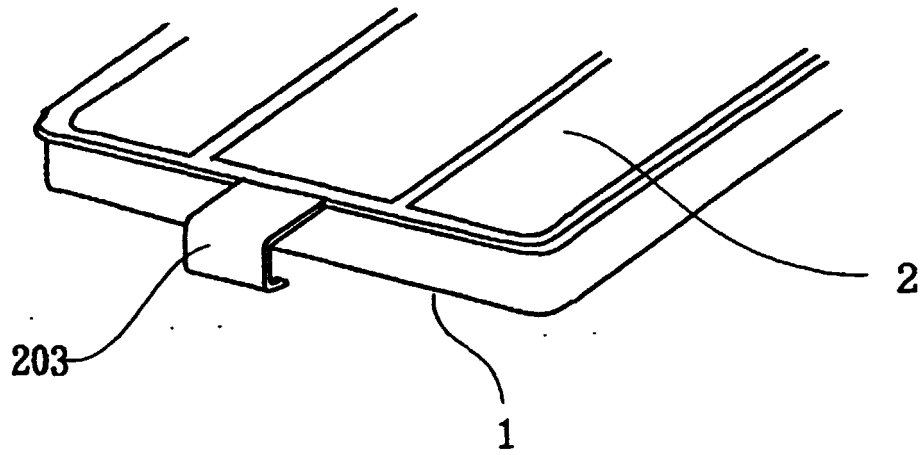


Fig. 49

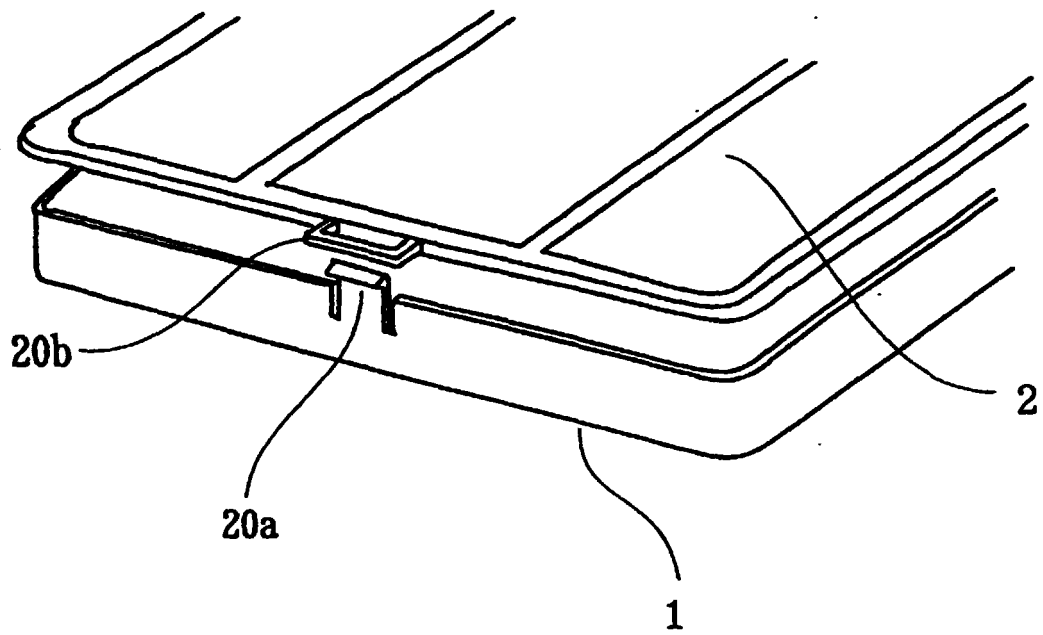


Fig. 50

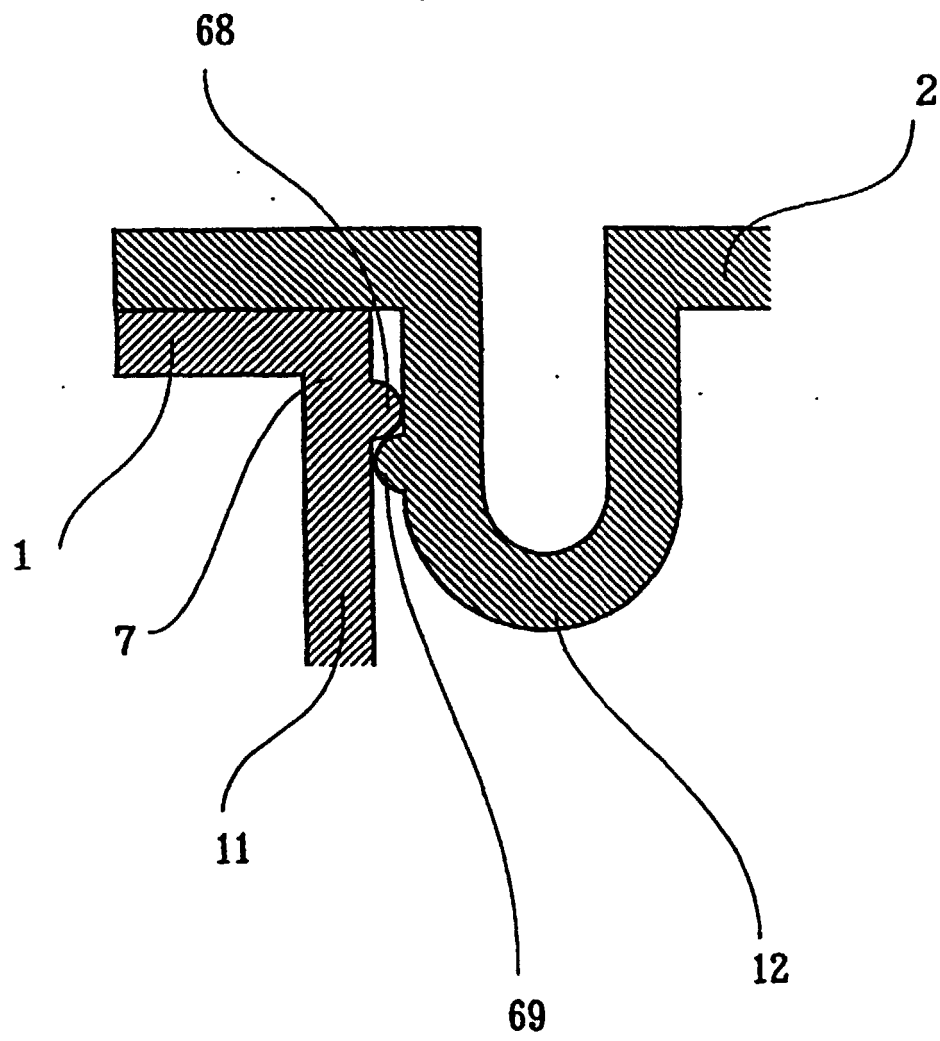
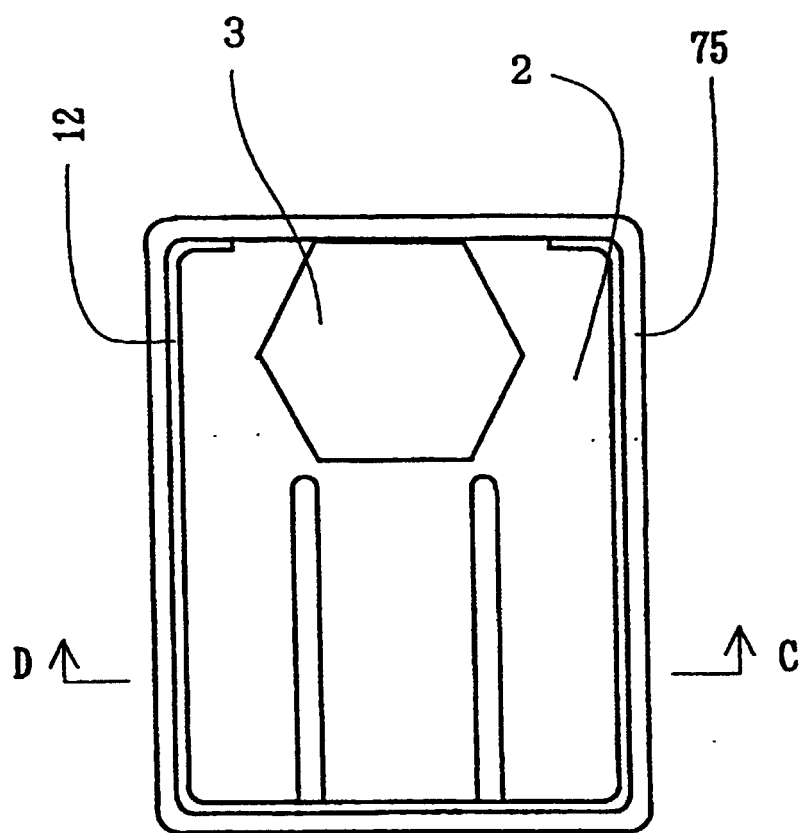
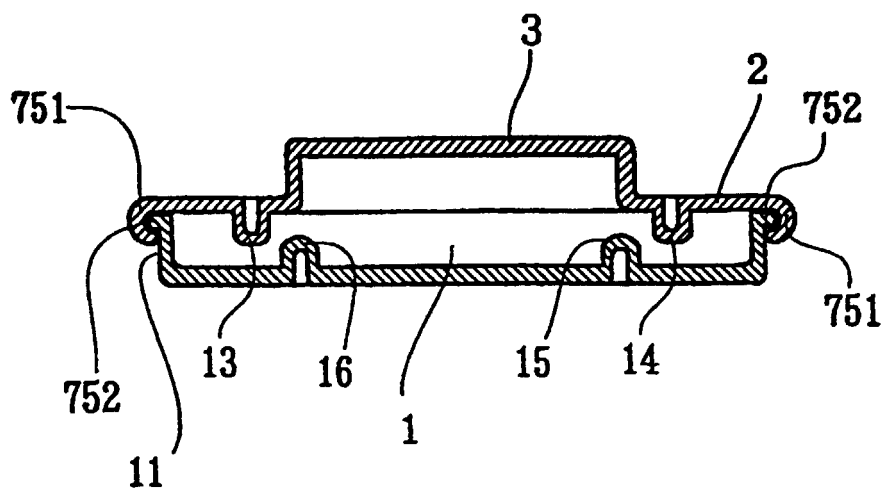




Fig. 51

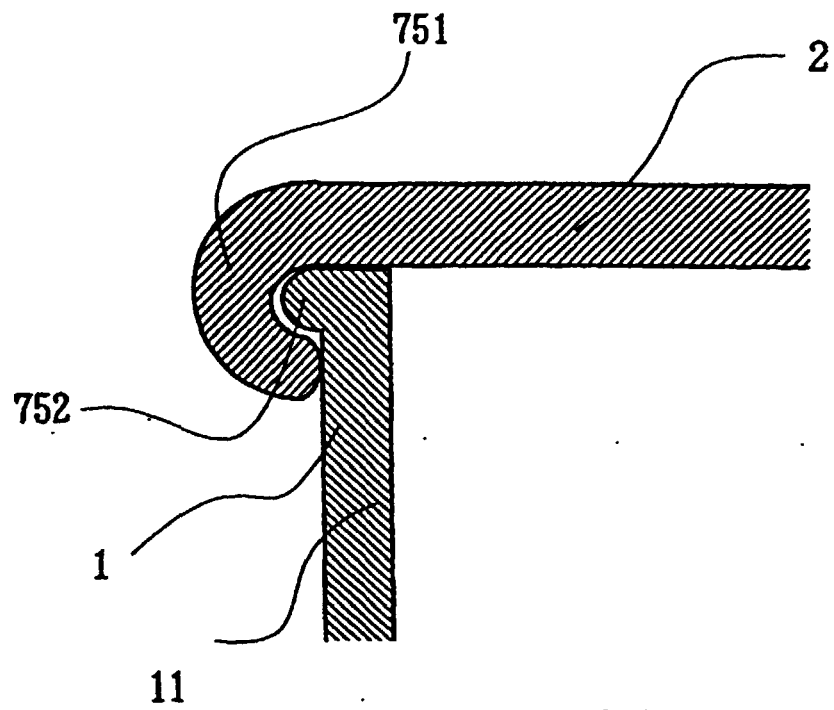


(A)

