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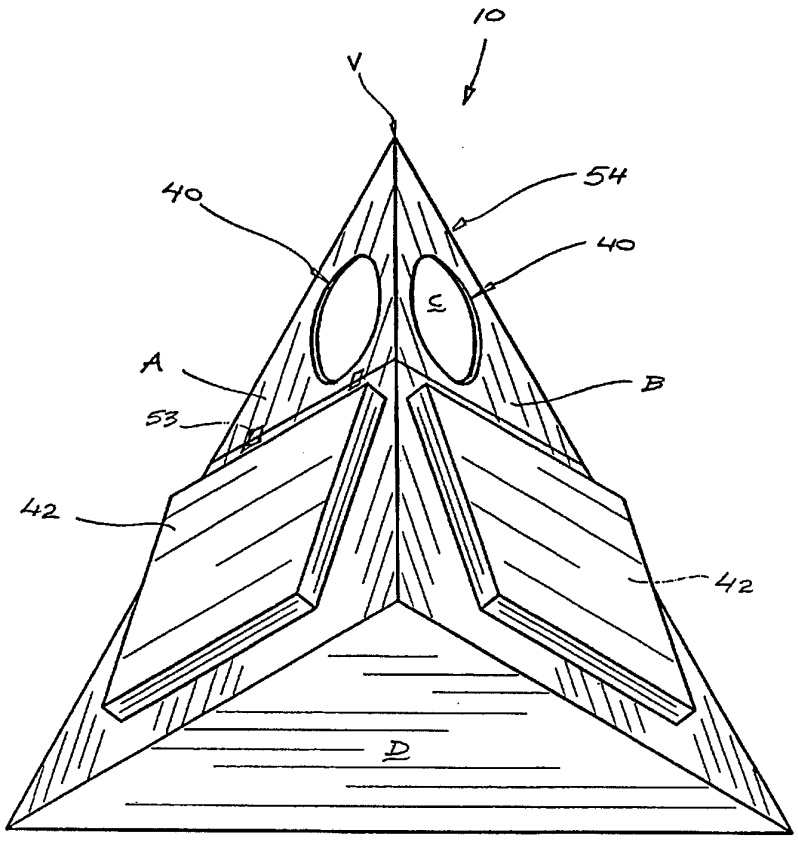
(54) Title: PYRAMIDAL RECEPTACLES AND DISPLAYS

(57) Abstract

A pyramidal restaurant table top receptacle and advertising display device (10) has a polygonal base (D) and a plurality of intersecting triangular side panels (A, B, C) which terminate at a common vertex (v) to form a pyramidal cavity, and an opening (40) in at least one of the side panels for receiving table top waste items such as chewing gum and straw wrappers. Display articles such as detachable tablets of paper (42) may be communicative media such as advertising, and for use as gum wrappers.



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Title of the Invention
PYRAMIDAL RECEPTACLES AND DISPLAYS

Field of the Invention

The present invention pertains generally to receptacles and advertisement displays and, in particular, to receptacles which have a dual function of containing articles and displaying advertising.

Background of the Invention

Receptacles for discarded items, such as waste baskets, ash trays, trash cans and recycling bins are typically formed in certain common configurations and shapes such as generally cylindrical or rectangular with an open top and may be provided with a cover or openable lid. These shapes and configurations are dictated by volume requirements and ease of manufacture and use, and not necessarily by aesthetic or novelty or other functional considerations. Because receptacles are ubiquitous, they provide an ideal medium for carrying advertising displays. However, prior art receptacles are generally not constructed or contoured to optimize visibility of advertising displays which could be applied to the exterior.

With the elimination of ashtrays from a large percentage of restaurant table tops, there is a newly created need for a receptacle for such things as chewing gum, sugar packets and straw wrappers. For chewing gum in particular, the inadequacy of ashtrays as a receptacle is illustrated by the presence of gum stuck to the underside of restaurant tables everywhere. Ideally, such a receptacle would be aesthetically pleasing, have a substantially enclosed waste cavity, and occupy no more space than an ashtray.

Foldable articles made of paper board or other foldable material are used as advertising displays for table tops in restaurants. Such articles are typically folded to have a base and two display surfaces upon which an advertisement is printed. For example, the common "tent" table top display is formed of a single piece of card stock folded in half with the end of each half folded inward to form an interlocking base. The tent thus provides two generally vertically oriented display panels which carry a printed advertisement. Though three dimensional, such tents have only two display surfaces and do not serve as waste or other receptacles.

Summary of the Invention

The present invention provides novel receptacle structures of unique configurations having distinct appearances and especially suited for carrying advertising or other media information material on external surfaces.

In accordance with one aspect of the invention, a pyramidal receptacle in the form of a polyhedron is provided having a polygonal

base and a plurality of intersecting triangular panels connected to the base and terminating at a common vertex, and an access opening to an internal cavity of the receptacle for receiving articles. The plurality of upwardly angularly disposed walls in the manner of a pyramid are especially suited for carrying communicative media such as advertisement displays in an orientation highly visible to users of the receptacle.

In accordance with other aspects and embodiments of the invention, the access opening to the internal cavity of the receptacle may include an opening in one of the panels, or a removable or openable top at or including the vertex of the intersecting panels. The receptacle may be formed of a relatively rigid material suitable for containing articles placed in the receptacle, such as metal or plastic or concrete, or of paper-based material foldable into the pyramidal configurations of the receptacle. The different embodiments of the pyramidal receptacle of the invention may be selectively dimensioned according to, for example, intended uses such as a table top receptacle, interior floor receptacle, exterior or public receptacle or recycling receptacle.

The present invention further provides a novel solution to the problem of restaurant table top waste management, and in combination with a novel table top advertisement or informational format and related methods of use. In accordance with these aspects of the invention, a pyramidal table top receptacle having a polygonal base and a plurality of triangular intersecting panels which terminate at a common vertex, and an opening to an internal cavity of the receptacle is provided for receiving table waste such as chewing gum and straw wrappers and for carrying communicative media such as advertising on exterior surfaces of the panels.

In accordance with one particular embodiment of the invention, a combined receptacle and advertisement display is formed from a single sheet of foldable material having three fold lines which define adjoining edges of four generally rectangular interconnected panels including a central panel, a right panel connected along a first fold line to the central panel, a left panel connected along a second fold line to the central panel, and a bottom panel connected along a third fold line to the central panel; the right, left and bottom panels being foldable along respective fold lines relative to the central panel to form a three dimensional structure having a receptacle cavity and three advertising display surfaces. As described herein, additional embodiments of the invention include pyramidal receptacles with more than three panels, such as four, five, six, seven and eight or more panels; and cube and rectangular configurations with openings in one or more panels to an internal cavity.

In accordance with still another aspect of the invention, a

pyramidal receptacle and display structure includes a base section having a polygonal bottom piece and side walls extending upward at an angle from edges of the bottom piece at intersecting angles which pass through a point above a geometric center of the bottom piece, the base section side walls terminating in a common plane parallel to the bottom piece, and a cover section in the form of pyramid having side walls which intersect at angles approximately equal to the angles of intersection of the base section side walls, the cover section having no bottom wall, whereby the cover section can be placed over the base section to form a pyramidal cavity for receiving items, whereby items are held in the base section, and whereby the cover section can be removed from the base section to provide access to the pyramidal cavity for emptying and/or cleaning, etc., and the exterior surfaces of the cover section side walls provide space for application of advertising or other media information.

These and other aspects of the present invention are herein fully disclosed in the following Detailed Description made with the reference to the annexed Figures.

Brief Description of the Figures

In the annexed Figures:

FIG. 1 is a perspective view of the Combined Receptacle and Advertisement Display of the present invention;

FIG. 2 is a side elevation of the Combined Receptacle and Advertisement Display of the present invention;

FIG. 3 is a top view of the Combined Receptacle and Advertisement Display of the present invention;

FIG. 4 is a plan view of the single sheet from which the Combined Receptacle and Advertisement Display of the present invention is formed;

FIG. 5 is a plan view of an alternate embodiment of the invention in an unfolded configuration;

FIG. 5A is a perspective view of an alternate embodiment of the invention in a folded configuration;

FIG. 6 is a plan view of a plan view of an alternate embodiment of the invention in an unfolded configuration;

FIG. 6A is a perspective view of an alternate embodiment of the invention in a folded configuration;

FIG. 7 is a plan view of a plan view of an alternate embodiment of the invention in an unfolded configuration;

FIG. 7A is a plan view of a plan view of an alternate embodiment of the invention in an unfolded configuration;

FIG. 7B is a perspective view of an alternate embodiment of the invention in a folded configuration;

FIG. 8 is a plan view of a plan view of an alternate embodiment of the invention in an unfolded configuration;

FIG. 8A is a perspective view of an alternate embodiment of the

invention in a folded configuration;

FIG. 9 is a plan view of a plan view of an alternate embodiment of the invention in an unfolded configuration, and

FIG. 9A is a perspective view of an alternate embodiment of the invention in a folded configuration.

FIG. 10 is a perspective view of an alternate embodiment of the invention having a base section and a cover section, in a disassembled state;

FIG. 11 is a perspective view of the embodiment of FIG. 10, in an assembled state;

FIG. 12A is a partial cross-section of the embodiment of FIG. 10;

FIG. 12B is a partial cross-section of the embodiment of FIG. 10;

FIG. 13 is a perspective view of a four-sided version of the base section/cover section alternate embodiment of the invention in a disassembled, and

FIG. 14 is a perspective view of the embodiment of FIG. 13 in an assembled state.

Detailed Description of Preferred and Alternate Embodiments

FIGS. 1 through 3 illustrate one embodiment of a pyramidal receptacle 10 of the invention which has the novel combination of elements of a polygonal base or bottom panel D, a plurality of intersecting triangular panels A, B and C which extend angularly vertically upward from base D to terminate at a common vertex V, thus forming a pyramidal polyhedron having an internal cavity accessible through an opening or aperture 40. In addition to the utility of the internal cavity for receiving articles and/or waste, the angularly disposed panels A,B and C are optimally oriented for highly visible presentation of communicative media such as advertising printed or otherwise applied to the exterior surfaces of the panels and/or attachment of media having additional dimension, such as tablets 42 or media support structures as further described below. Each of the embodiments described herein may be selectively dimensioned according to intended usages such as, for example, without limitation, table or desk top receptacles, floor-based receptacles for interior use, ground-based receptacles for outdoor use such as public or private trash receptacles, recycling receptacles, etc. Any of the embodiments may be constructed or molded or formed of any suitable material for a given usage such as, for example, plastic, fiberglass, metal, steel, wood or paper-based material such as paperboard, cardboard, and composites of any materials such as polymer-coated papers and fiberglass reinforced plastics and polymers. Of course, when the receptacles are constructed of non-foldable material such as steel or concrete, the descriptions herein of receptacles having panels which

are relatively foldable are not applicable, though all other principles apply. The descriptions of foldable receptacles contemplates any foldable material.

As further described below, the aperture or opening 40 may be selectively configured and located within a panel or panels also according to intended usages. As a non-limiting example, a pyramidal receptacle for receiving used beverage containers may have one or more relatively small apertures 40 located near the top of one or more panels, whereas a pyramidal receptacle for receiving paper may have a relatively larger aperture or apertures located somewhat more centrally within a panel or panels. Each of the panels may further include transverse cuts 50 to define a top portion 54 which is removable or openable relative to the remainder of the pyramid, as further described below, to provide even greater access to the interior of the receptacle. By this arrangement, additional containment vessels and/or plastic or paper liners may be used in combination with the receptacle such as placing a conventional garbage can within the pyramid base, or draping the top edge of a plastic garbage bag over the tops of the truncated pyramid panels to further contain articles passed through apertures 40. All such variations and modifications and methods of use are within the basic concept of the invention of a pyramidal receptacle having an accessible internal cavity and angular side panels adapted to carry and display advertising media.

The embodiment of FIGS. 1 through 3 may alternatively be executed as a preferred foldable form of the combined receptacle and advertising display 10 of the present invention which novelly provides a generally concealed waste receptacle and three distinct display panels or walls. The display 10 is formed from a single sheet 11 of card stock or any other suitable foldable material cut substantially in the unfolded configuration shown in FIG. 4 to include a central panel A, a right panel B, a left panel C and a bottom panel D. The four panels are interconnected along adjoining edges by respective fold lines 12, 14 and 16. In this particular embodiment, the length of fold lines 12 and 14 is substantially greater than fold line 16 in order to increase the height and volume of the waste receiving cavity without increasing the surface area of bottom panel D. Panels B and C further include foldable bottom flaps 18 and 20, respectively, attached to a bottom edge of the panel along respective fold lines 22 and 24. Locking tab insertion slots 26 are provided adjacent fold lines 22 and 24 to receive and engage locking tabs 27 which extend from peripheral edges 28 of panel D, in a manner well known in the foldable structure arts. Panel B further includes a foldable peripheral flap 30 attached to a peripheral edge of panel B along fold line 32. Locking tab insertion slots 34 are positioned adjacent fold line 32 to receive and engage locking tabs 36 which extend from

peripheral edge 38 of panel C. Alternatively, tabs 36 may be substituted with a single somewhat larger tab 36' extending from peripheral edge 38 of panel C and distanced from vertex V and apertures 40 to avoid interference therewith. Locking tabs 36 may also be cut to have a relatively small locking notches 35 at the points of intersection of the tabs 36 with peripheral edge 38 to more securely engage ends of slots 34. Locking tabs 27 may similarly include locking notches 29. Adhesive may be applied to a surface of any portion of any panel, such as peripheral flap 30 for securement to an interior surface of the overlapping area of panel C.

To transform the display 10 into the three dimensional pyramidal folded configuration shown in FIGS. 1-3, peripheral flap 30 of panel B is first folded relative to panel B away from the exterior face of panel B. Panels B and C are then each folded relative to panel A, away from the exterior face of panel A, along fold lines 12 and 14 each to the extent that peripheral edge 38 meets fold line 32 with peripheral flap 30 tucked underneath panel C. Locking tabs 36 are inserted into slots 34. Bottom flaps 18 and 20 are then folded inward and panel D is also folded away from the face of panel A, to overlap bottom flaps 18 and 20 and position locking tabs 27 for insertion into slots 26. Apertures 40 may be selectively placed and shaped in panels A, B and C to provide access to the substantially enclosed waste receiving cavity formed by the described structure. The receptacle can be easily emptied by disengaging locking tabs 26 and opening panel D by hinged rotation along fold line 16. Furthermore, multiple assembled displays may be vertically stacked by similarly opening (or folding inward) bottom panel D to allow insertion of the point of another display.

The remaining exterior surface area of each panel is sufficient for attachment of an additional article or articles, which may be, for example, an advertising medium such as adhesively attached pieces of paper in the form of a miniature tablet 42 upon which messages may be printed and which may also be used to wrap waste material such as chewing gum prior to placing it in the receptacle. Other extra-dimensional articles may be attached to or otherwise incorporated in the side panels of the pyramid to attract attention to the advertisement display such as, for example without limitation, battery powered flashing light emitting diodes, electronic sound-generating chips and/or reflective or luminescent materials or fabric, etc.

FIGS. 5 through 9 and accompanying FIGS. 5A through 9A illustrate certain alternate embodiments of the foldable version of the pyramidal receptacle 10 (i.e., constructable of foldable material) in unfolded and folded configurations, with additional side panels to form four, five, six, seven and eight-sided pyramidal receptacles. As depicted in FIGS. 5A through 9A, each of these embodiments may also be formed in non-foldable materials or combinations of materials such as

wood, steel, concrete, plastic or polymers or composite materials. Each of these embodiments has a base panel D and a central panel A attached to panel D, and are in most other respects substantially similar and consistent with the embodiment of FIGS. 1 through 4, including apertures 40 and attachment of extra-dimensional removable media such as miniature tablets 42 to the side panels. The embodiment of FIG. 5 includes an additional side panel E, which may also be provided with an aperture 40 of any desired shape, to form a four sided pyramid receptacle. The panels are relatively folded along the lines which interconnect the panels to form the pyramidal receptacle, as shown in FIG. 5A.

Additionally, in this and other embodiments, all panels but one may be transversely cut, for example along lines 50, with one panel such as A being scored along line 52 to provide for hinged opening of a top portion 54 of the pyramid, about line 52 to provide access to the interior of the receptacle for filling or emptying. The top portion 54 may or may not be provided with apertures 40. When constructed of non-foldable material, top portion 54 may be simply removable such as the lid to a trash can or otherwise hinged, for example by hinges 53, or removably attached and secured by latches or strapping.

The unobvious addition of panels in excess of three affords the functional advantage of increasing the number of advertising display surfaces. Also, a greater number of panels allows selected panels to be free of an aperture to thereby further increase advertising display area without limiting access to the cavity of the receptacle.

FIG. 6 illustrates an embodiment of the receptacle 10 having five side panels A through F and a pentagonal base D. This embodiment is used to illustrate an alternate configuration of apertures 40 such as triangular with dimensions comparable to the side panels. Of course, this and all other alternate configurations of aperture 40 can be incorporated solely and in combination on any number of panels of any of the receptacle embodiments described. For example, FIG. 6A illustrates the embodiment of FIG. 6 in a folded configuration but with generally circular apertures in some side panels.

FIG. 7 illustrates an alternate embodiment of the receptacle 10 having six side panels A through F and a hexagonal base D. FIG. 7A illustrates a still further variation of apertures 40 cut across an interconnecting fold line or lines so that the aperture is generally bisected by the fold line or lines and extends into the areas of two adjacent panels. Again the shape of aperture(s) 40 can be any shape which allows articles to be inserted into the cavity of the receptacle. FIG. 7B illustrates the six side panel embodiment in a folded configuration.

FIG. 8 illustrates a seven side panel (A through G) embodiment of receptacle 10 and a septagonal base D. Central aperture 40 is cut

across two fold lines to completely traverse panel A and extend into adjacent panels B and C. FIG. 8A illustrates this embodiment in a folded configuration with a diamond shaped aperture 40.

FIG. 9 illustrates an eight side panel (A through I) embodiment of the receptacle 10 with octagonal base D. As shown in FIG. 9A, this embodiment is especially suited for apertures 40 which extend across multiple fold lines.

FIGS. 10-14 illustrate an alternate embodiment of the pyramidal receptacle and display device of the invention, indicated generally at 60, which includes a base section 61 and a cover section 70. The base section 61 is formed of a planar polygonal bottom piece 63 which may have any number of intersecting edges 64 of generally equal length, such as three as shown in FIG. 10 or four as shown in FIG. 13, or more. Rising upward from the bottom piece edges are a plurality of intersecting base section side walls 65 which intersect at the points of intersection 66 of the bottom piece edges 64, and along angles which pass through a point above a geometric center of the bottom piece. The geometric center of the bottom piece is defined herein as a point equidistant from the each of the edges of the bottom piece. The base section side walls terminate at top edges 67 each in a common plane parallel to bottom piece 63.

Cover section 70 is formed by a plurality of cover section side walls 71 equal in number to the number of edges of bottom piece 63. Each cover section side wall 71 has a bottom edge 72 which may be, for example, approximately equal in length to a length dimension of the bottom piece edges 64, and at least equal in length to base section side wall top edges 67. In one form of this embodiment of the invention, the length of bottom edges 67 of the cover section side walls is just slightly greater than that of the bottom piece edges 64, and wherein the bottom edges of the cover section side walls are bevelled to lie in the same plane as a bottom surface 68 of bottom piece 63 to provide a completely flush standing surface, as shown in detail in FIG. 12A. In another form, the length of the bottom edges 72 of the cover section side walls is slightly less than the bottom piece edges 64 so that the side walls 71 of the cover section do not completely cover the side walls 65 of the base section when the two sections are fully engaged, as shown in FIG. 12B. As a result of these relative dimensions, a small area of the base section side walls 65 remains exposed, just below the bottom edges 72 of the cover section side walls 71. The exposed areas of the base section side walls are especially useful in gripping the base section for separation or disengagement from the cover section, and can be distinctively colored from the cover section to provide a visual indication of where to grip the two sections for separation. