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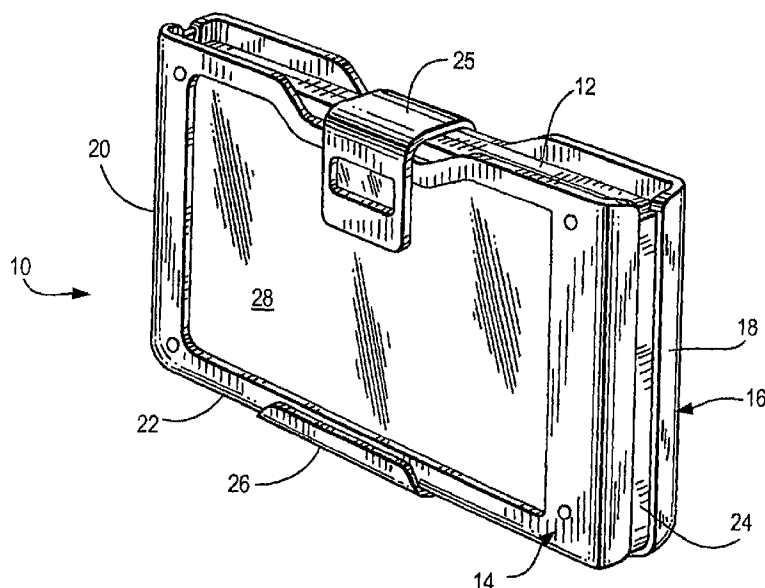
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(54) Title: CARRY CASE FOR COMPUTER AND THE LIKE WHICH PROVIDES CONTENT VIEWING FOR TRANSPORTATION SAFETY AUTHORITIES AND THE LIKE



(57) Abstract: Carry case for providing protective transport of an article such as a laptop computer, vulnerable to shock and disruption, which comprises an enclosure having at least front and rear sides and defining an inner storage space for reception of the article, at least one side having a portion of sufficient translucency or transparency to permit viewing and identification of the article without opening the enclosure. The enclosure is preferably made of frame members having a clear or translucent window, or optionally it may include a frame member made of a relatively sturdy plastic material, coated with a softer rubber layer of a thermoplastic elastomeric material. Cushioning material strategically placed within the enclosure provides protection for the article from unwanted shock or disruption.

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**CARRY CASE FOR COMPUTER AND THE LIKE
WHICH PROVIDES CONTENT VIEWING
FOR TRANSPORTATION SAFETY AUTHORITIES
AND THE LIKE**

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BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a carry case for computers such as laptops and the like, which include relatively delicate components and devices. The carry case is fully supportive of the computer and facilitates sufficient content viewing for identification by transportation safety authorities or the like.

2. Description of the Related Art

Carry bags and cases generally used for transporting relatively delicate and sensitive items such as personal laptop computers (hereinafter "laptop", "computer", or "laptop computer") and the like are generally opaque and are usually required to be opened for examination by Transportation Safety Authorities at airports and other travel depots. In the United States, the Transportation Safety Administration is generally referred to as the "TSA".

When the computer is transported in a conventional carry bag having wheels, or by a wheeled movable luggage cart, the computer is placed in danger of damage by shock forces. In addition, when the bag is opened to allow examination by safety authorities, such delicate devices are again placed in danger of damage or breakage, thereby providing unnecessary inconvenience to the owner. The present invention relates to a carry case for carrying delicate items such as laptop computers and the like, which provides content viewing by outsiders while preferably providing sufficient protection from damage if dropped.

SUMMARY OF THE INVENTION

Carry case for providing protective transport of an article such as a laptop computer, vulnerable to shock and disruption, which comprises an enclosure having at least front and rear sides and defining an inner storage space for reception of the article, at least one side having a portion of sufficient translucency or transparency to permit viewing and identification of the article without opening the enclosure. The enclosure further comprises cushioning material to provide protection for the article from unwanted shock or disruption. The carry case preferably comprises at least two shell-like members attached in each other in a manner to define said inner storage space.

The carry case preferably comprises front and rear sides, a bottom and respectively opposed ends which define the inner space, at least a portion of one of the front and rear sides being translucent or transparent. The translucent or transparent portion is of dimensions sufficient to permit viewing and identification of the article without opening the enclosure.

In a preferred embodiment, the carry case is comprised of two shell-like frames pivotally attached together to define the inner space, at least one of the frames including an inner surface portion of translucent or transparent material of dimensions sufficient to view and identify the article without opening the enclosure. The shell-like frames are attached at least in part by at least one gusset comprising resilient means which permits snug insertion of the article into the inner storage space such that the article engages said protective cushioning material to prevent shifting of the article.

The resilient means preferably comprises an elastomeric member having means for attachment to each of said shell-like members along at least a portion of two ends and the bottom portion. The elastomeric member is preferably made of synthetic or natural rubber, rubberized plastic, or an elasticized fabric. Further, the elastomeric member may include a central strip and a pair of rib members extending generally longitudinally along each opposed end of the strip.

The shell-like members preferably include a channel for respective reception and retention of each said ribs to attach said shell-like frames by said resilient gusset in a manner which permits resilient expansion and contraction of the storage space defined by the shell-like members to permit

insertion and removal of the article. Preferably, the elastomeric member extends over at least a portion of the periphery defined between the shell-like members. Further, the cushioning material is preferably at least one of polymeric foam and air filled polymeric material. The polymeric foam material is preferably one of closed cell ethylene vinyl acetate (EVA). Polyurethane, polyethylene, polyether, polyester and ethafoam brand cushioning material can also be used.

In a preferred embodiment, at least a portion of the outer surface of the shell-like members includes raised ribs to assist manual gripping of the enclosure, and to permit resting the enclosure on a flat surface without causing shock to the contents.

Each of the shell-like members is preferably co-injection molded of acrylonitrile-butadiene-styrene (ABS) having a coating of a thermoplastic elastomer, such as SANTOPRENE® brand elastomer, which has a rubber-like feel to the grip. The cushioning material is preferably either a closed cell foam or a plastic material enclosure filled with a gaseous material to provide cushioning support for the article. The gaseous material may be air or other inert gas.

In one embodiment, a carry case is disclosed for providing protective transport of a laptop computer to prevent damage from shock, which comprises an enclosure having at least two shell-like members and pivotally attached to each other to define an inner space for reception of the computer. The shell like members include cushioning material positioned in predetermined locations for snug engagement by the computer when inserted into the space. At least a portion of the surface of one side of at least one of the members is translucent or transparent, the translucent or transparent surface portion being of dimensions sufficient to permit viewing and identification of the computer without opening the enclosure. The enclosure has an opening at one end to permit insertion and removal of the computer.

Broadly stated, the invention relates to a carry case for supporting a laptop computer while providing sufficient protective cushioned support against shock. An enclosure is provided having at least front and rear sides and an opening along one end for insertion and removal of the computer. The enclosure has sufficient structural integrity to support the computer, and a portion which is of sufficient size and translucency or transparency to permit viewing and identification of the computer without removing the computer. The enclosure is preferably co-injected of ABS

plastic having a relatively soft coating of a rubber-like thermoplastic elastomer such as SANTOPRENE® brand elastomer, over at least a portion of the surface thereof. Preferably the entire enclosure is coated with such elastomer. The carry case includes sections of closed cell ethylene vinyl acetate (EVA) foam positioned within the enclosure to define a storage space for

5 cushioned support of the laptop computer.

BRIEF DESCRIPTION OF THE DRAWINGS

Preferred embodiments of the invention are disclosed hereinbelow with reference to the drawings, wherein:

Fig. 1 is a top, front and right side perspective view of a carry case for a laptop computer which provides content viewing for transportation safety authorities and the like, constructed according to our invention;

Fig. 2 is a top, front and right side perspective view of an alternative embodiment of a carry case constructed according to the invention;

Fig. 3 is a top, front and right side perspective view of another alternative embodiment of the invention;

Fig. 4 is a cross-sectional view, taken along line 4-4 of Fig. 3;

Fig. 5 is a front elevational view of another alternative embodiment of a carry case constructed according to our invention;

Fig. 6 is a top plan view of the carry case of Fig. 5;

Fig. 7 is a right side elevational view of the carry case of Fig. 5;

Fig. 8 is a cross-sectional view, taken along line 8-8 of Fig. 5;

Fig. 9 is a top, front and right side perspective view of another alternative embodiment of our invention;

Fig. 10 is a cross-sectional view, taken along line 10-10 of Fig. 9;

Fig. 11 is a top, front and left side perspective view of another alternative embodiment of our invention;

Fig. 11a is a cross-sectional view taken along line 11a-11a of Fig. 11;

Fig. 12 is a top, front and left side perspective view of the carry case of Fig. 11, with the outer shell components separated for illustration purposes;

Fig. 13 is a top and left side perspective view from above, of another alternative embodiment of the carry case of the present invention, shown in the open condition, with the internal transparent and a flexible protective cushioning material in the form of a "quilted type" resilient plastic material separated from the outer shell for illustration purposes;

Fig. 14 is a top and left side perspective view from above, of the carry case shown in Fig. 13, with the inner protective flexible and resilient cushioning material assembled with the plastic outer shell;