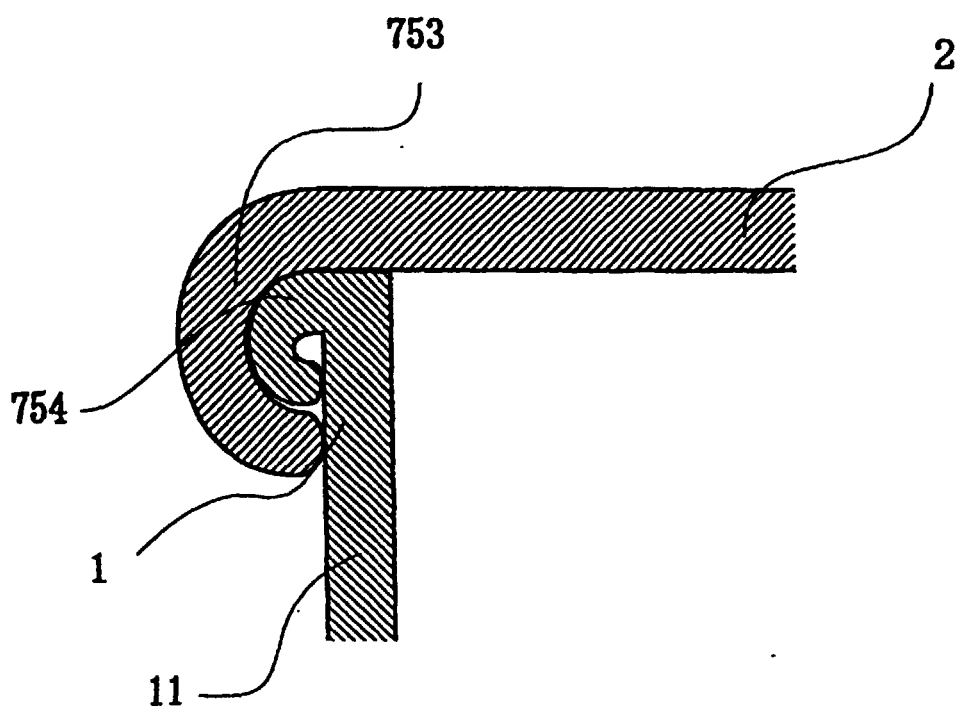


(B)

Fig. 52

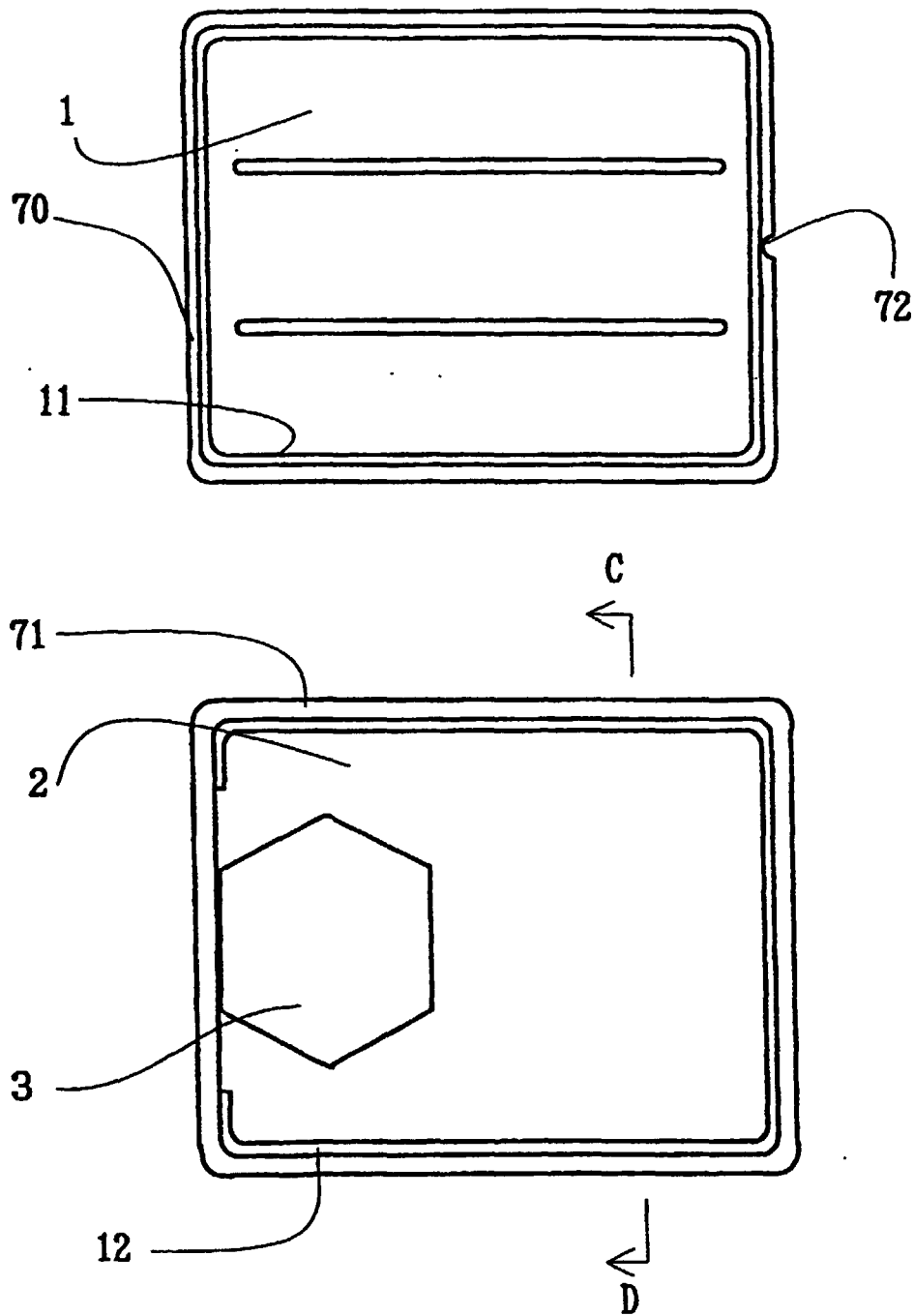


(A)



(B)

Fig. 53



**Fig. 54**

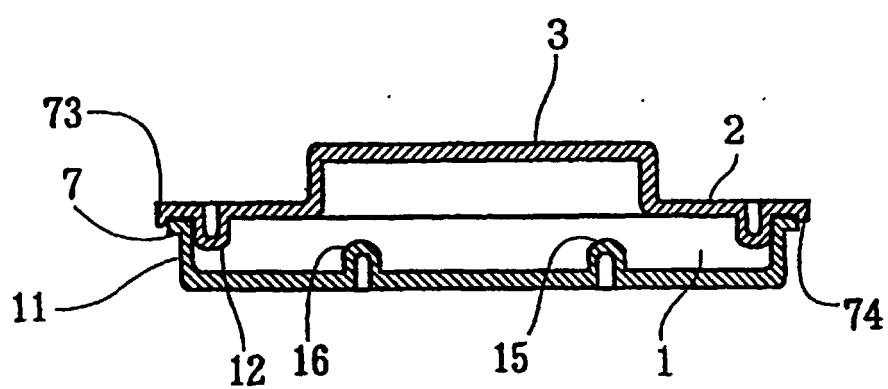
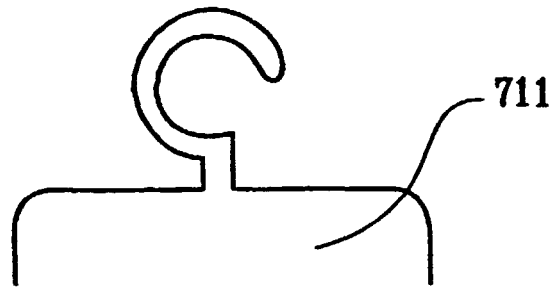
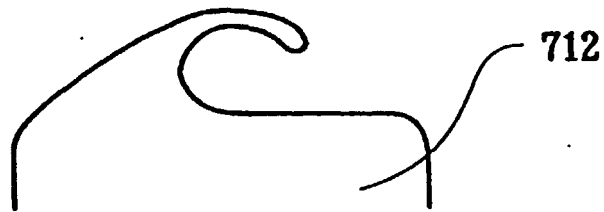


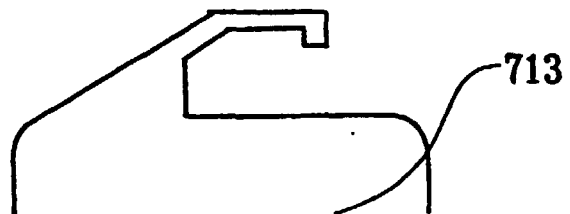
Fig. 55



(A)



(B)



(C)

Fig. 56

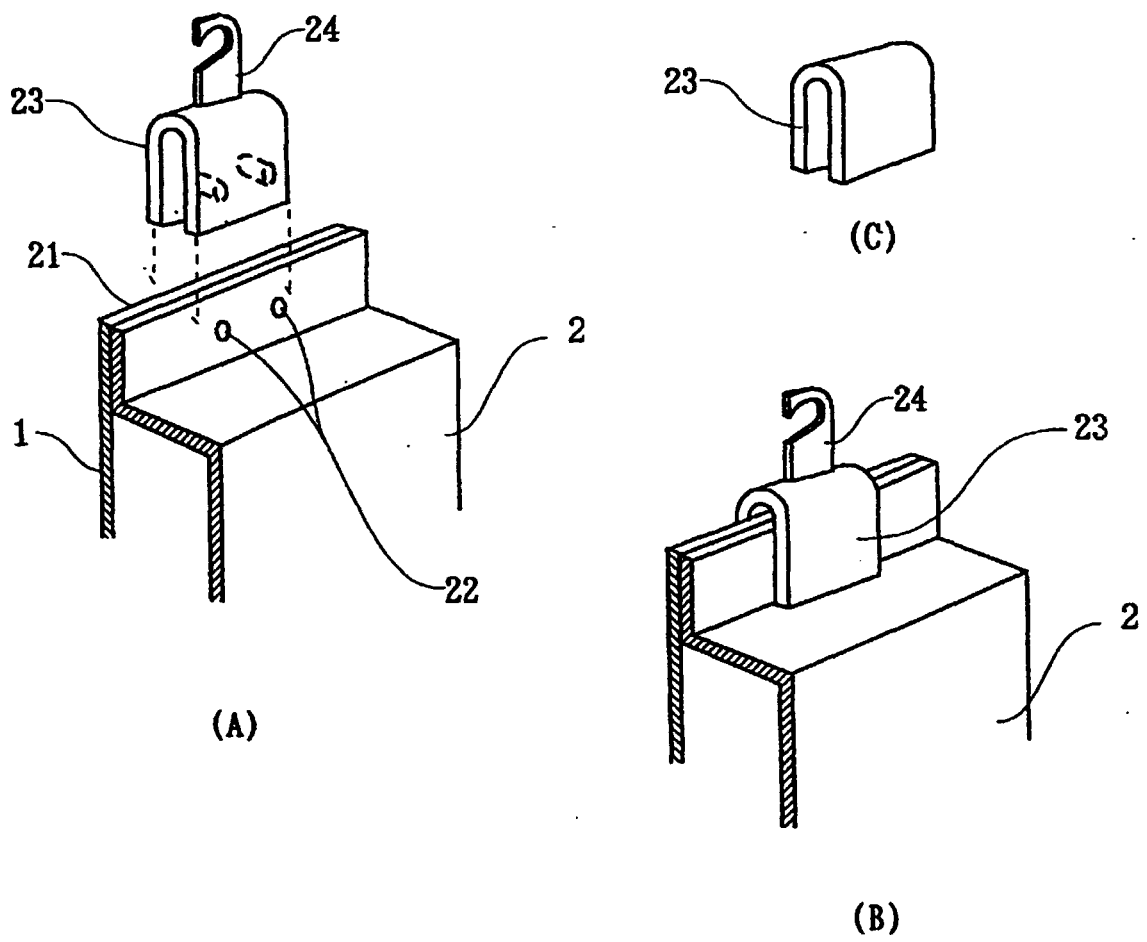


Fig. 57

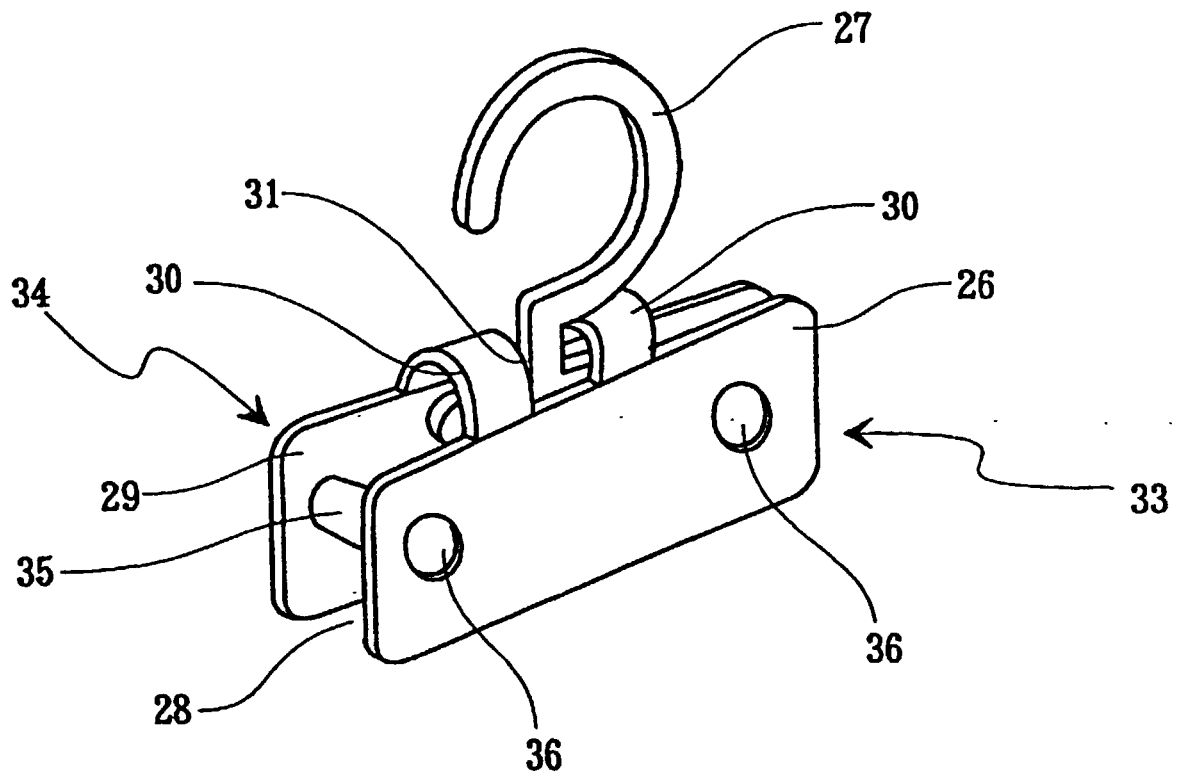


Fig. 58

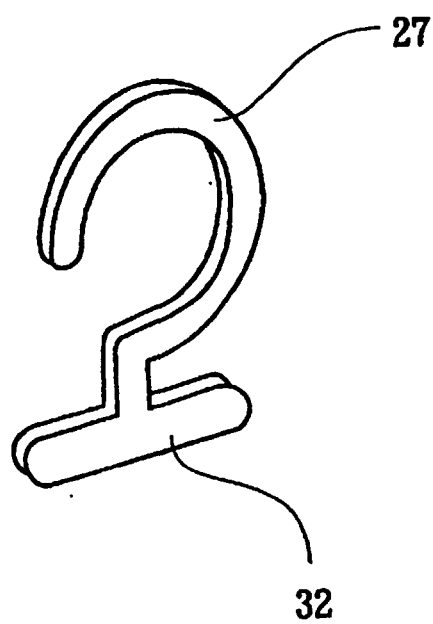


Fig. 59

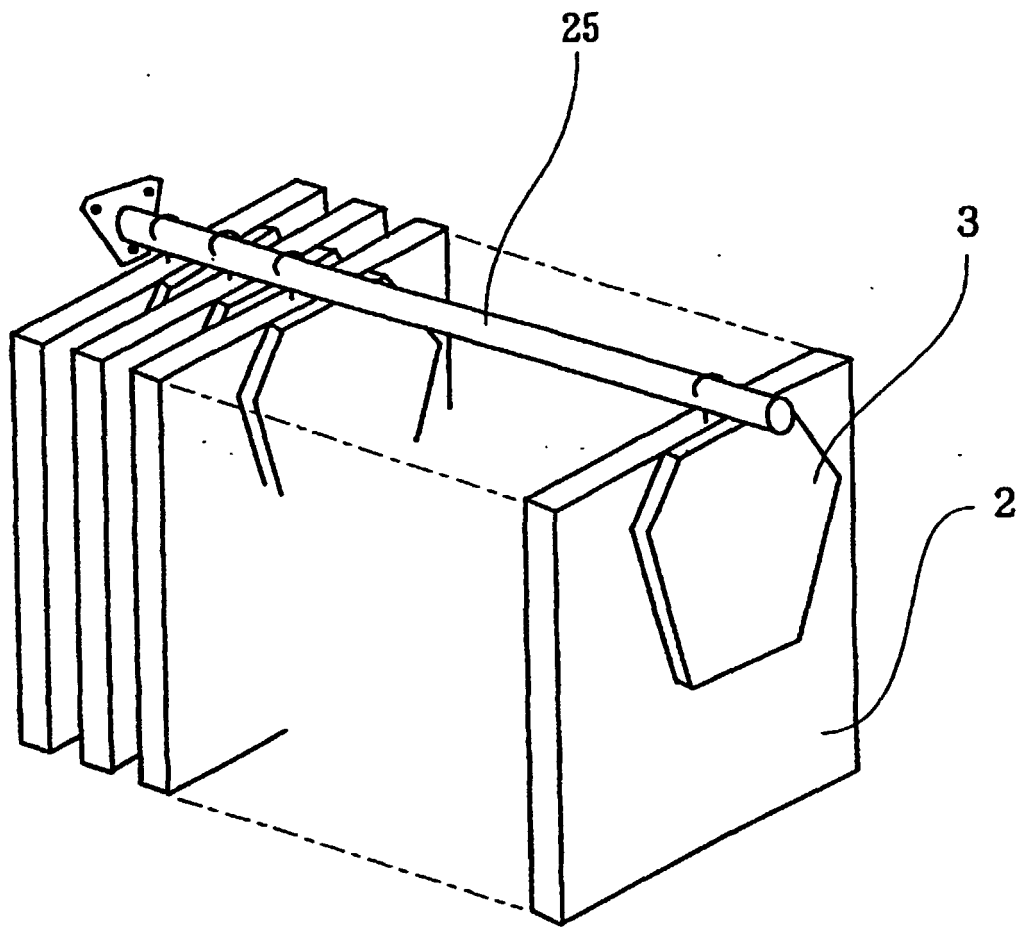


Fig. 60

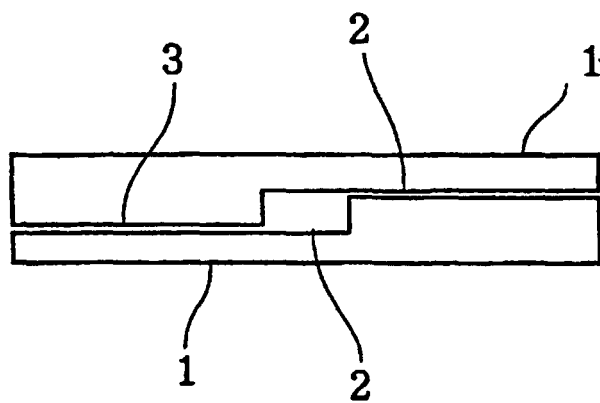




Fig. 61

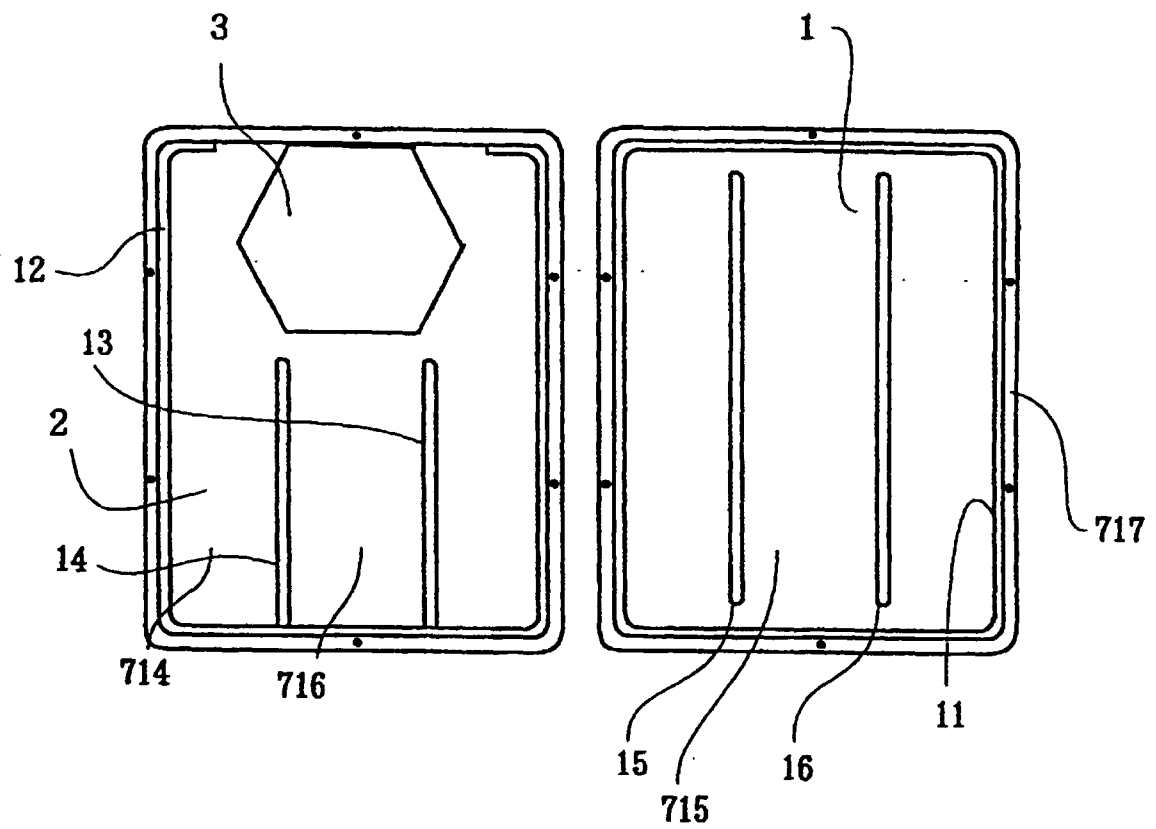


Fig. 62

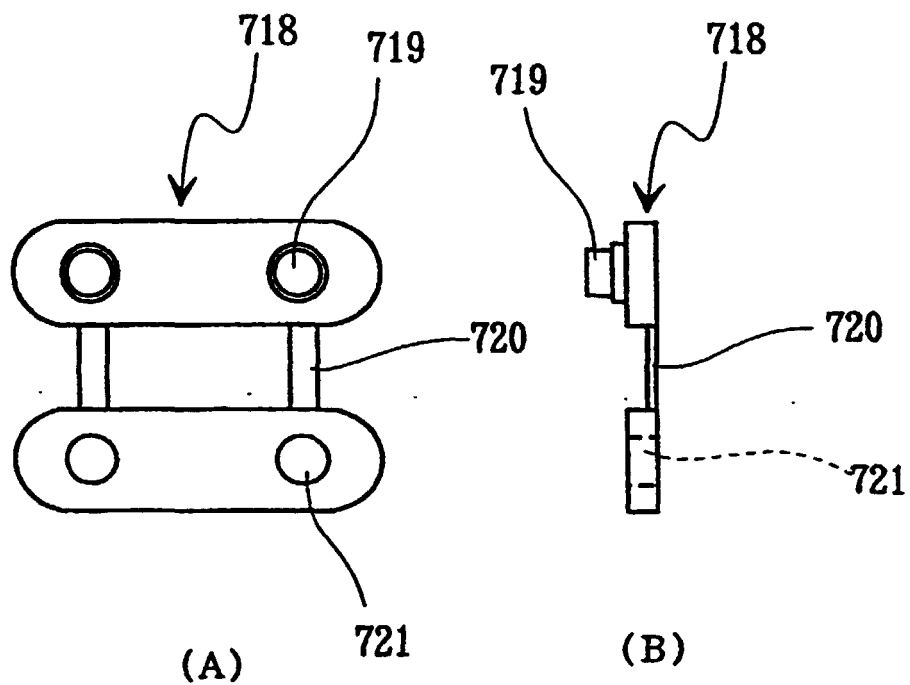


Fig. 63

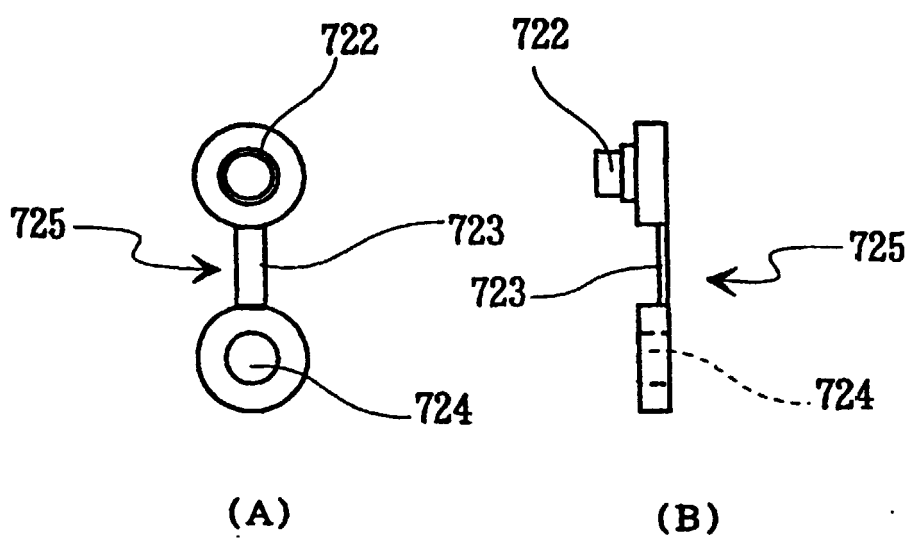
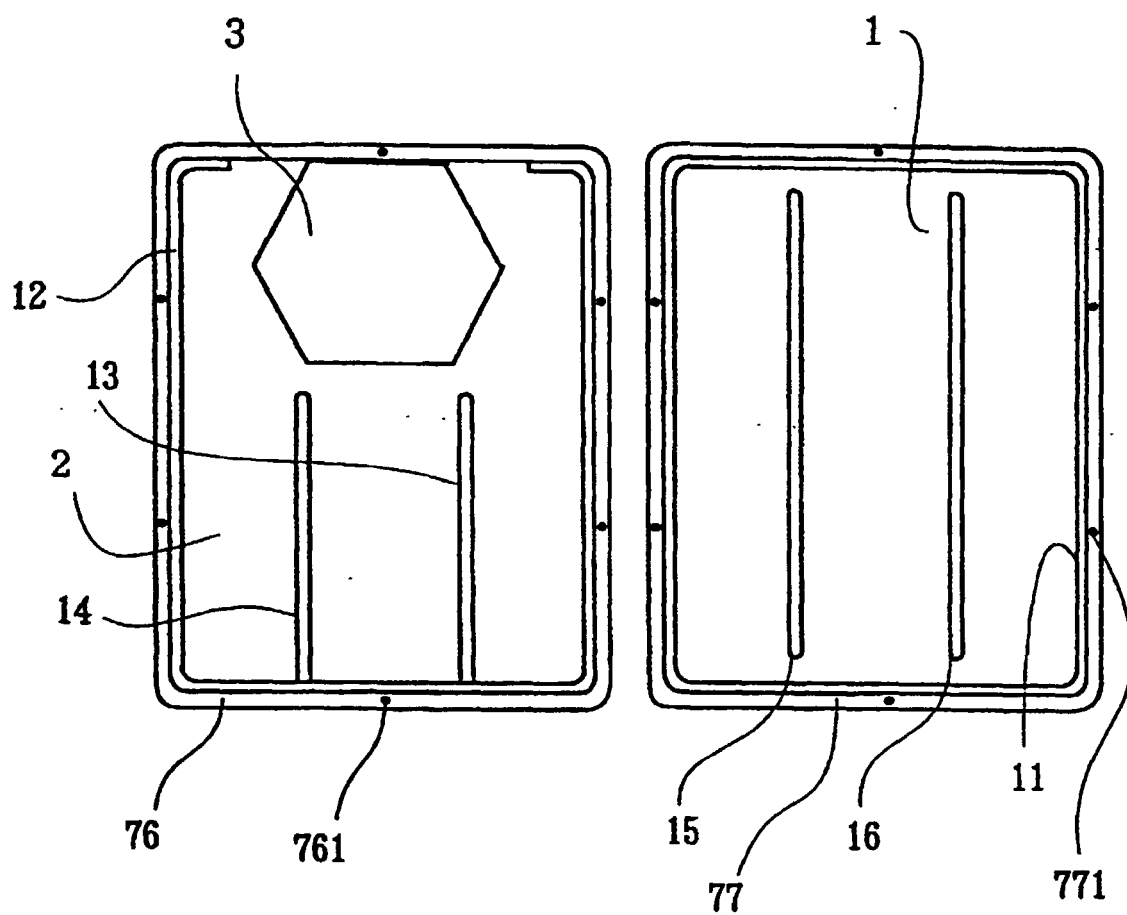
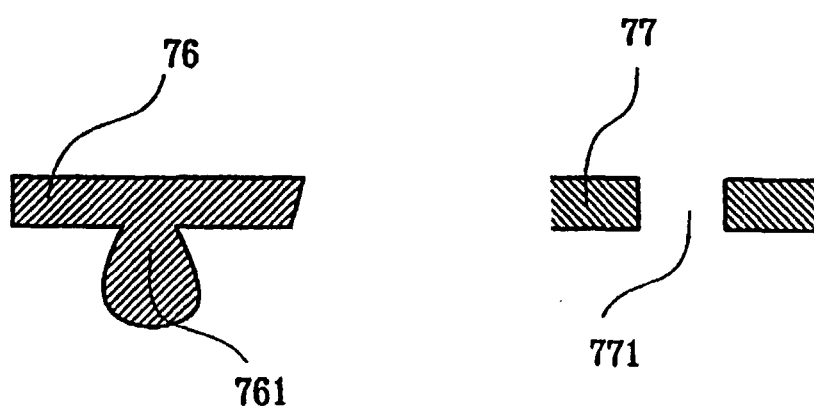


Fig. 64



(A)



(B)

Fig. 65

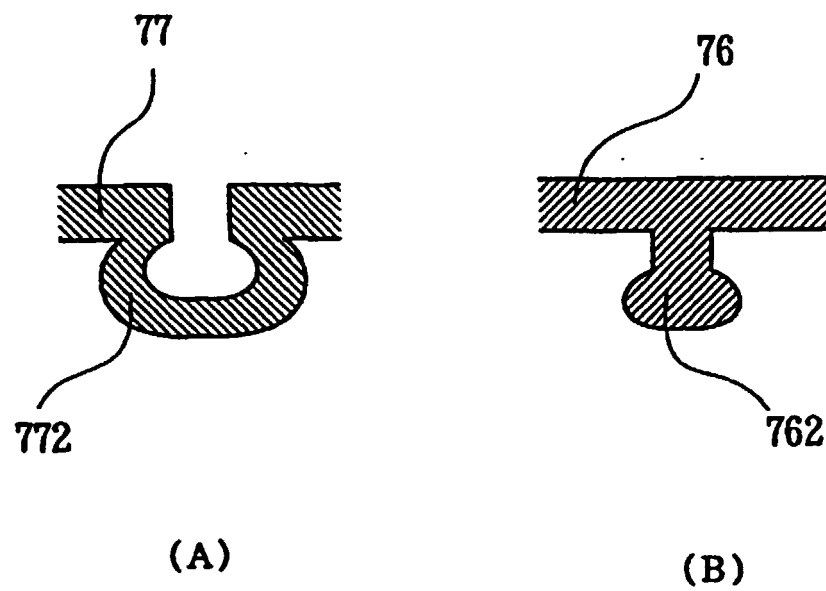
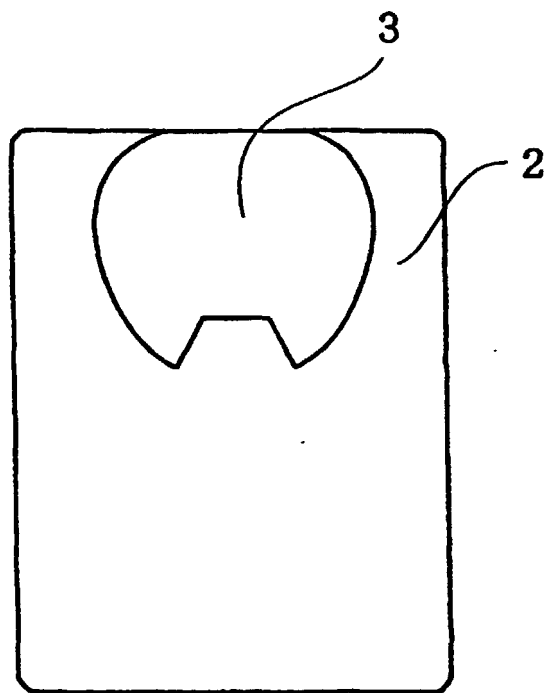
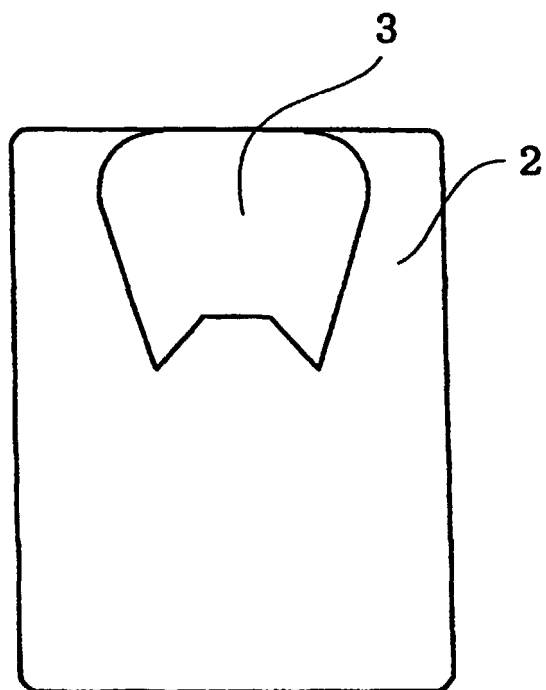


Fig. 66



(A)



(B)

Fig. 67

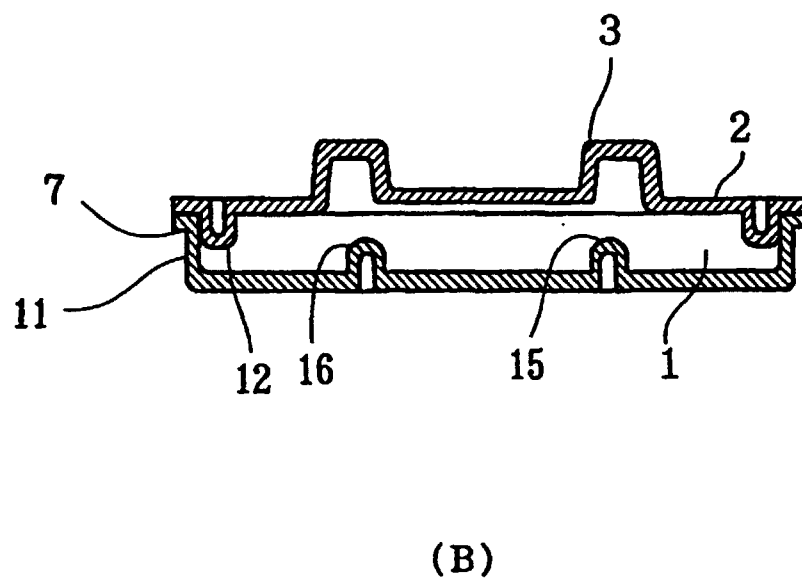
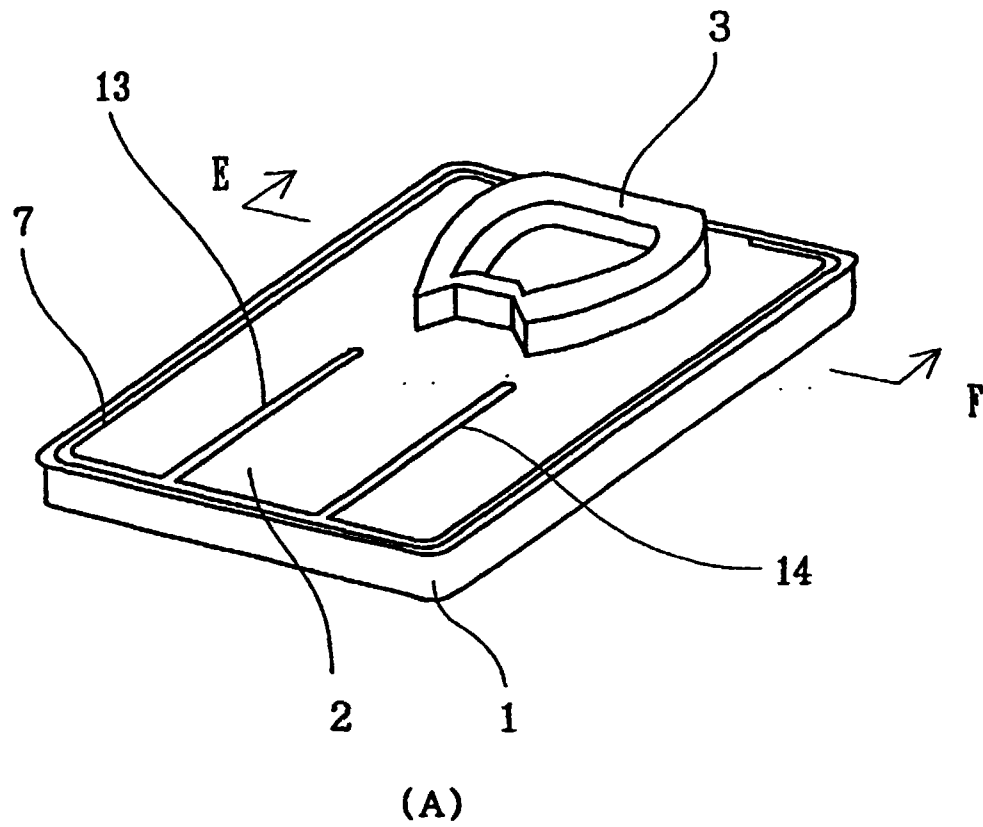
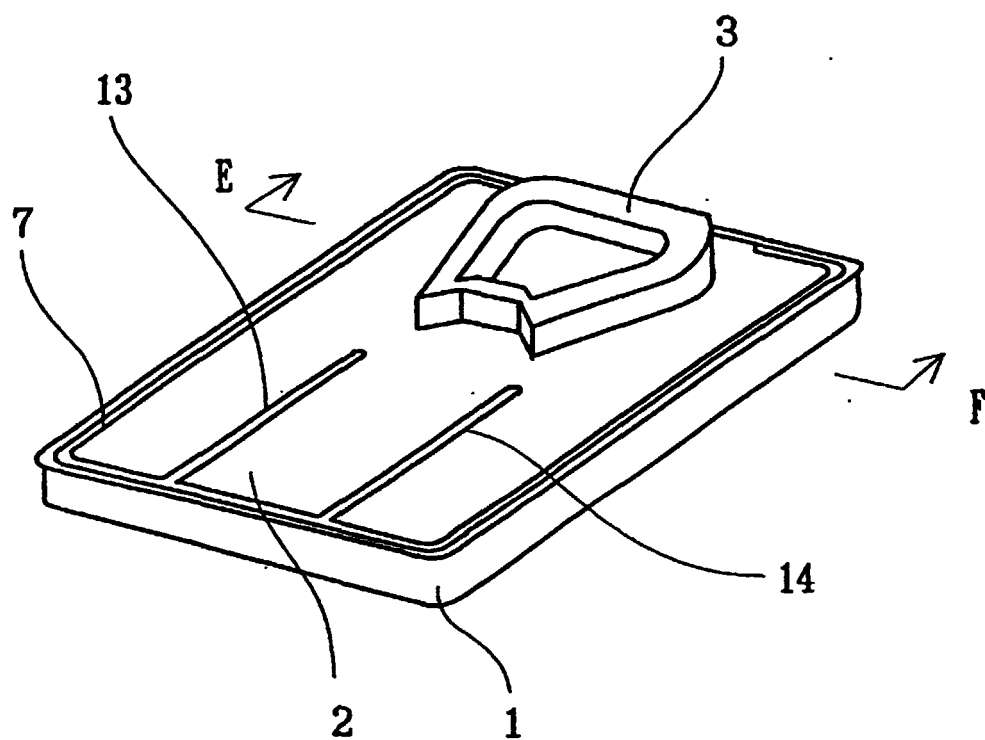
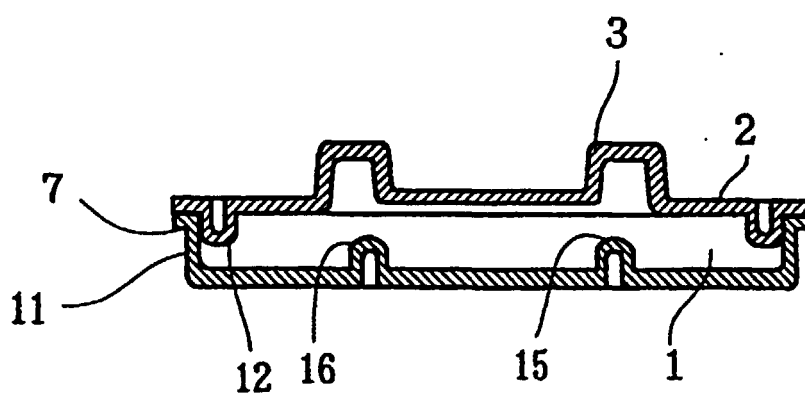


Fig. 68

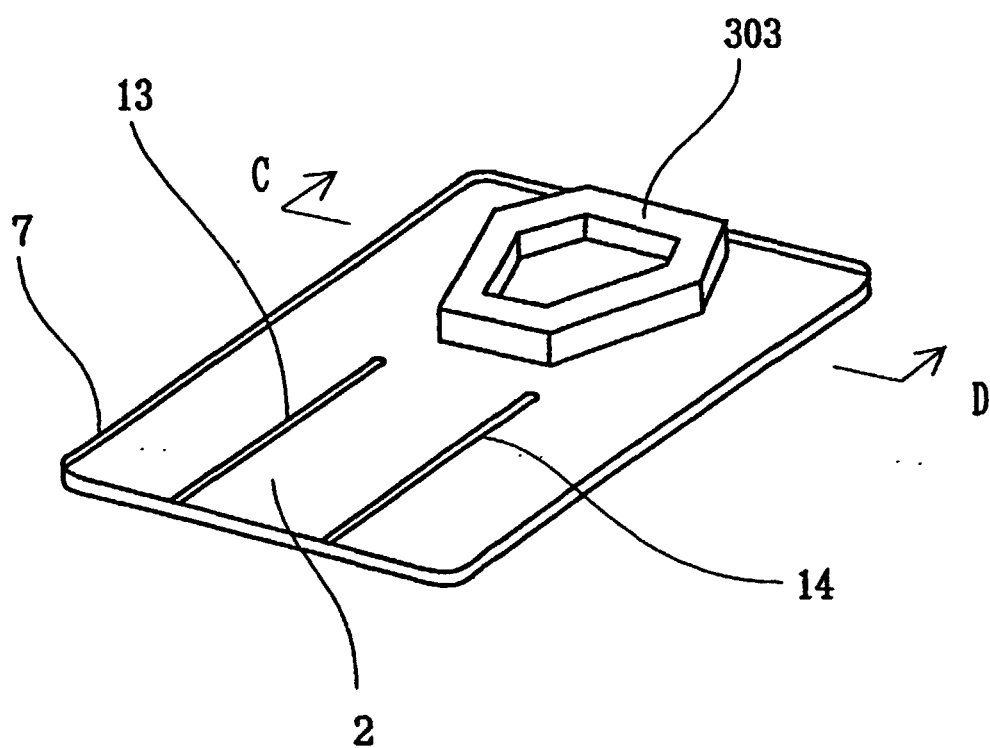


(A)

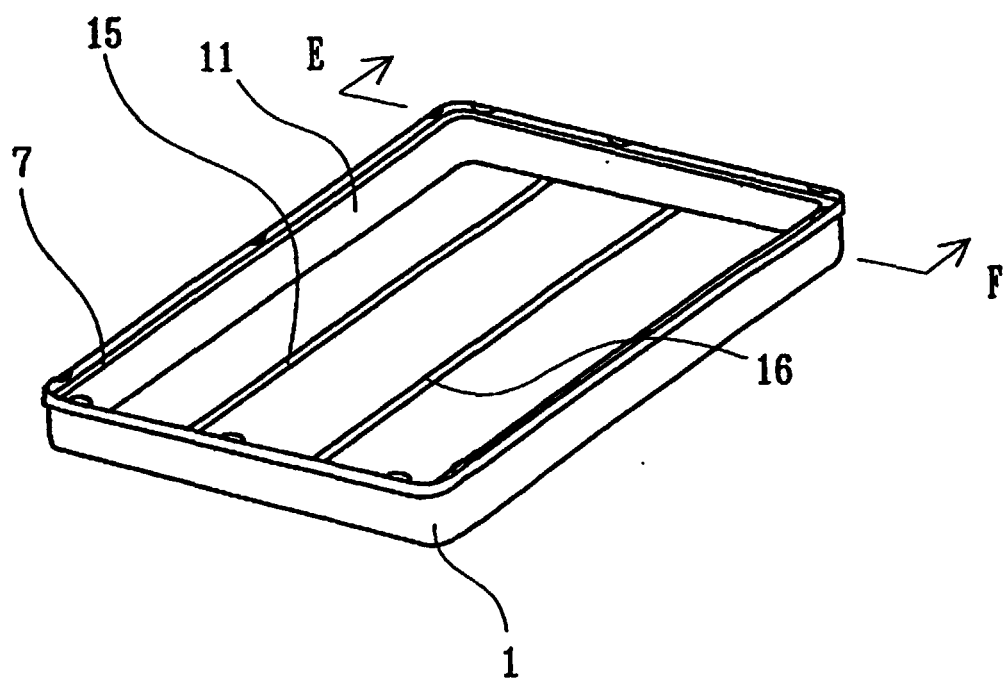


(B)

Fig. 69



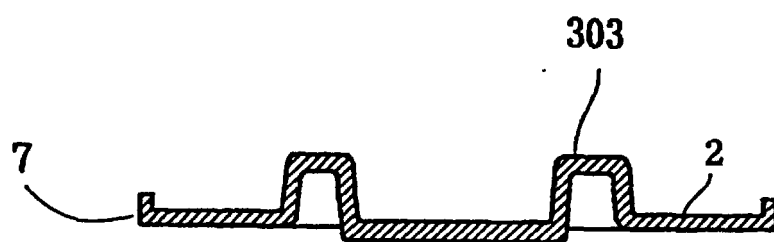
(A)



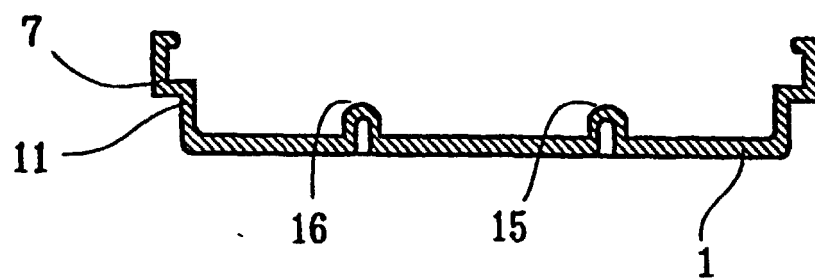
(B)



Fig. 70

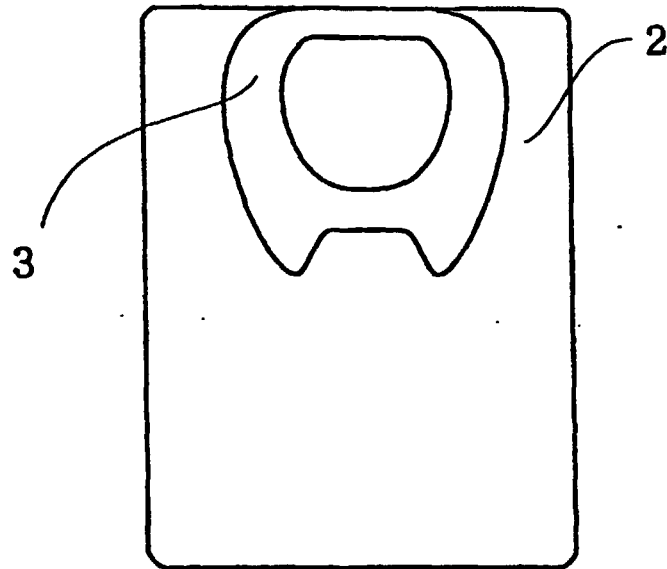


(A)

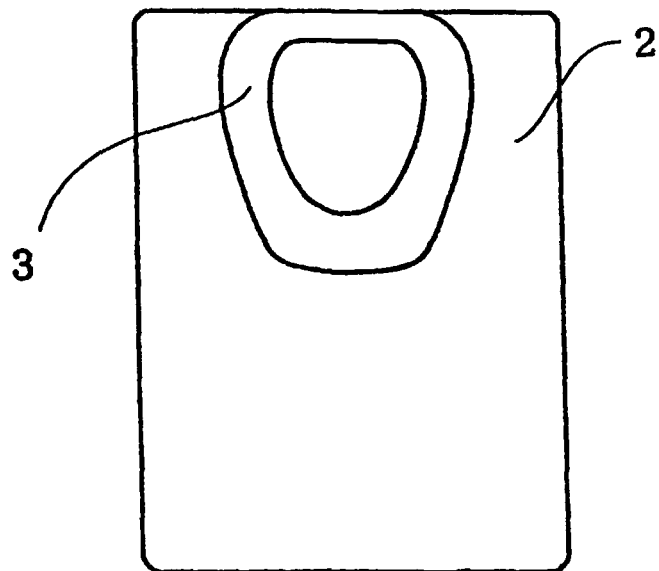


(B)

Fig. 71

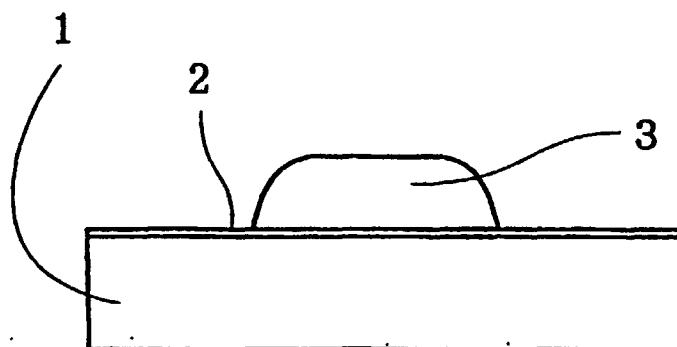


(A)

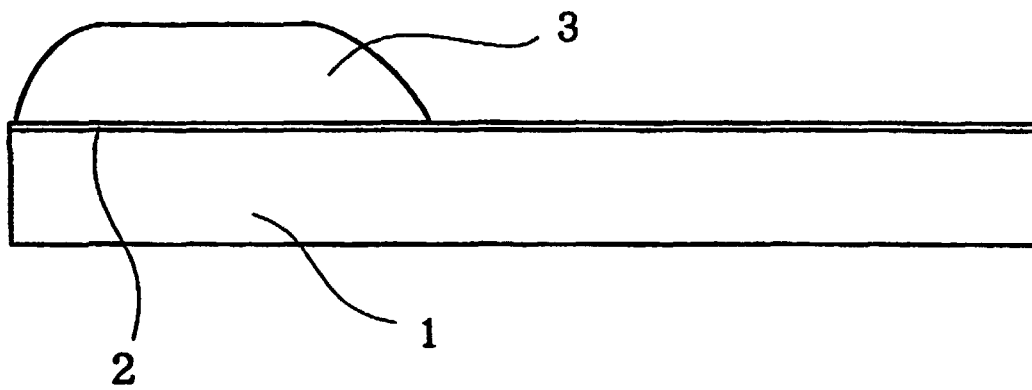


(B)

Fig. 72

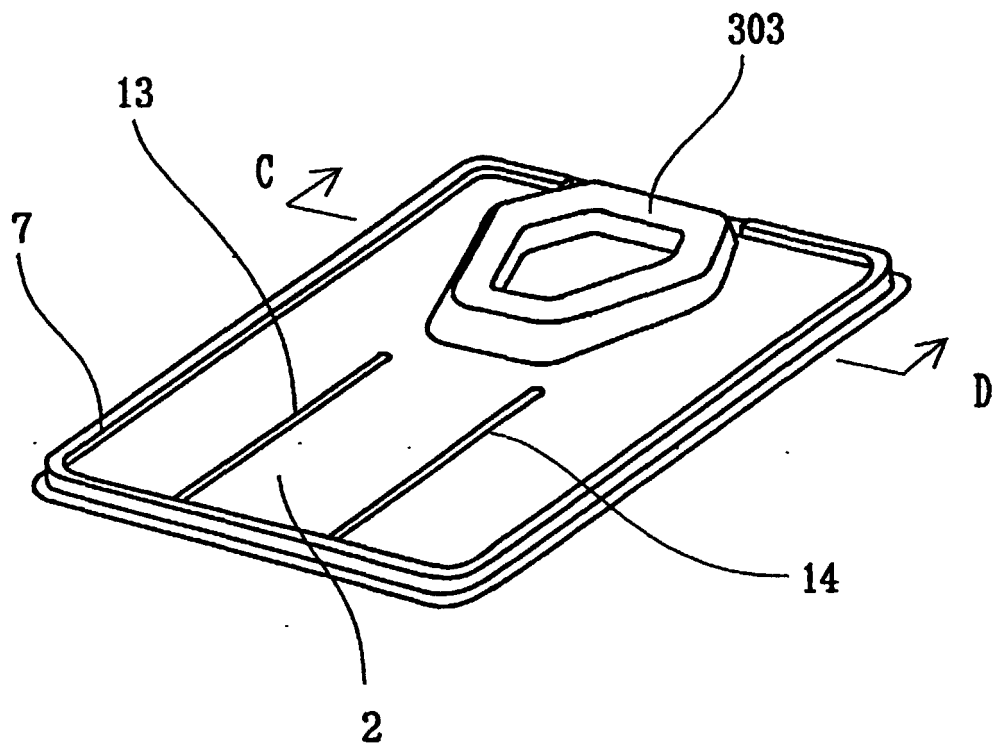


(A)

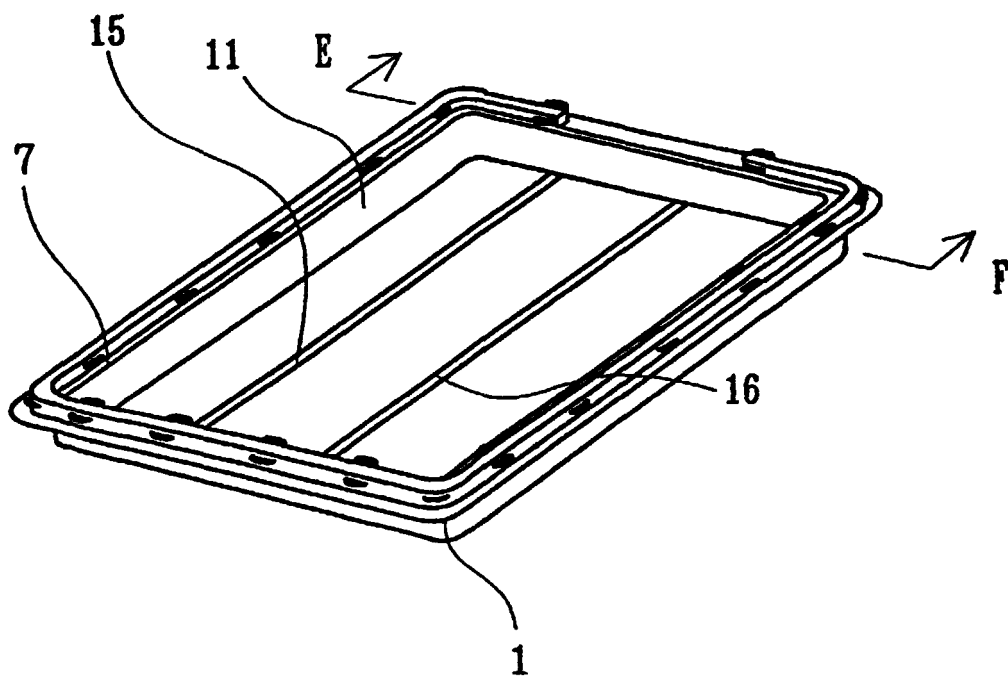


(B)

Fig. 73

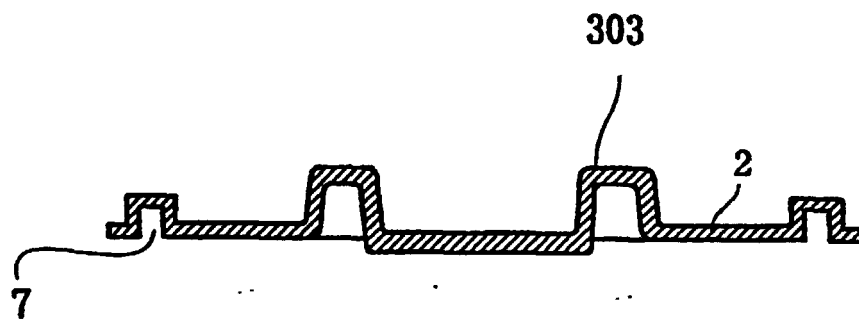


(A)

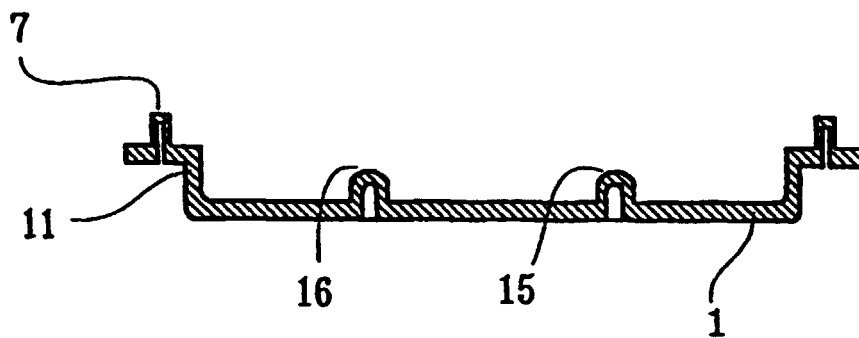


(B)

Fig. 74



(A)



(B)

Fig. 75

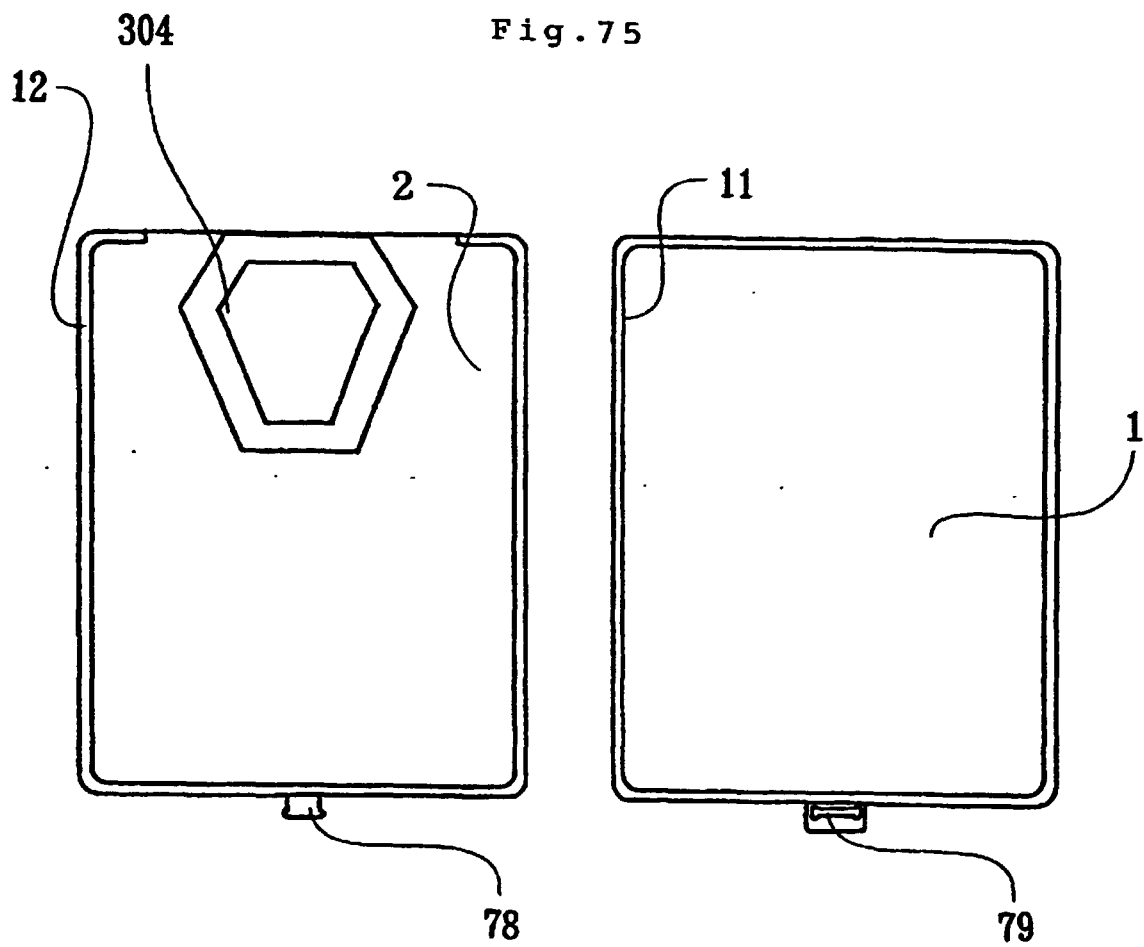
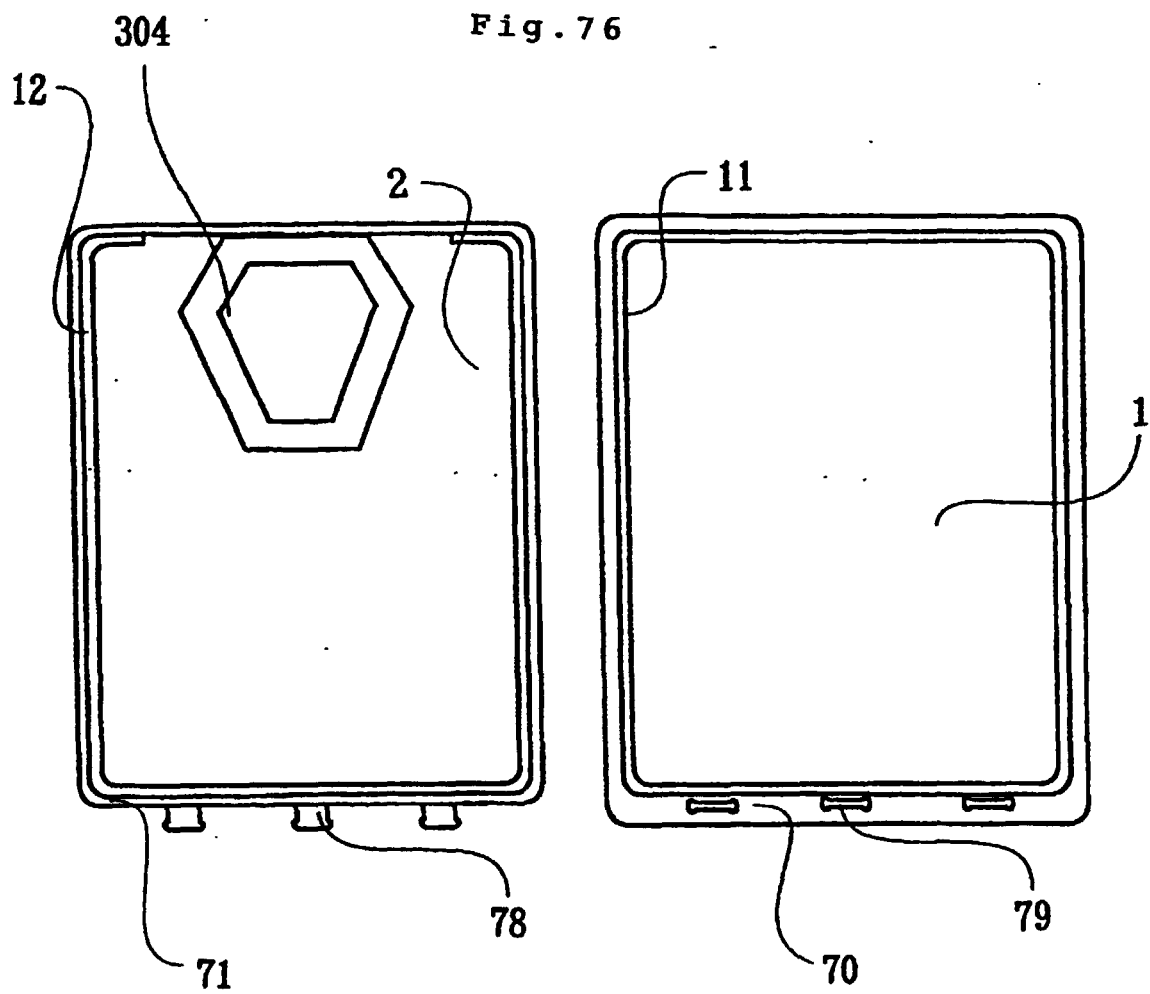


Fig. 76



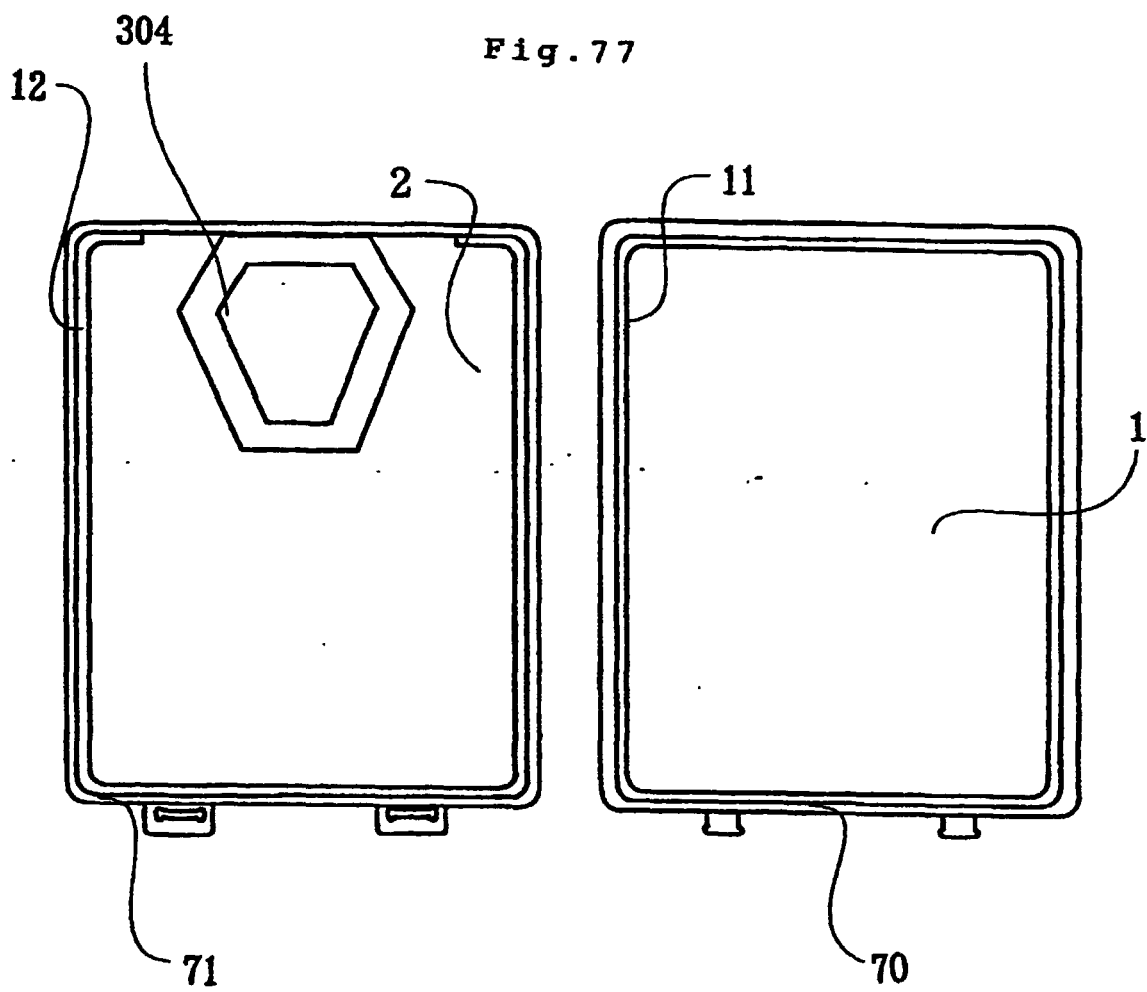
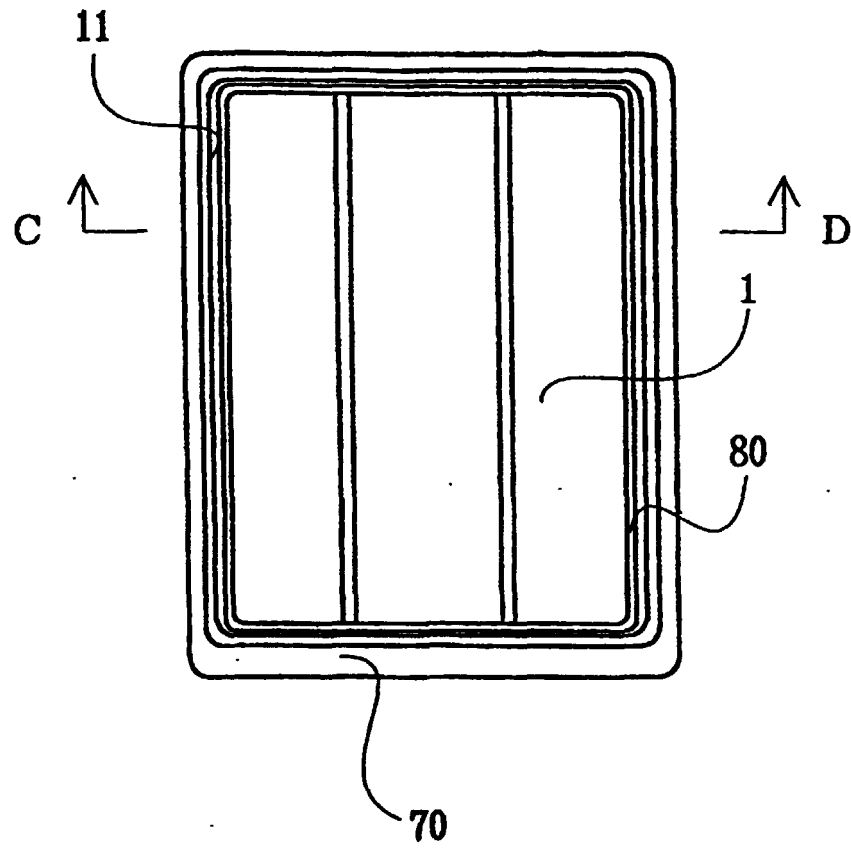
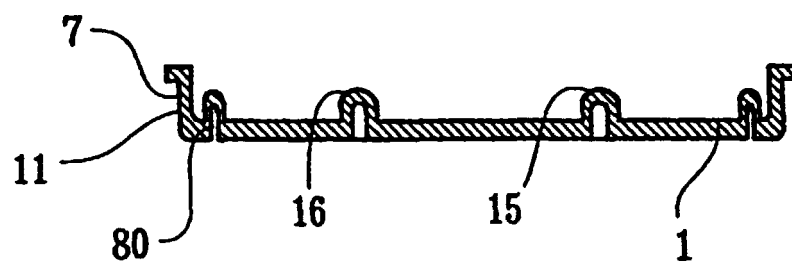




Fig. 78

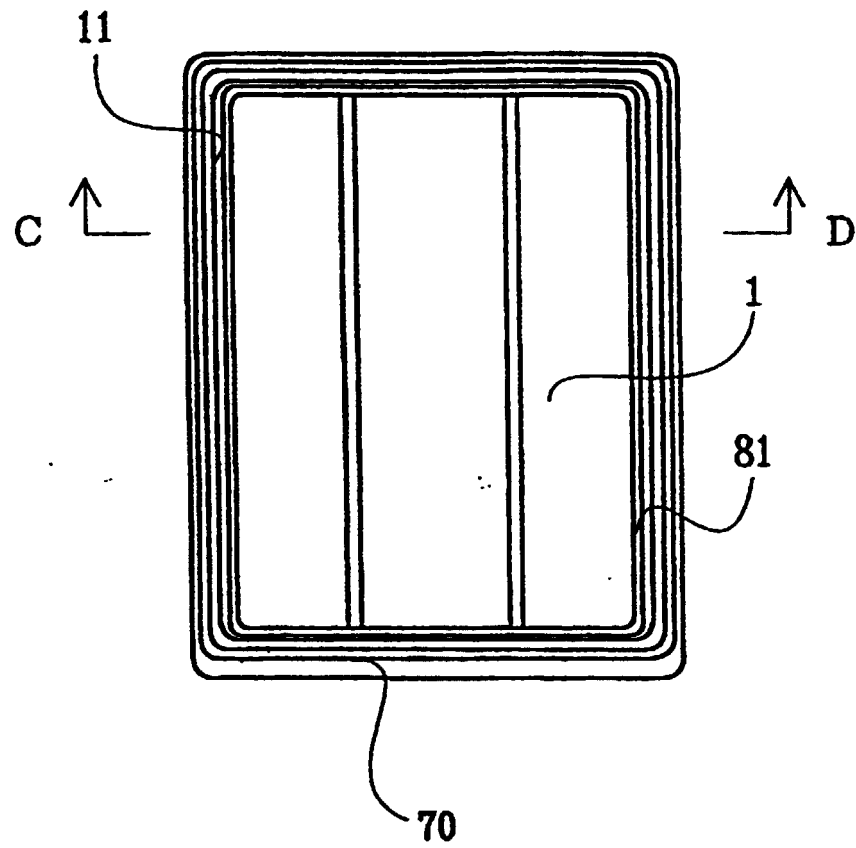


(A)

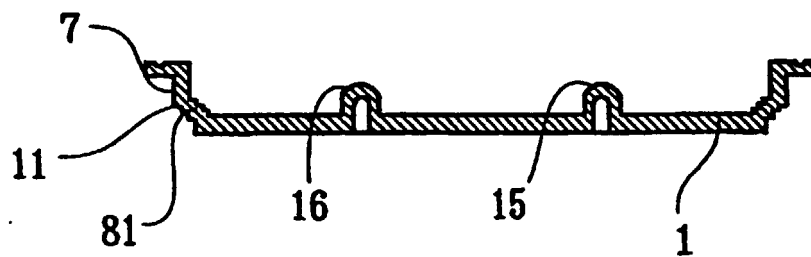


(B)

Fig. 79



(A)



(B)

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP97/03665

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl<sup>6</sup> B65D85/18, A47F7/22

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)

Int. Cl<sup>6</sup> B65D85/18, A47G25/20, A47F7/00-7/30

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1926 - 1998
Kokai Jitsuyo Shinan Koho	1971 - 1998
Toroku Jitsuyo Shinan Koho	1994 - 1998

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.
X	JP, 44-17037, Y (Genta Kurihara), July 23, 1969 (23. 07. 69), Page 1, column 1, line 26 to column 2, line 22; Figs. 1 to 4 (Family: none)	2-4, 7-17, 19-21, 27-31
Y		1, 5, 6, 18, 32-38
A		22 - 26
X	JP, 61-56276, U (Toppan Shoji K.K.), April 15, 1986 (15. 04. 86), Page 1, left column, line 2 to right column, line 3; Figs. 1 to 3 (Family: none)	2, 5, 14, 15, 30, 31
Y		1, 18, 32-38
X	JP, 42-3238, Y (Isamu Asahara), February 25, 1967 (25. 02. 67), Page 1, left column, line 33 to right column, line 17; Figs. 1 to 3 (Family: none)	1, 6, 9, 16, 30, 31
Y		18, 32-38

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

 Date of the actual completion of the international search  
 January 5, 1998 (05. 01. 98)

 Date of mailing of the international search report  
 January 13, 1998 (13. 01. 98)

 Name and mailing address of the ISA/  
 Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP97/03665

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP, 64-41368, U (Masako Ito), March 13, 1989 (13. 03. 89), Fig. 1 (Family: none)	18
Y	JP, 03-66877, U (Mitsubishi Kasei Polytec Co.), June 28, 1991 (18. 06. 91), Page 1, left column, lines 2 to 6 (Family: none)	32
Y	JP, 02-66438, U (Hayashida K.K.), May 18, 1990 (18. 05. 90), Page 1, left column, line 18 to right column, line 1 (Family: none)	33
Y	JP, 59-55166, U (Kyoei Sangyo Co., Ltd.), April 11, 1984 (11. 04. 84), Page 1, left column, line 2 to right column, line 2; Fig. 2 (Family: none)	34
Y	JP, 62-9962, U (Hitoshi Aizawa), January 21, 1987 (21. 01. 87), Page 1, left column, line 2 to right column, line 1; Figs. 2, 5, 6 (Family: none)	35 - 38

Form PCT/ISA/210 (continuation of second sheet) (July 1992)