

(19)



Europäisches
Patentamt
European
Patent Office
Office européen
des brevets



(11)

EP 1 780 045 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

02.05.2007 Bulletin 2007/18

(51) Int Cl.:

B42F 17/08 ^(2006.01)(21) Application number: **06012576.2**(22) Date of filing: **20.06.2006**

(84) Designated Contracting States:

**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI
SK TR**

Designated Extension States:

AL BA HR MK YU

(30) Priority: **28.10.2005 US 262402**(71) Applicant: **Sanford, L.P.**

Freeport, IL 61032 (US)

(72) Inventor: **Smith, Aaron W.**

Plainfield

Illinois 60544 (US)

(74) Representative: **Winkler, Andreas Fritz Ernst**

Forrester & Boehmert

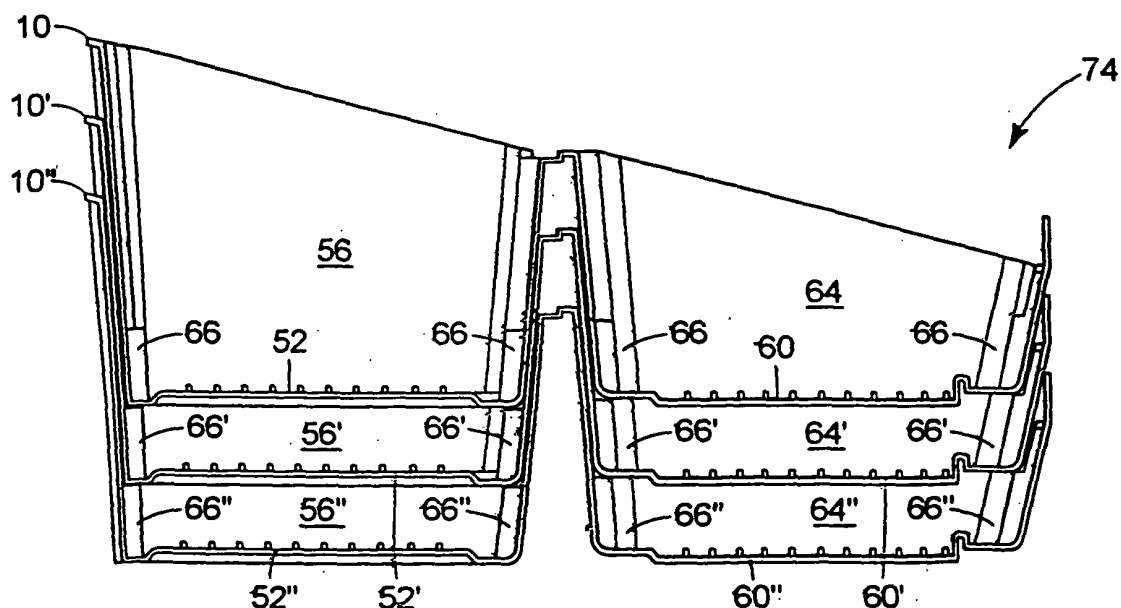
Pettenkoferstrasse 20-22

80336 München (DE)

(54) **Card file**

(57) A card file is described herein including a base and a lid hingedly joined together. The base includes a base panel, front, back and side walls. Likewise, the lid includes a lid panel, front, back and side walls. The front, back, and side walls, of both the base and lid extend away from respective ones of the base and lid panels. The front and back walls diverge away from one another moving away from the base or lid panel. Likewise, the side walls diverge away from one another moving away

from the base or lid panel. A first storage space is defined between the base panel and respective front back and side walls of the base. Similarly, a second storage space is defined between the lid panel, and respective front, back and side walls of the lid. Thus, both the first and second storage spaces are generally smaller in cross-sectional area near respective base or lid panels than near the exposed edges of the front, back and side walls of the base and lid. The card file is stackable with like card files in a nested configuration.

FIG. 4

Description

BACKGROUND

Field of the Disclosure

[0001] The disclosure generally relates to storage devices and specifically to nestable card files.

Related Technology

[0002] Card filing containers are known in the art. Most of these containers are simply boxes having an opening on or near a top surface for access to a storage space within the container. Because these containers inherently comprise mostly empty space, they generally take up relatively large amounts of retail shelf space and also a significant amount of space during shipment.