5 Fig. 15 is a right side end view of an alternative embodiment of the carry case shown in Fig. 14, in the closed condition, with an alternative foam-type protective inner cushioning material similar to that of the previous embodiments, in place of the resilient flexible liner shown in Fig. 14;

Fig. 16 is a right side end view of the carry case shown in Fig. 15 in the closed condition, illustrating the insertion of a typical laptop computer into place;

10 Fig. 17 is a front elevational view of still another alternative embodiment of the invention, including a plastic molded carry case with a plurality of raised "bumpers" for use as feet, rigidifying means, and gripping means;

Fig. 17a is a cross-sectional view taken along line 17a-17a of Fig. 17; and

Fig. 18 is a right side end view of the carry case illustrated in Fig. 17.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring initially to Fig. 1, there is illustrated a front, top and right side perspective view of a carry case constructed according to the present invention. The carry case is particularly structured and adapted to support an article such as a laptop computer 12. However, any article or articles which can be inserted into the case are contemplated. Carry case 10 is constructed of an enclosure having two shell-like frames 14, 16 made of any suitable material to provide sufficient structural integrity to the case, such as plastic, metal or the like. Preferably the shell-like frames are injection molded of a relatively soft thermoplastic elastomeric material commonly referred to as "TPE". Such materials as SANTOPRENE® brand TPE marketed by Advanced Elastomer Systems, L.P., of Akron, Ohio, are contemplated. Other materials include silicone, (ABS) acrylonitrile-butadiene-styrene), polypropylene, polycarbonate or the like.

The frames 12, 14 may be attached to each other in any suitable manor, as by a pivotal hinge or the like. In the embodiment shown in Fig. 1, the frames 12, 14 are attached along two sides 18, 20 and the bottom 20 by a gusset in the form of an elastomeric band 24 which is attached to each frame as shown. A preferred manner in which the attachment is made will be described in further detail hereinbelow in connection with another prepared embodiment. The elastomeric band is preferably made of an elastomeric material such as synthetic or natural rubber, elasticized fabric or the like.

Carry case 10 includes a closure mechanism 25 at the top, and a supportive connective member 26 on the bottom which provides attachment and support for the two frames along the bottom edge. Additionally, connective member 26 provides a gripping assist for the embodiment shown, which does not include handles.

As shown in Fig. 1, the front face of the carry case 10 includes a window portion 28 which is either transparent, or of sufficient translucency to permit viewing of the contents of the case sufficient to identify them without the necessity to open the case and remove them for identification by anyone, such as transportation safety authorities or the like. Window 28 may be injection molded of polyethylene, ABS, PCABS (a combination of polycarbonate and ABS), polypropylene, polycarbonate or the like.

Although one side is shown having a transparent or translucent "window," the front and rear sides may include such a window.

The article such as a laptop computer 12 is merely inserted into the carry case and resilient connective member 18 is caused to stretch and to permit insertion of the computer snugly into the case.

The inner surfaces of the case 10 are provided with a suitable cushioning material as will be described hereinbelow in connection with another embodiment. The cushioning material is preferably a closed cell foam material such as polyurethane, polyethylene, polyether, polyester, or the like. One preferred foam material is ethylene vinyl acetate, commonly referred to as "EVA". Furthermore, foam materials marketed under the trademark ETHAFOAM™ by The Dow Chemical Company, Midland, Michigan are also contemplated. In addition, cushioning support and snug-fit can be provided for the contents by including an air or gas filled enclosure, such as a plastic cushioning bag, or "air mattress". Any cushioning medium is contemplated, which will provide protective cushioned support for the contents, along with snug-fit.

Referring now to Fig. 2, there is illustrated a carry case 30 similar to the carry case 10 shown in Fig. 1. However, carry case 30 includes a pair of gripping handles 32, 34, but does not include the elastomeric band 24 of the embodiment of Fig. 1. Carry case 30 is preferably pivotally attached at 36 along the bottom edge. Raised edge 38 is provided on the front and rear (not shown) faces to assist gripping of the case. The front face includes translucent (or transparent) window 40 as shown, to provide content viewing for anyone without the need to remove the contents for inspection or the like, as by transportation safety authorities.

The carry case 30 of Fig. 2 preferably includes a window on the rear face (not shown) to provide content viewing for both sides of the case. However, where only one transparent or translucent side is desired, only the front face may be provided with a window as shown at 28 in Fig. 1.

Referring now to Fig. 3, there is illustrated an alternative preferred embodiment of the present invention in the form of carry case 42, which is formed of a molded plastic enclosure 44, structured and dimensioned to receive and support contents such as a laptop computer 12 in a

cushioned environment, which protects the computer from shock during transport. The carry case 42 is preferably made of a durable sturdy plastic material which is moldable by injection or other type molding process. The enclosure 44 is preferably either translucent or transparent, so as to permit viewing and identification of the contents without the need for removal, as by transportation safety authorities. A pair of arcuate portions of reduced thickness also permits viewing of the contents on the ends and at the bottom portions, which are supported by foam cushion shock absorbing material 50, 52, and 53, which is preferably closed cell foam as described hereinabove. This foam material may also be transparent or translucent to permit viewing therethrough.

As can be seen in the cross-sectional view of Fig. 4, the plastic enclosure 44 is preferably a co-injected plastic which includes a bottom layer 41 of a relatively hard plastic such as ABS (see above) or polycarbonate, coated or covered with a relatively soft thermoplastic elastomer 43 such as SANTOPRENE® brand TPE. Any suitable TPE is contemplated.

Referring again to Fig. 4, there is shown a cross-sectional view taken along line 4-4 of Fig. 3, illustrating the arcuate portion of reduced thickness and the shock absorbing foam cushion 52 which provides a cushion and snug fit for the contents, such as laptop computer 12. Raised molded grips 54 are provided to facilitate grasping the case by hand, since gripping handles are not provided in this embodiment. These grips 54 also provide rigidity to the case and act as contact "feet" when the case is placed face or rear side down on a flat surface, thus providing additional protection for the laptop computer 12. The relatively soft PTE co-injected layer also adds cushioning and gripping capability to this embodiment.

A suitable low profile closure device 56 is provided at the upper open end to contain the laptop in place and prevent it from falling out. Window 57 is provided for an owner identification tag, or the like.

Referring to Fig. 5, there is shown an elevational front view of another alternative embodiment of the invention.

Fig. 6 is a top plan view of the carry case 60 of Fig. 5. In this embodiment, the case is also made of a translucent or transparent moldable polymeric material such as a co-injection molded combination of ABS coated with a layer of TPE. In each embodiment disclosed herein, it is also

contemplated to utilize such co-injection molding processes as INCLOSIA® brand molding, by Dow Chemical Company (SUPRA), in which natural woods, metal and the like are incorporated by overmolding systems and techniques. In addition, such materials as PVC polyethylene, polypropylene, nylon and the like may also be used where appropriate in either embodiment.

5 In the embodiment of Figs. 5, 6, and 8, two shell-like case halves 62, 64 are attached by a gusset in the form of elastomeric (or elasticized fabric) strip 66 which contains two ribs 68, 70 held in place within respective correspondingly configured channels formed in each shell-like case half 62, 64 as shown. This arrangement is similar to the embodiment of Fig. 1, whereby the elastomeric strip provides resilient separability of the plastic case halves 62, 64 to facilitate snug insertion of the
10 laptop computer 12 into the case in a manner to be snugly supported by foam shock absorbing material 72. Raised relatively rigid feet 74 provide further rigidity to the case and also provide a means for supporting the case in a horizontal position on a flat surface. As noted previously, the outer relatively soft layer 43 of PTE provides enhanced appearance, transparency or translucency, and gripping capability.

15 Optional handles 76 on the front and rear faces are pivotally attached by pivot pins 78 (rear face not shown). These handles may be pivotally rotated to vertical positions for gripping the case for transport.

Closure device 80 extends over the open top and attaches to the front and rear faces to prevent the laptop computer from falling out of the case.

20 Referring to Fig. 9 there is illustrated an alternative embodiment of the present invention in the form of carry case 90 having L-shaped molded plastic corner pieces 92, 94, bottom connection member 96 and central molded translucent or transparent molded plastic panels 98, 100. The corner frames 92, 94 are attached to the translucent or transparent plastic panels 98, 100 by rivets 102, which are preferably made of a sturdy material, such as metal, plastic, or the like. A closure or
25 connecting member 104 extends over the top of the computer and is connected on either end to a respective clear plastic panel 98, 100 to prevent the computer 12 from falling out of the carry case 90. The materials used in this embodiment may be any of the materials described hereinabove, or suitable combinations thereof.

Referring now to Fig. 10 there is shown a cross-sectional view taken along line 10-10 of Fig. 9. As can be seen in Fig. 10 the computer 12 is fitted within the carry case 90 and is cushioned by an appropriate foam molded material 106 which is nestled within the corner frame members 92, 94 and attached by adhesive or other suitable means. Conceivably, the cushioning material can be co-molded with the frame. The foam material extends along the sides of the laptop computer and along the left and right portions of the lower surface of the computer at least over a portion corresponding to the respective lower horizontal portions 89, 95 of the respective L-shaped frame members 92, 94. The frame members 92, 94 are also co-injected with a soft covering layer 91 of TPE over ABS plastic. Other co-injectable materials are contemplated to provide any desired effect. Alternatively, the frame members 92, 94 may be molded entirely of TPE.

In operation, the closure member 104 is lifted either outwardly or by pivotal motion from the position shown in Fig. 9 to permit entry of the laptop computer 12 into the carry case in a manner to be nestled onto foam cushioning material 106. Thereafter, the closure member 104 is replaced in position as shown in the position in Fig. 9 to retain the laptop computer in position.

The translucent or transparent character of molded panels 98, 100 permit the relatively clear viewing of the laptop computer when it is stored within the carry case 90 thereby avoiding the need to remove the computer for viewing and/or identification for purposes, as by official transportation safety authorities. In addition, the relative sturdy nature of the carry case 90, combined with the cushioning features provided by the outer layer of PTE and the cushioning foam (or other) material 106 provides a relatively safe and confident manner for transporting the computer from one place to another, onto airlines, seagoing vessels, automobiles, without the possibility of damage to the computer by shock or relatively quick movements.

As indicated previously in connection with the previous embodiments, the L-shaped frame members 92, 94 may be co-injected or otherwise molded of any suitable polymeric moldable plastic materials such as those noted in the previous embodiments.

The translucent or transparent panels 98, 100 can be molded of any suitable plastic moldable material by injection molding or otherwise, to provide a translucent or transparent panel. Moldable materials as noted hereinabove in connection with the previous embodiments are also

contemplated.

The cushioned foam material 106 can be any suitable polymeric foam material which is produced for cushioning purposes. Preferably closed cell foam as noted above will be used. However, any moldable foam material can be used, including open cell foam material.
5 Furthermore, a polymeric gas filled polymeric bag or other resilient shock absorbing devices can also be used.

Fig. 11 shows a top, front and left side perspective view of an alternative embodiment of the invention, which includes outer sleeve 110 having two halves 112, 114, preferably of transparent moldable resilient plastic material having the properties similar to the well know food
10 containers marketed under the trademark TUPPERWARE®, marketed by Dart Industries Inc., Orlando, Florida. While complete transparency is preferred in order to provide viewing of the contents, preferably a laptop computer, a minimum transparency, or even translucency which is sufficient to provide viewing of the contents, is acceptable.

Referring to Figs. 11, 11a and 12, the outer shells 112,114 are held together along each
15 side 116, 118 by elastic side gussets 120, 122, which may be threaded from slot 124, 126 to slot 124,126 as shown. Alternatively, individual elastomeric loops may be inserted into adjacent slots 124, 126. Other securing devices such as elastic shoelace-type ties, or even snap closures in the rims such as is used in TUPPERWARE® brand containers are contemplated.

On the interior of the shell halves 112, 114, soft molded polymeric foam strips 128 provide
20 impact resistance for the laptop computer or other contents. Foam patches 130 also provide additional impact protection for the laptop computer.

The use of foam strips 128 and patches 130, as well as the transparent outer shell, provides protection, as well as easy viewing of the contents of the carry case. The elastic side gussets provide expandability to fit most widths of laptop computers snugly. Molded raised bumpers 132
25 and molded raised patches 134 (on either side) are used to provide rigidity to the case 110 and to assist in gripping and lifting the case. A cross-sectional view taken along line 11a-11a of Fig. 11 of bumper 132 is shown in Fig. 11a, which is typical of all of the bumpers shown. The case shown in Fig. 11 is also preferably co-injected of relatively rigid ABS 111 with a coating of relatively soft

layer 113 of TPE as shown.

Referring now to Figs. 13 and 14, there is illustrated an alternative embodiment of the carry case having transparent molded plastic outer shell 140 having shell halves 142, 144 connected together by hinge 146, and which are held in the closed condition in the manner shown in the
5 embodiments of Figs. 15 and 17, i.e., by clamshell-type resilient interference-type snap fasteners 148, 151. The shell may be molded of any plastic material, or co-injected of ABS with a covering layer of TPE 143, 145 as disclosed in the previous embodiments.

Suspended between the two sides of the outer shell is a transparent resilient and flexible plastic material 150 such as silicone, methacrylate, ethylene-vinyl acetate (EVA) or the like, or other
10 flexible transparent or semi-translucent material, having sufficient transparency to permit viewing of the contents from the outside, while providing cushioned protection therefor.

Fig. 15 illustrates an embodiment 160 of the carry case of Fig. 14, utilizing a molded foam cushioning material to protect the laptop computer 12.

Fig. 16 illustrates the insertion of the laptop computer 12 into the carry case of Fig. 15.

In Fig. 16, laptop computer 12 is then inserted into the carry case and suspended as shown
15 inside the case between the opposed panels of cushioning foam material (or the flexible material of Fig. 14), protecting the computer laptop 12 from impact in all directions, as well as remaining in a see-through condition so that the contents are visible.

In Fig. 16, laptop computer 12 is shown partially inserted into the case 160. The case and
20 inner lining dimensions may be varied to facilitate complete insertion of alternatively dimensioned laptop computers 12 into the case 160.

Referring now to Fig. 17, another alternative embodiment of the invention 170 is illustrated. Each shell half 172, (174, not shown) of the outer case 170 has molded therein, raised portions - or
bumpers 176, 178, 180, used for gripping and lifting, and resting the carrying case on a flat surface.
25 One side of the case is shown in Fig. 17. However, the opposite side, not shown, is preferably the mirror image of the side which is shown. The molded bumpers, or handgrips 176, 178, 180 are typically shown in cross-section in Fig. 17a, which is taken along lines 7a-7a of Fig. 17. The molded bumper, or handgrip 176, has a raised, or arcuate, or "half-moon" configuration as shown.

This embodiment may also optionally be co-injection molded of ABS and TPE as in the previous embodiments.

It should be understood that features, elements and preferred materials of each of the embodiments shown can be cross-matched with the other embodiments so as to provide a variety
5 of combinations of the features disclosed herein for each embodiment.

Claims:

1. Carry case for providing protective transport of an article such as a laptop computer, vulnerable to shock and disruption, which comprises an enclosure having at least front and rear sides and defining an inner storage space for reception of the article, at least one side
5 having a portion of sufficient translucency or transparency to permit viewing and identification of the article without opening the enclosure, said enclosure further comprising cushioning material to provide protection for the article from unwanted shock or disruption.
2. The carry case according to Claim 1, having at least two shell-like members attached in each other in a manner to define said inner storage space.
- 10 3. The carry case according to Claim 2, wherein said carry case comprises front and rear sides, a bottom and respectively opposed ends which define said inner space, at least a portion of one of said front and rear sides being translucent or transparent, said translucent or transparent portion being of dimensions sufficient to permit viewing and identification of the article without opening the enclosure.
- 15 4. The carry case according to Claim 3, wherein said enclosure is comprised of two shell-like frames pivotally attached together to define said inner space, at least one of said frames including an inner surface portion of translucent or transparent material of dimensions sufficient to view and identify the article without opening the enclosure.
- 20 5. The carry case according to Claim 4, wherein said shell-like frames are attached at least in part by at least one gusset comprising resilient means which permits snug insertion of the article into the inner storage space such that the article engages said protective cushioning material to prevent shifting of the article.
- 25 6. The carry case according to Claim 5, wherein said resilient means comprises an elastomeric member having means for attachment to each of said shell-like members along at least a portion of two ends and the bottom portion.
7. The carry case according to Claim 6, wherein said elastomeric member is made of synthetic or natural rubber, or an elasticized fabric.

8. The carry case according to Claim 7, wherein said elastomeric member includes a central strip and a pair of rib members extending generally longitudinally along each opposed end of said strip.

5 9. The carry case according to Claim 8, wherein each of said shell-like members includes a channel for respective reception and retention of each said ribs to attach said shell-like frames by said resilient gusset in a manner which permits resilient expansion and contraction of the storage space defined by said shell-like members to permit insertion and removal of the article.

10. The carry case according to Claim 9, wherein said elastomeric member extends over at least a portion of the periphery defined between said shell-like members.

10 11. The carry case according to Claim 10, wherein said cushioning material is at least one of polymeric foam and air filled polymeric material.

12. The carry case according to Claim 11, wherein said polymeric foam material is one of closed cell ethylene vinyl acetate (EVA), polyurethane, polyethylene, polyether, polyester and ethafoam brand cushioning material.

15 13. The carry case according to Claim 12, wherein at least a portion of the outer surface of said shell-like members includes raised ribs to assist manual gripping of the enclosure, and to permit resting said enclosure on a flat surface without causing shock to the contents.

20 14. The carry case according to Claim 4, wherein said shell-like members are attached along opposed end portions by at least one elastomeric member which connects at least a portion of the peripheral end portions thereof in a resilient manner to permit resilient separation and contraction of the frames respectively away and toward each other.

15. The carry case according to Claim 14, wherein each of said shell-like members are co-injection molded of acrylonitrile-butadiene-styrene (ABS) having a coating of a thermoplastic elastomer, such as SANTOPRENE® brand elastomer.

25 16. The carry case according to Claim 15, wherein said cushioning material is at least one of a closed cell foam and a plastic material enclosure filled with a gaseous material to provide cushioning support for the article.

17. The carry case according to Claim 16, wherein said gaseous material is air.

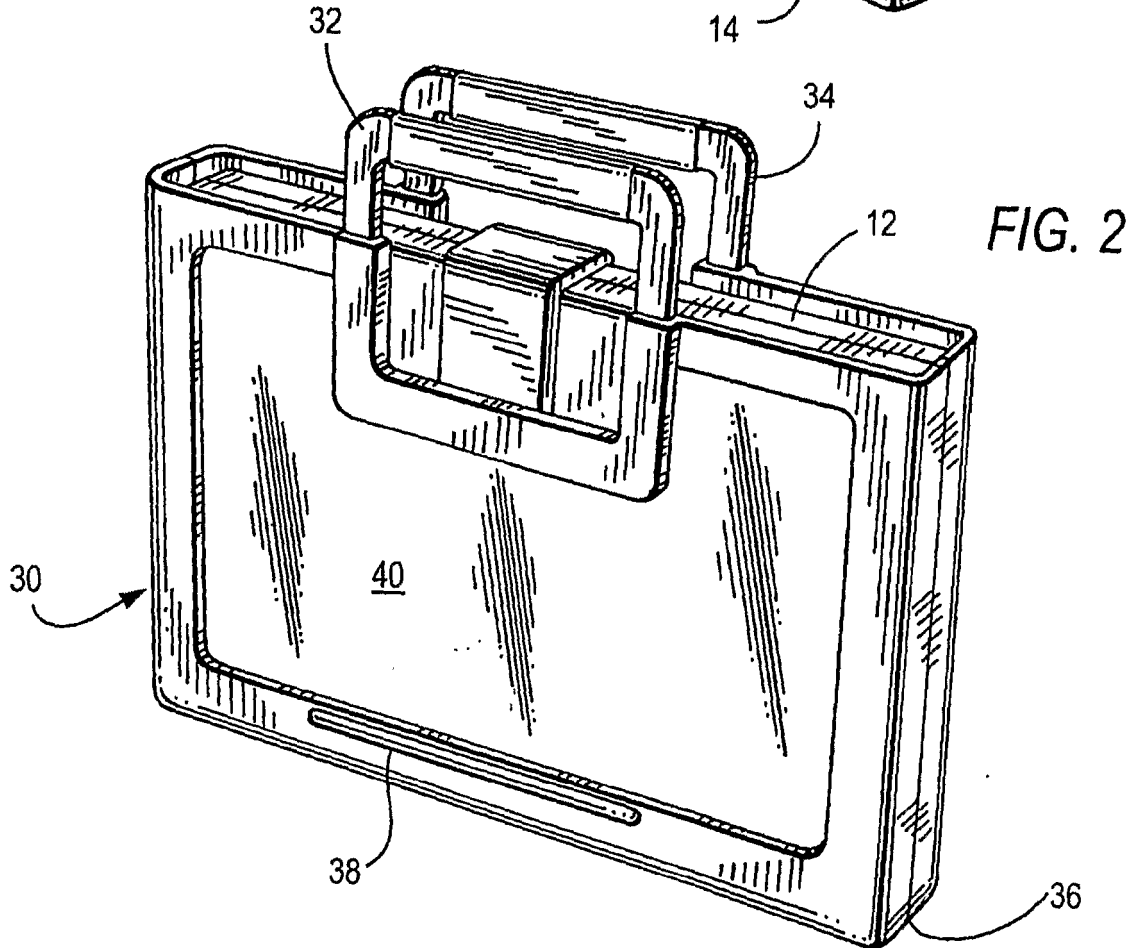
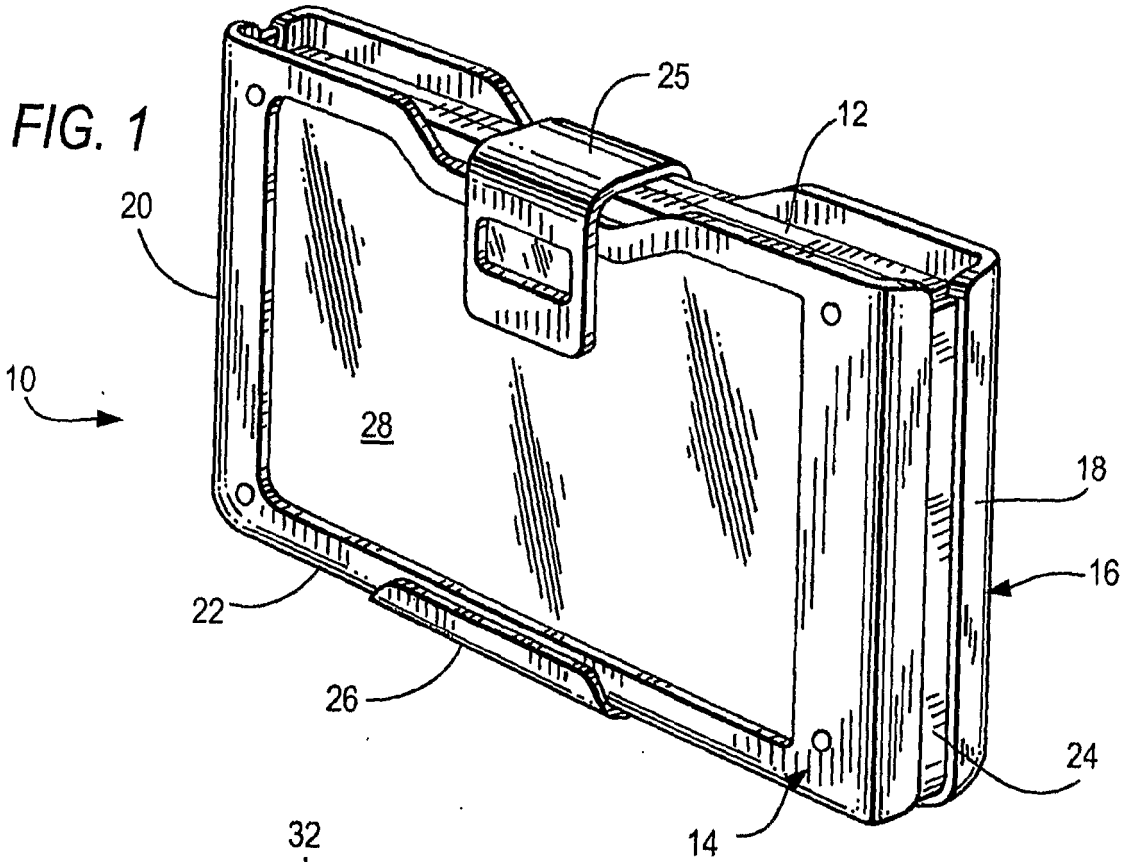
18. Carry case for providing protective transport of a laptop computer to prevent damage from shock, which comprises an enclosure having at least two shell-like members and pivotally attached to each other to define an inner space for reception of the computer, said shell like members including cushioning material positioned in predetermined locations for snug
5 engagement by the computer when inserted into said space, at least a portion of the surface of one side of at least one of said members being translucent or transparent, said translucent or transparent surface portion being of dimensions sufficient to permit viewing and identification of the computer without opening the enclosure, said enclosure having an opening at one end to permit insertion and removal of the computer.

10 19. Carry case for supporting a laptop computer while providing sufficient protective cushioned support against shock, which comprises an enclosure having at least front and rear sides and an opening along one end for insertion and removal of the computer, said enclosure having sufficient structural integrity to support the computer, and having a portion which is of sufficient size and translucency or transparency to permit viewing and identification of the computer without
15 removing the computer.

20. The carry case according to Claim 19, wherein said enclosure is co-injected of ABS plastic having a relatively soft coating of thermoplastic elastomer, such as SANTOPRENE® brand elastomer, over at least a portion of the surface thereof.

20 21. The carry case according to Claim 20, further comprising sections of closed cell ethylene vinyl acetate (EVA) foam positioned within said enclosure to define a storage space for cushioned support of the laptop computer.

22. The carry case according to Claim 20, further comprising flexible resilient shock absorbing materials positioned within said enclosure to support the laptop computer against shock.



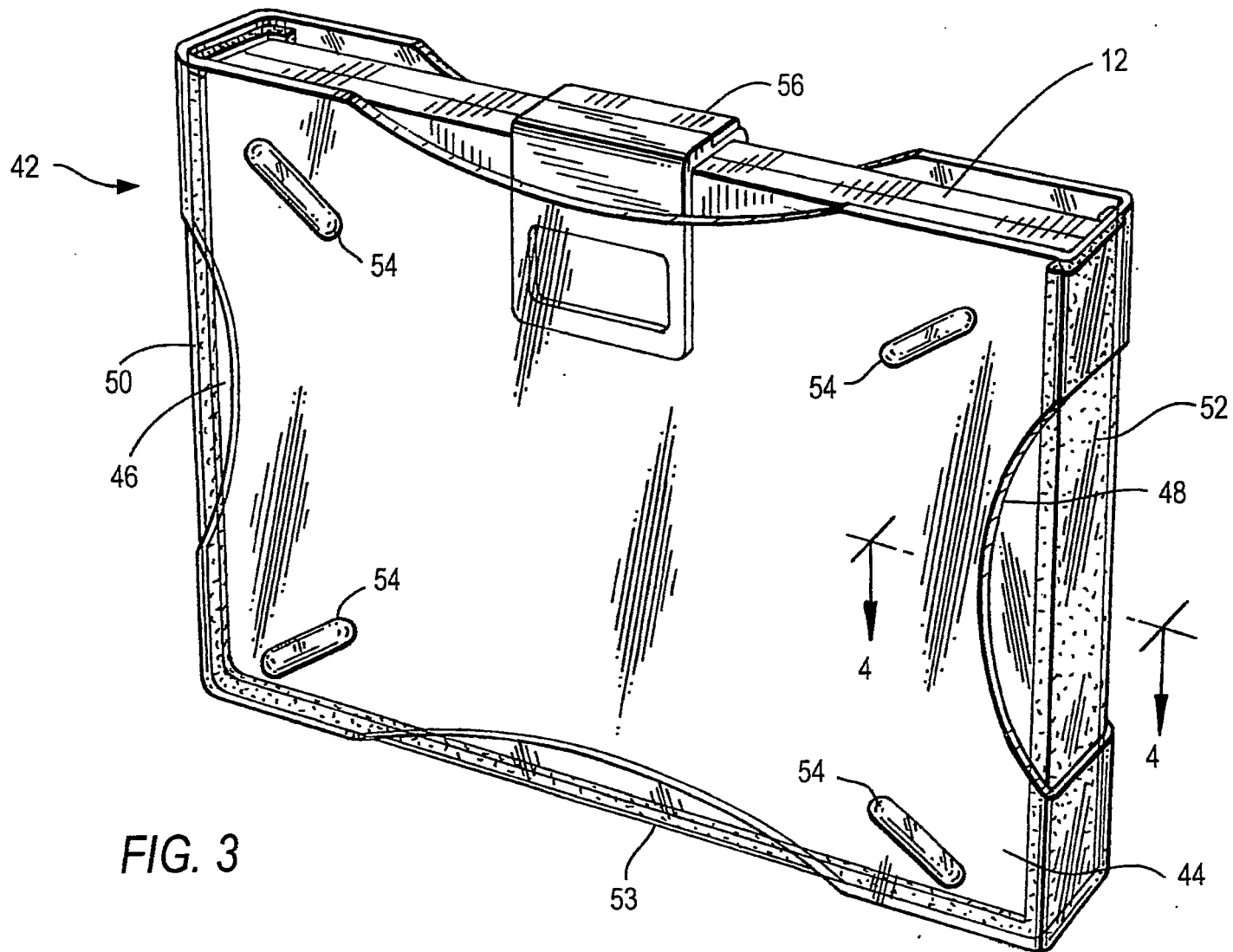


FIG. 3

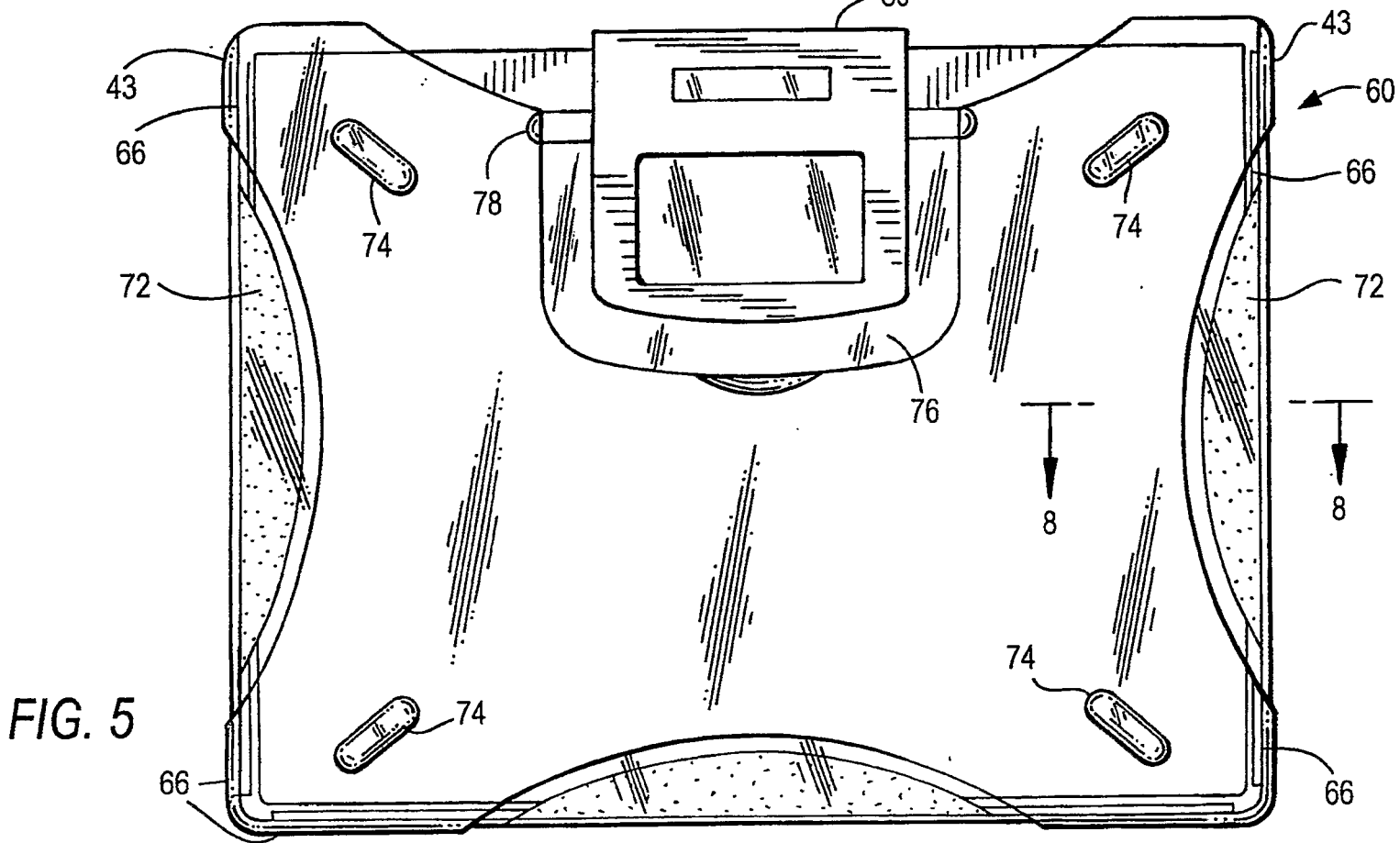
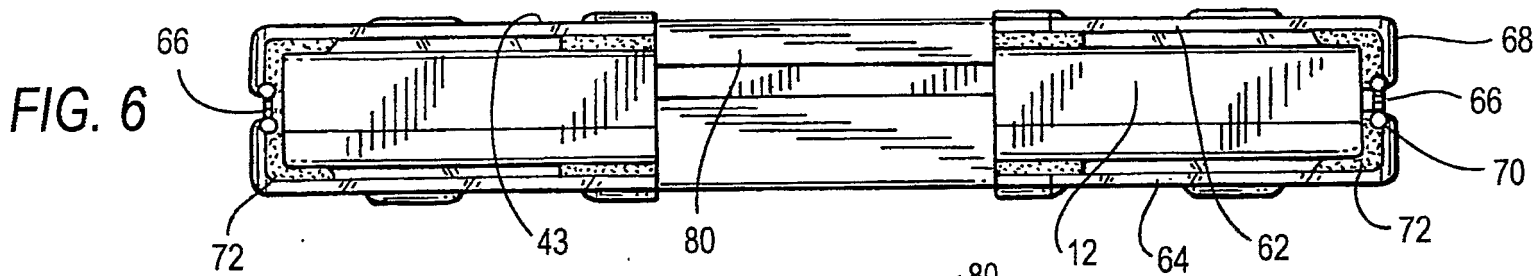


FIG. 4

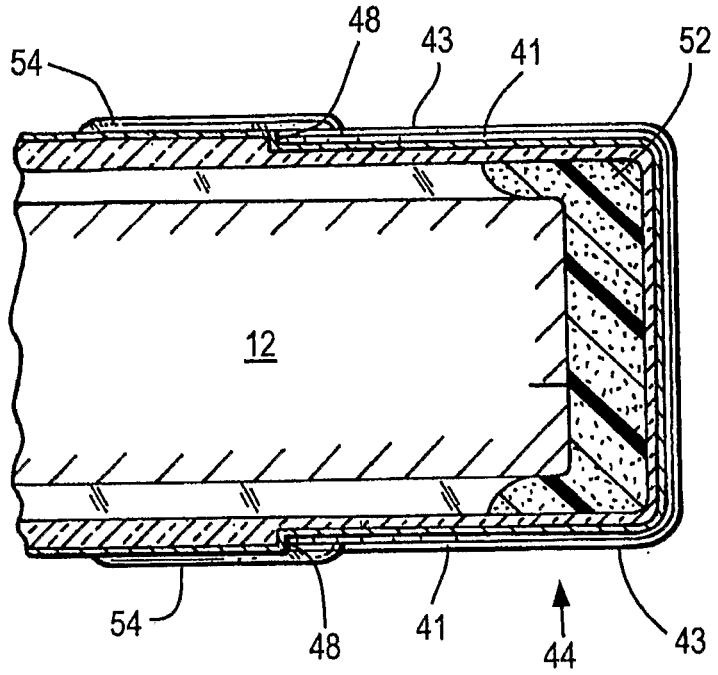


FIG. 7

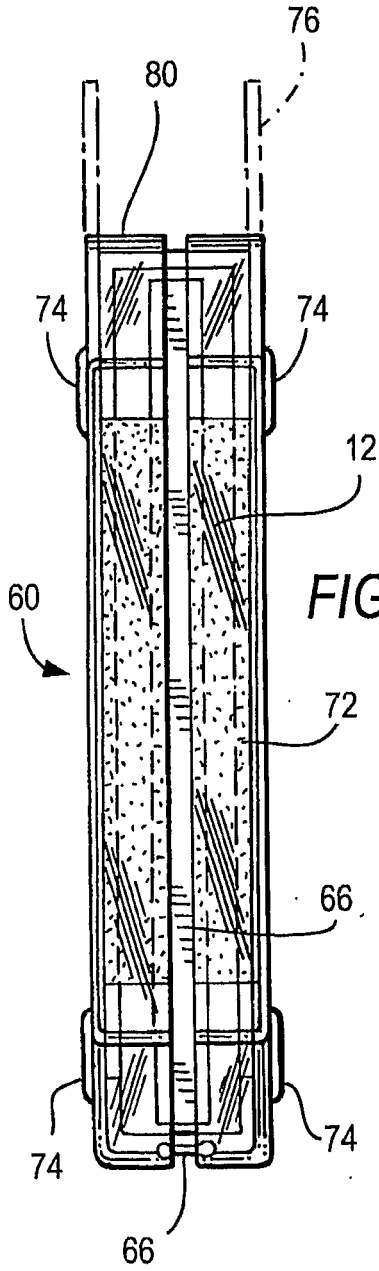
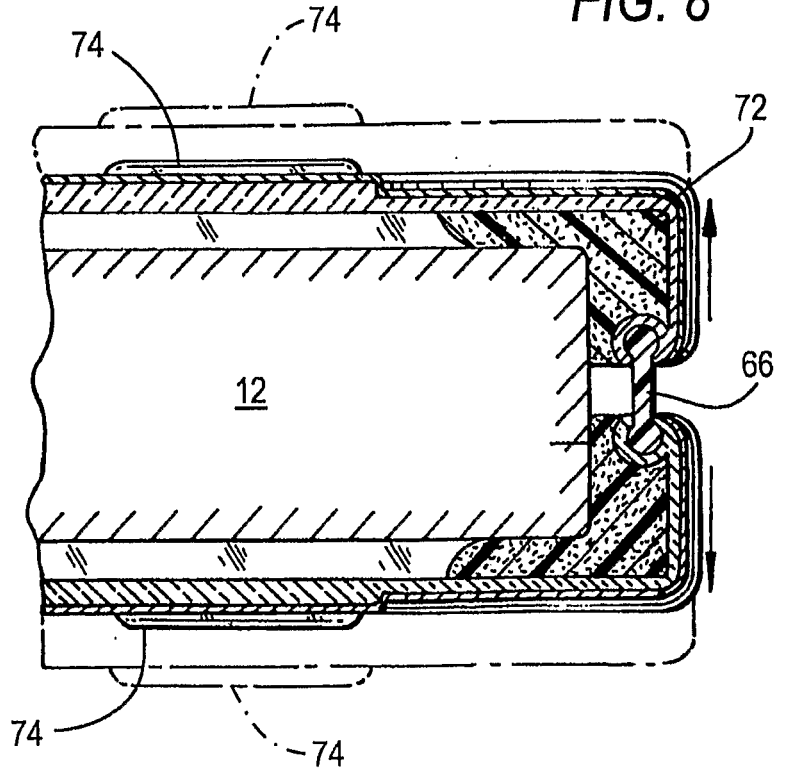


FIG. 8



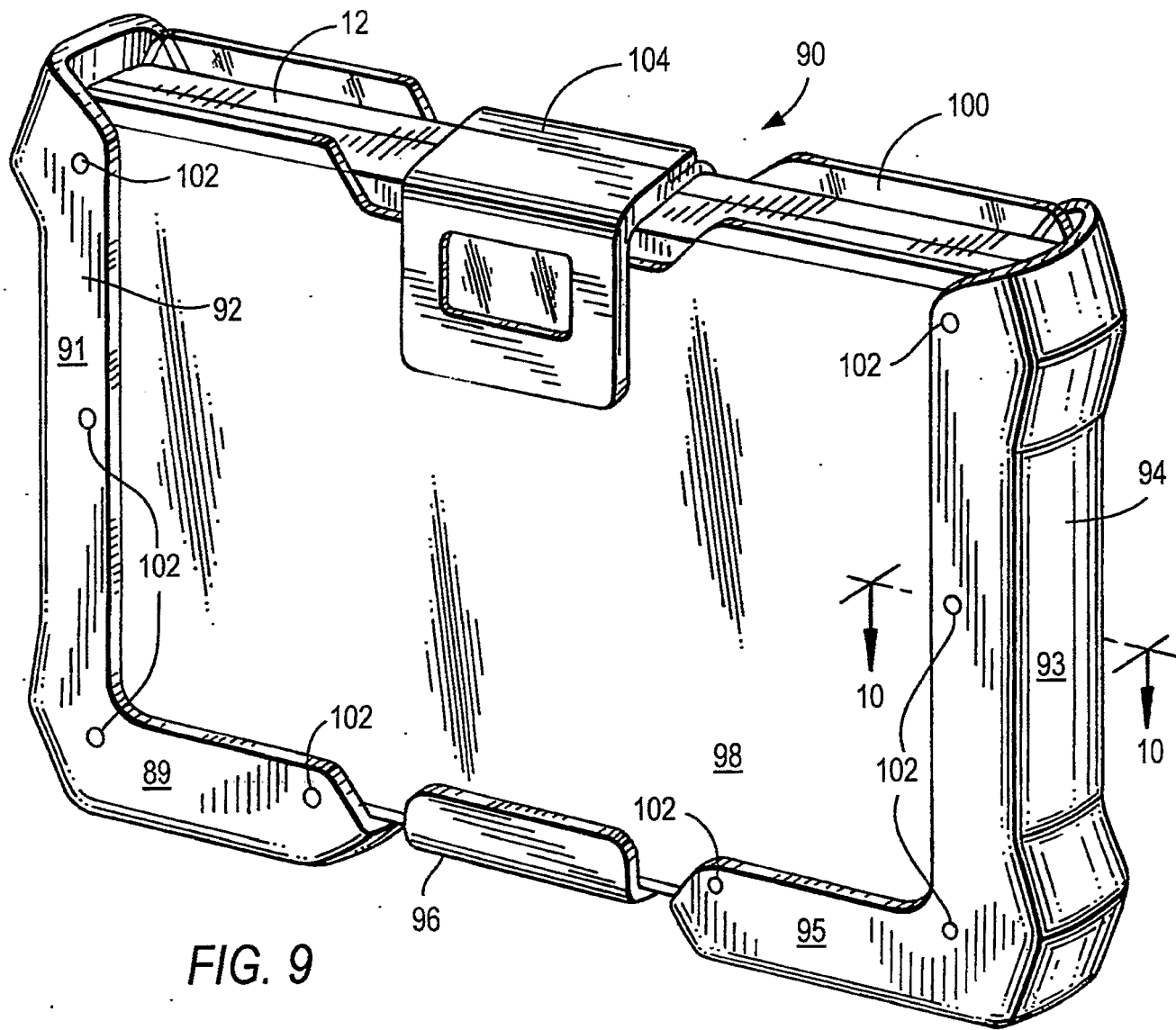


FIG. 9

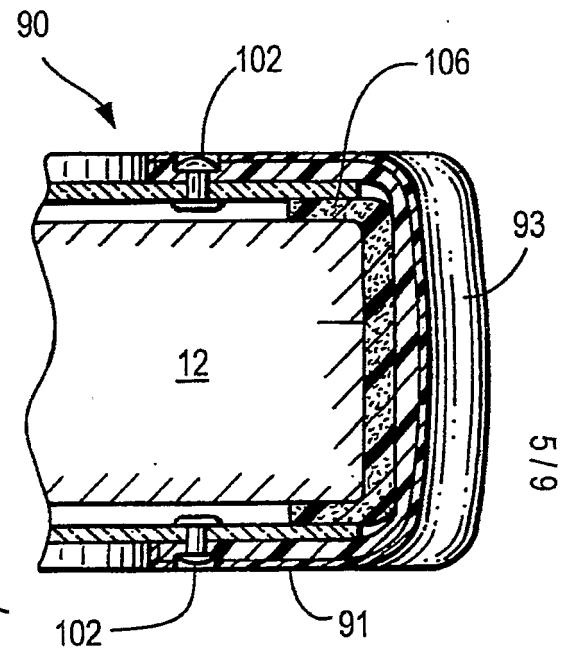
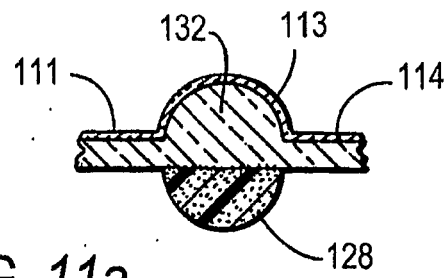
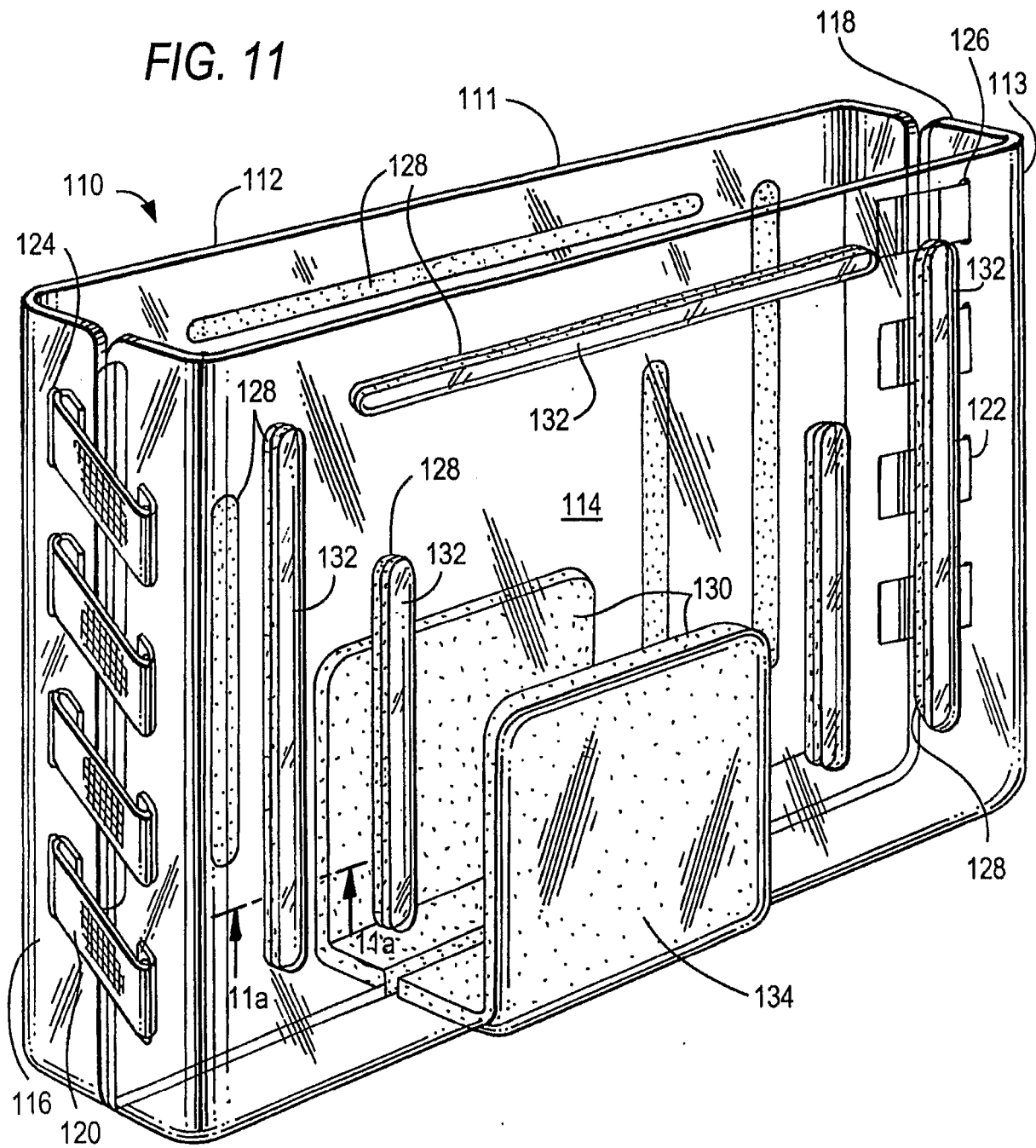


FIG. 10



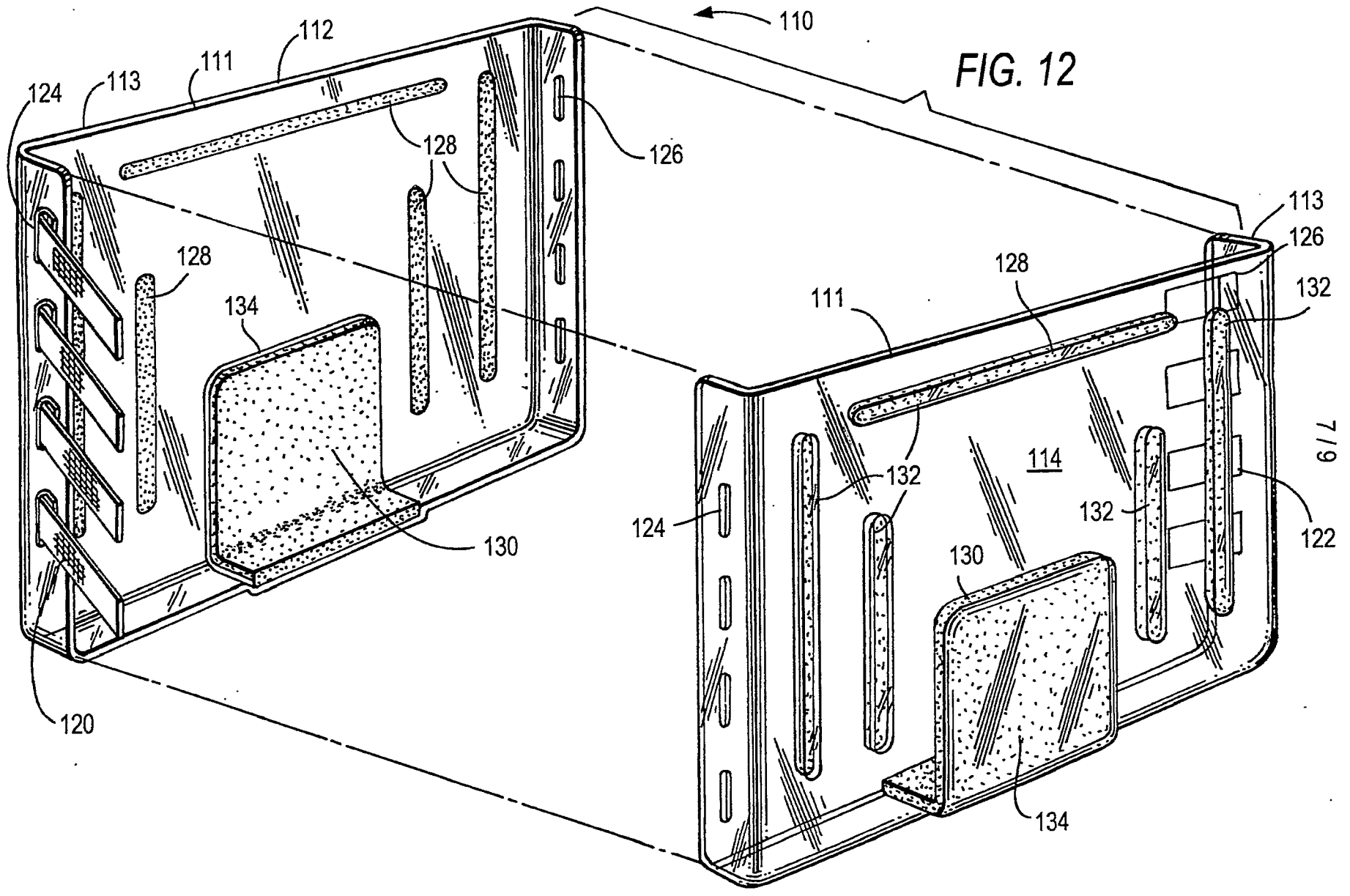


FIG. 13

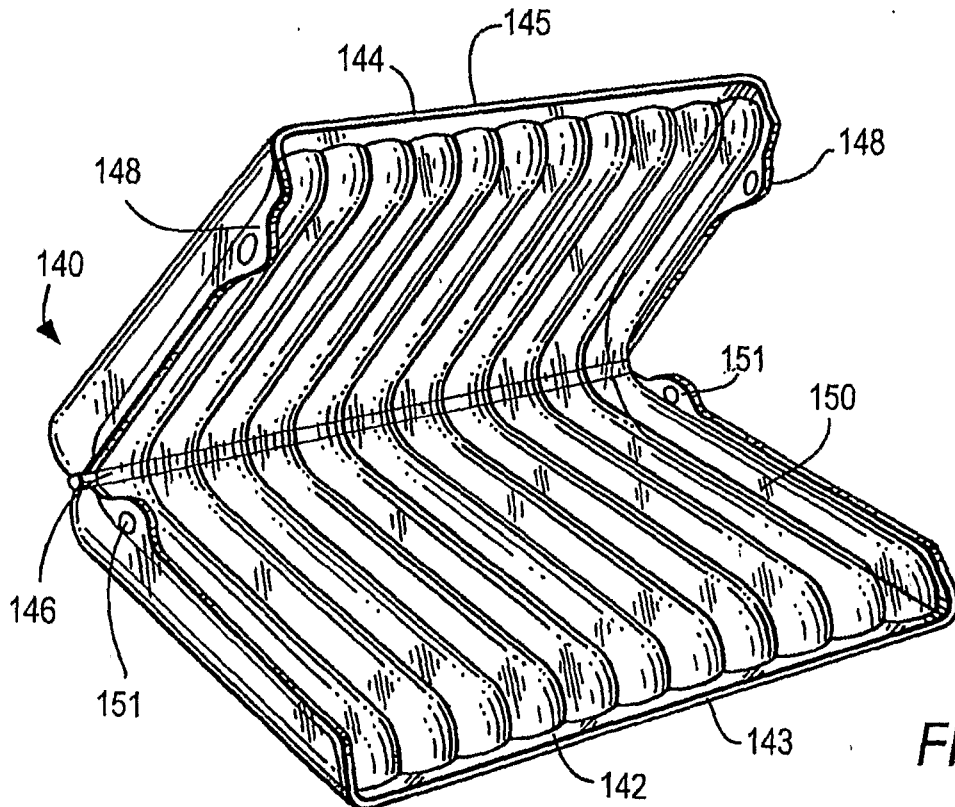
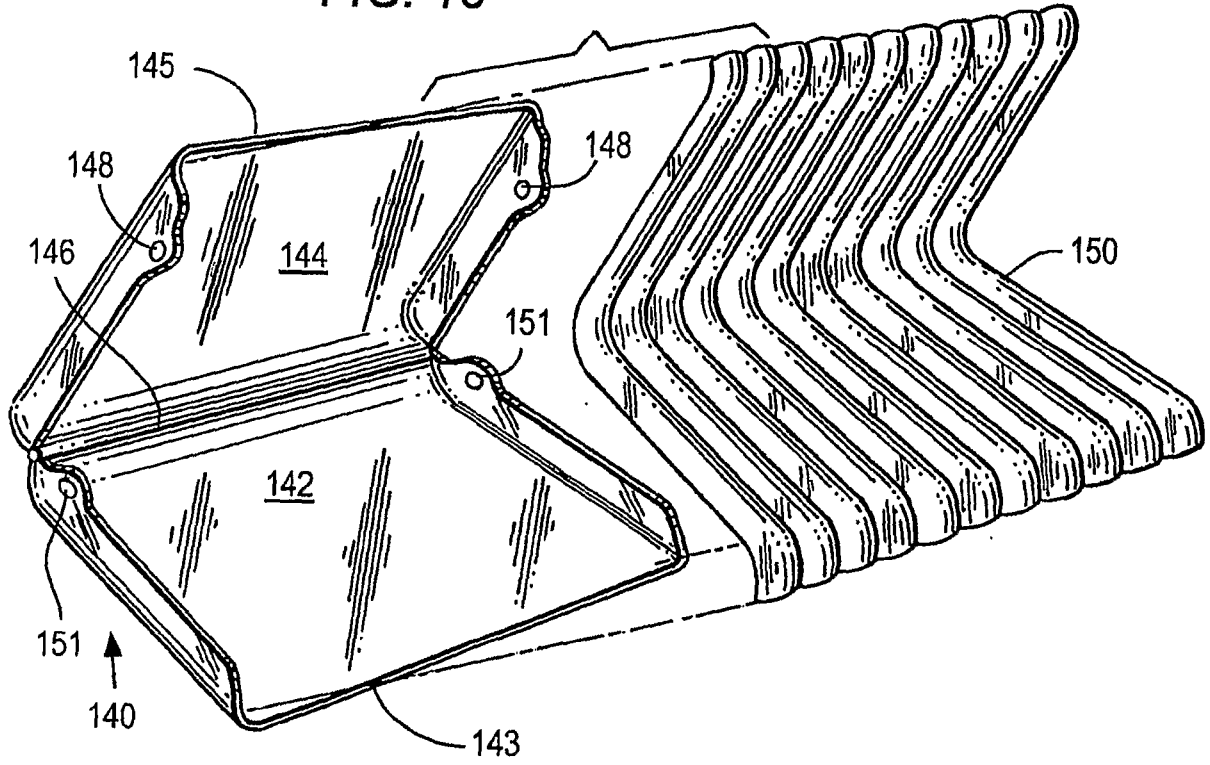


FIG. 14

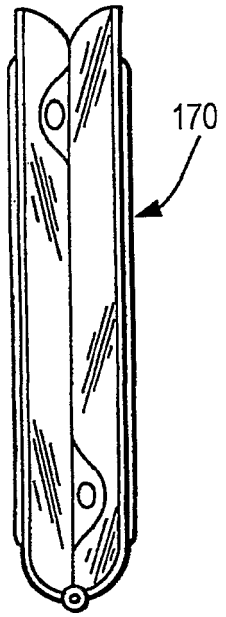


FIG. 18

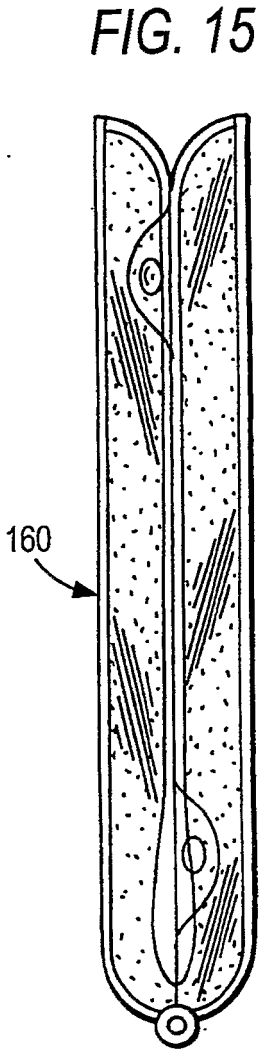


FIG. 15

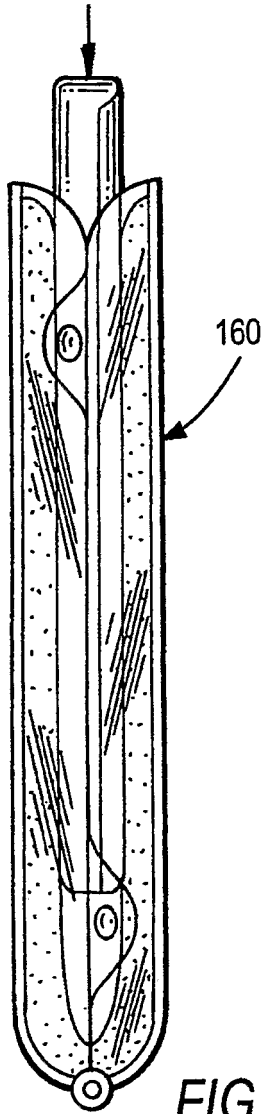


FIG. 16

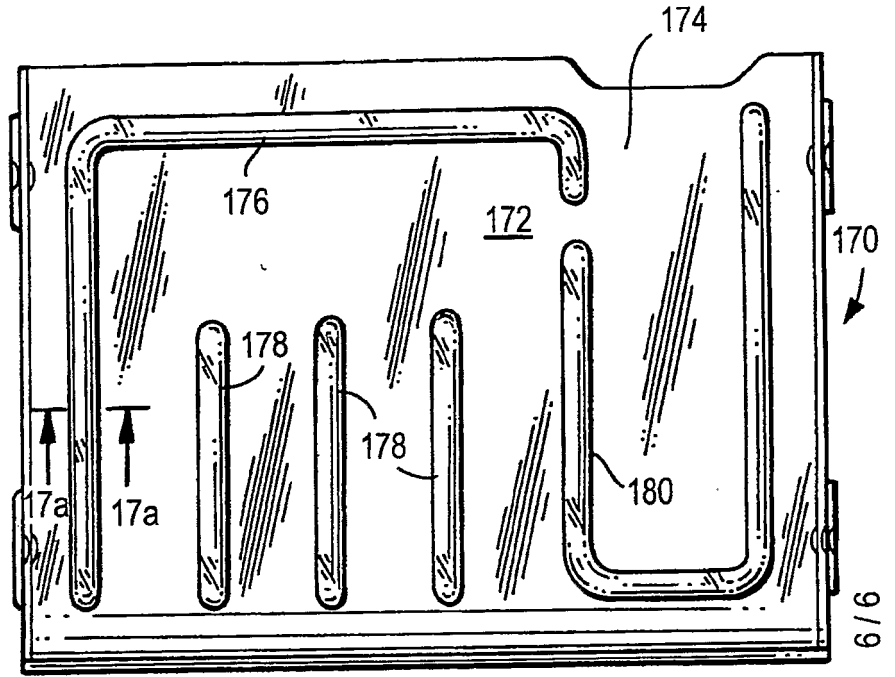


FIG. 17

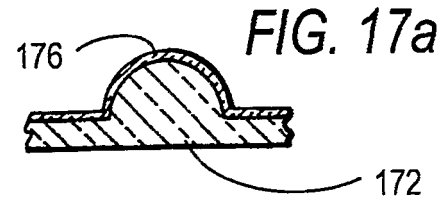


FIG. 17a