[0003] A significant drawback to these containers from a retail sales point of view occurs in bulk transportation and display of these containers for sale. Because such containers are typically made to hold a plurality of cards, they consist mostly of empty space, surrounded by four or more walls and a bottom. During bulk transportation from the manufacturer to the retailer, the volume of empty space within the container may be lost to the shipper and may result in a higher per unit cost to the retailer. Furthermore, such containers are often displayed for sale by stacking one product on top of a like product, thus losing valuable display space to the empty storage space within the containers.

SUMMARY

[0004] A card file is described herein including a base and a lid hingedly joined together. The base includes a base panel, front, back and side walls. Likewise, the lid includes a lid panel, front, back and side walls. The front, back and side walls of both the base and lid extend away from respective ones of the base and lid panels. The front and back walls diverge away from one another in a direction away from the base or lid panel. Likewise, the side walls diverge away from one another moving away from the base or lid panel. A first storage space is defined between the base panel and respective front back and side walls of the base. Similarly, a second storage space is defined between the lid panel, and respective front, back and side walls of the lid. Thus, both the first and second storage spaces are generally smaller in cross-sectional area near respective base or lid panels than near respective exposed edges of the front, back and side walls. The card file is stackable with like card files in a nested configuration.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] Objects, features, and advantages of the present disclosure will become apparent upon reading

the following description in conjunction with the drawing figures, in which:

[0006] FIG. 1 is a perspective view of a card file constructed in accordance with the teachings of the disclosure;

[0007] FIG. 2 is a top plan view of the card file of FIG. 1 in an open position;

[0008] FIG. 3 is a side cross-sectional view of the card file of FIG. 1 in an open position; and

[0009] FIG. 4 is a side cross-sectional view of the card file of FIG. 1 stacked in a nested condition with like card files.

DETAILED DESCRIPTION

[0010] A card file generally includes a first portion, or base, and a second portion, or lid, hingedly joined together. Each of the first and second portions includes a panel and two opposing sets of walls. In a closed configuration, the card file is box-like in shape including a storage space defined between the panels and walls of the first and second portions. The card file may be sized for storage of index cards or the like. Additionally, the size and shape of the card file may be selected based on what is to be stored in the storage space. The card file may be produced in virtually any size to accommodate a desired card size. For example, the card file may be sized to receive 3"x 5" cards, 4"x 6" cards, business cards or virtually any other sized card or document.

[0011] A card file 10 constructed in accordance with the teachings of the disclosure is shown in FIG. 1. The card file 10 is shown in a closed position and includes a first portion or base 20 and a second portion or lid 22. The base 20 and lid 22 are hingedly attached to one another and are movable between an open position, in which a storage space is exposed, to a closed position, in which the storage space is not exposed. A front wall 24 of the base 20 includes a generally scalloped or recessed area 26. A front wall 30 of the lid 22 includes a corresponding tongue 32 extending from a first edge 34 thereof that overlays the scalloped or recessed area 26. The tongue 32 conveniently provides a grasping surface for a user when moving the card file 10 from the closed position to the open position. Additionally, the lid includes a groove 36 disposed on a first surface 40 thereof. The groove 36 is sized and shaped to support an index card on the first surface 40 in a generally upright orientation so that a user may view the index card without holding the index card. Thus, the groove 46 frees the user's hands for other uses while still allowing easy viewing of the index card.

[0012] FIG. 2 shows a top plan view of the card file 10 in an open position. The base 20 and lid 22 are hingedly attached along a first edges 40, 42 of respective back walls 44, 46. In this example, the base 20 and lid 22 are attached to one another via a living hinge 50. Of course any type of hinge could be used to attach the base 20 to the lid 22. The base 20 includes a base panel 52, front

and back walls 24, 44 and a pair of side walls 54. The front and back walls 24, 44 of the base 20 extend away from the base panel 52 and diverge slightly away from one another as the front and back walls 24, 44 of the base 20 extend away from the base panel 52. Likewise, the two side walls 54 of the base 20 extend away from the base panel 52 and diverge away from one another as the side walls 54 of the base 20 extend from the base panel 52. A storage space 56 for the base 20 is formed between the front, back and side walls 24, 44, 54 of the base 20. The storage space 56 of the base 20 is smaller in cross-sectional area near the base panel 52 than near the distal edges of the front, back and side walls 24, 44, 54 of the base 20.

[0013] Likewise, the lid 22 includes a lid panel 60, front and back walls 30, 46, and a pair of side walls 62. The front and back walls 30, 46 of the lid 22 extend away from the lid panel 60 and diverge slightly away from one another as the lid front and back walls 30, 46 extend away from the lid panel 60. Similarly, the two side walls 62 of the lid 22 extend away from the lid panel 60 and diverge away from one another as the side walls 54 of the lid 22 extend from the lid panel 60. A storage space 64 for the lid 22 is formed between the front, back and side walls 30, 46, 62 of the lid 22. The storage space 64 of the lid 22 is smaller in cross-sectional area near the lid panel 60 than near the distal edges of the front, back and side walls 30, 46, 62 of the lid 22.

[0014] The groove 36 in this example extends generally from one side wall 62 of the lid 22 to the other side wall 62 of the lid 22. Thus, an index card may be supported on the lid 22 for easy viewing. Additionally, in this example, the groove 36 is substantially parallel to the front wall 30 of the lid 22. Of course, the groove 36 may be dimensioned and oriented as required by the user.

[0015] A plurality of flanges 66 are disposed on the base panel 52 and the lid panel 60. Each flange 66 extends away from the base panel 52 or the lid panel 60 and to a height less than that of a respective front or back wall 24, 44 of the base 20 or a respective front or back wall 30, 46 of the lid 22. The flanges 66 act as nesting stops when the card file 10 is nested with like card files 10. This interaction will be discussed in detail hereinafter.

[0016] Further, the card file 10 may include a plurality of ribs 70 disposed on the base panel 52 and the lid panel 60. The ribs 70 facilitate organization of the cards stored in the card file 10 by preventing the cards from sliding to one side of the storage space 56, 64. The ribs 70 also facilitate storage of the cards in a generally upright orientation within the card file 10. Further, the tapered front, back and side walls 24, 44, 54 of the base 20 provide more space near a top portion of the cards allowing a user to fan the top portions of the card for easy viewing.

[0017] FIG. 3 is a side cross-sectional view of the card file 10 of FIG. 1 in an open position. The lid 22 and base 20 are joined by the hinge 50 along the first edge 40 of the back wall of the base 20 and the first edge 42 of the back wall of the lid 22. In this embodiment, the back wall

44 of the base 20 and the back wall 46 of the lid are substantially the same height, this feature allows the base panel 52 and the lid panel 60 to lie in substantially the same plane when the card file 10 is in the open position. The substantially coplanar orientation of the base panel 52 and the lid panel 60 provides a relatively stable starting condition with which a stack of card files 10 may be constructed.

[0018] The side walls 54 of the base 20 taper from the front wall 24 of the base 20 towards the back wall 44 of the base 20. In other words, the side walls 54 of the base 20 are greater in height near the front wall 24 of the base 20 than near the back wall 44 of the base. Conversely, the side walls 62 of the lid 22 taper from the back wall 46 of the lid 22 to the front wall 30 of the lid 22. That is to say, the side walls 62 of the lid 22 are greater in height near the back wall 46 of the lid 22 than near the front wall 30 of the lid 22. Of course, the side walls 54 of the base 20 and the side walls 62 of the lid 22 could be constructed with varying heights and tapers. However, the general taper of the side walls 54, 62 from the front wall 24 of the base 20 toward the front wall 30 of the lid 22 allows a user easy viewing of cards stored in the card file 10. Viewing of the cards is especially enhanced by the taper of the side walls 54, 62 when the card file 10 is at or near capacity.

[0019] Additionally, the flanges 66 extend generally away from the base panel 52 and the lid panel 60 respectively. Further, the flanges 66 are attached to one of the front walls 24, 30 of the base 20 or lid 22 and the back walls 44, 46 of the base 20 or lid 22. However, the flanges may be freestanding in that they only extend from the base panel 52 or the lid panel 60. Furthermore, the flanges 66 may be eliminated if desired. The flanges 66 generally provide an upper surface 72 which bears against a lower surface of the base panel 52 or the lid panel 60 of a like card file 10 when like card files 10 are stacked in a nested configuration. In this manner, the flanges 66 act as nesting stops to prevent frictional locking between adjacent card files when nested. Alternately, one or more of the ribs 70 may be lengthened to provide a similar upper surface for bearing against another base panel 52 or lid panel 60.

[0020] FIG. 4 shows a cross-sectional view of a stack 74 of like card files 10, 10', 10'', in a nested configuration. In this configuration, a first card file 10 is partially inserted into the storage spaces 56', 64', of a second card file 10'. The base panel 52 of the first card file 10 bears against the flanges 66' of the second card file. Likewise, the lid panel 60 of the first card file 10 bears against the flanges 66' of the second card file 10'. Thus, the first card file 10 may only be inserted into the second card file 10' to a predetermined depth. Accordingly, frictional locking is prevented and a user may easily separate the individual card files 10, 10' from the stack 74 of card files. The two card files 10, 10', may likewise be nested with a third card file 10''. The volume of space occupied by the stack 74 of card files is significantly less than the sum of the vol-

umes occupied by the individual card files. Therefore, shipment and storage of the card files 10 in the stacked and nested configuration is more efficient than shipment and storage of traditional card files. The resulting increase in shipping and storage efficiency reduces the overall cost of the products to a consumer.

[0021] While the disclosed embodiments are generally manufactured from molded plastic, the card files can, of course, be constructed from virtually any suitable material and by virtually any suitable manufacturing process. For example, the card files may be constructed from polystyrene, polypropylene, polycarbonate, engineering grade plastic, ABS, TPE, thermoplastics, metal, wood, organic materials, laminates, leather, glass and/or combination thereof. One example of the card file may be manufactured of plastic through an injection molding process. The material and method of manufacture may be chosen by one skilled in the art according to desired features, cost, and/or ease of manufacture, among other considerations.

[0022] The disclosed card files improve upon maximizing retail shelf space, accommodate variable shelf space and configurations, and enhance product nesting for shipping, stock storage, and display for sale. Product nesting is accomplished by stacking each card file vertically upward relative to its preceding card file in a stack. The stacked card files can be displayed and shipped without damage to the product due to scuffing, scratching, and the like because the products will be tightly nested. Additional packing between adjacent card files can be negated.

[0023] Additionally, freight cube size can be optimized and significantly reduced utilizing the disclosed nested card file configuration. Products shipped in bulk can be directly unloaded from the master carton or shipping box onto a retail shelf. No additional reorientation of the product may be necessary, making the merchandiser's handling of the product easier. The nested card files also assist in retaining the displayed card files on a retail shelf space. The card files also look more organized when nested as disclosed herein. This reduces the amount of work required by both customers and merchandisers to keep the shelf displays neatly organized and arranged. An organized shelf space may effect the perception of the consumer and influence his or her decision to buy the displayed products.

[0024] Further, because more product can be displayed for sale in a given amount of shelf space, less restocking time and stocking space is necessary for the retailer. Having more product available and on display for sale at any one time reduces the frequency of an item appearing to be out of stock, which can prevent a consumer from leaving the establishment to go elsewhere to find the desired product.

[0025] Although certain card files that are nestable have been described herein in accordance with the teachings of the present disclosure, the scope of the appended claims is not limited thereto. On the contrary, the

claims cover all embodiments of the teachings of this disclosure that fairly fall within the scope of permissible equivalents.

Claims

1. A card file comprising:

first and second portions hingedly joined together, each portion including a base panel, front and back walls extending away from the base panel and side walls extending away from the base panel;

a first storage space defined generally between the front, back and side walls of the first portion; and

a second storage space defined generally between the front, back and side walls of the second portion,

wherein the front and back walls of the first portion diverge away from one another in a direction from the base panel of the first portion towards exposed edges of the front and back walls of the first portion, forming a first storage space that is wider in a direction away from the base panel of the first portion than near the base panel of the first portion,

wherein the front and back walls of the second portion diverge away from one another in a direction from the base panel of the second portion towards exposed edges of the front and back walls of the second portion, forming a second storage space that is wider away from the base panel of the second portion than near the base panel of the second portion.

2. The card file of claim 1, wherein the first and second portions are hingedly attached to one another along a portion of the exposed edges of back walls of the first and second portions.

3. The card file of claim 1, wherein the base panel of the first portion includes a groove along a portion thereof.

4. The card file of claim 3, wherein the groove is of sufficient length to accommodate supporting a card in a generally upright orientation.

5. The card file of claim 1, wherein the front wall of the first portion includes a generally scalloped region therein.

6. The card file of claim 5, wherein the front wall of the second portion includes a tongue disposed along a first edge thereof.

7. The card file of claim 6, wherein the tongue overlays a portion of the scalloped region when the card file is in a closed position.
8. The card file of claim 1, further including at least one rib disposed on a first surface of the base panel of one of the first and second portions.
9. The card file of claim 8, further including a plurality of ribs disposed on the first surface.
10. The card file of claim 9, wherein the plurality of ribs is generally oriented perpendicularly to the base panel of the one of the first and second portions.
11. The card file of claim 1, further including a flange attached to a first surface of the base panel of one of the first and second portions.
12. The card file of claim 11, further including a plurality of flanges attached to the first surface.
13. The card file of claim 12, wherein the plurality of flanges prevents frictional locking between like card files when like card files are stacked in a nested configuration.
14. The card file of claim 11, wherein the flange is attached to both the first surface and the front wall of the one of the first and second portions.
15. The card file of claim 1, wherein the first and second portions are attached by a living hinge.
16. The card file of claim 1, wherein in a first, open position, the card file is nestable with a like card file such that a first card file is partially disposed within the first and second storage spaces of a second card file.
17. The card file of claim 16, wherein the base panels of the of the first and second portions first card file partially rest on a plurality of flanges disposed on the base panels of the first and second portions of the second card file.
18. The card file of claim 17, wherein the volume of space occupied by the nested first and second card files is less than the sum of the volumes of the first and second storage spaces of the first and second card files.
19. The card file of claim 1, wherein the side walls of the first and second portions taper.
20. The card file of claim 19, wherein the side walls taper from the front wall of the first portion towards the front wall of the second portion when the card file is in an open position.
21. The card file of claim 1, wherein the back wall of the first portion and the back wall of the second portion are substantially the same height and allow the base panel of the first portion and the base panel of the second portion to lie in substantially the same plane when the card file is in an open position.
22. A method of stacking a storage container comprising:
 - providing a plurality of storage containers, each storage container comprising:
 - first and second portions hingedly joined together, each portion including a base panel, front and back walls extending from the base panel and diverging away from one another and side walls extending from the base panel and diverging away from one another,
 - wherein a first storage space is defined between the front, back and side walls of the first portion and a second storage space is defined between the front, back and side walls of the second portion;
 - placing each storage container in the plurality of storage containers in an open position; and
 - creating a stack of storage containers by partially inserting a first storage container into the first and second storage spaces of a second storage container,
 - wherein the stack of storage containers occupies a volume less than the sum of volumes of the first and second storage spaces of the first and second storage containers.
23. The method of claim 22, wherein at least one flange is disposed on one of the base panel of the first portion and the base panel of the second portion of the second storage container.
24. The method of claim 23, wherein the step of creating the stack of storage containers includes inserting the first storage container until one of the base panel of the first portion and the base panel of the second portion of the first storage container Contacts a surface of the at least one flange.

FIG. 1

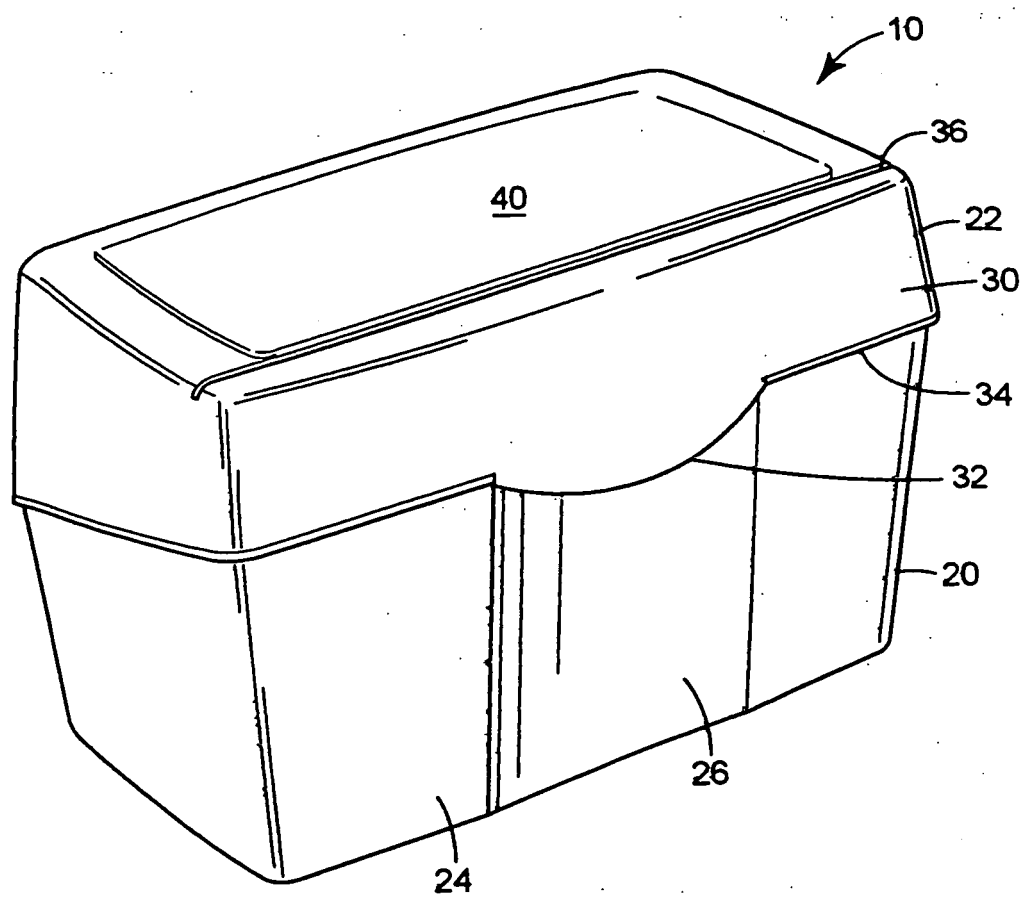


FIG. 2

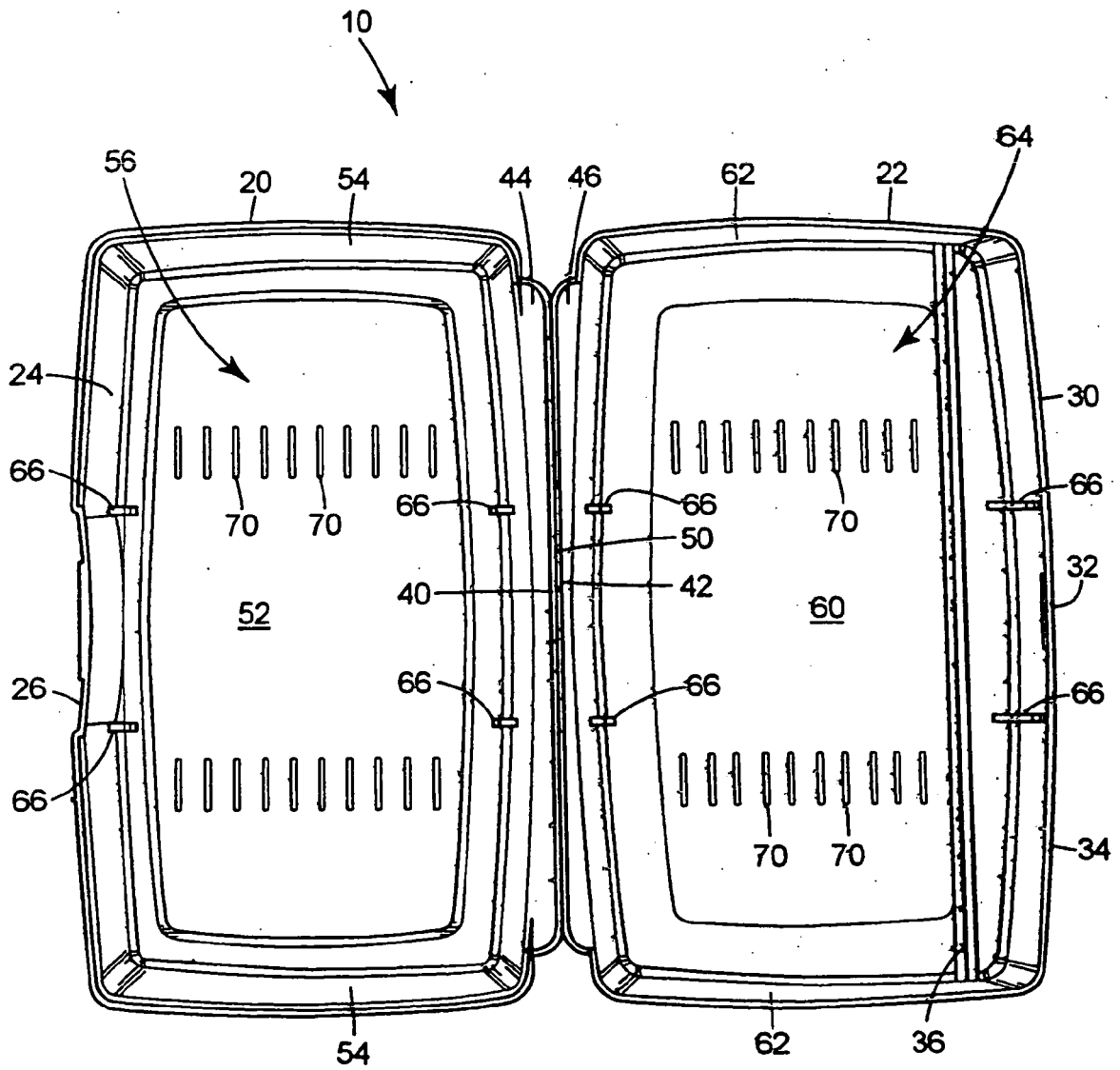


FIG. 3

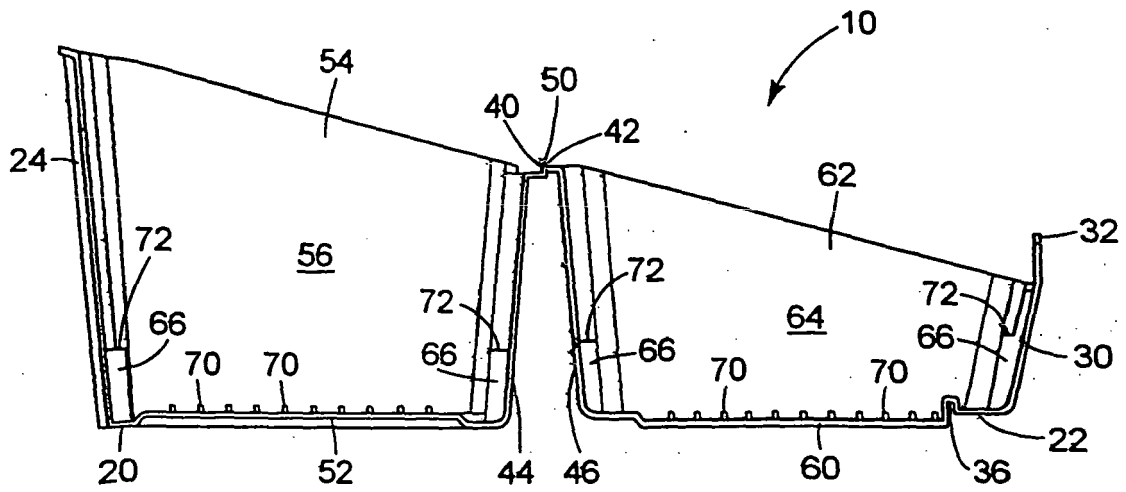


FIG. 4

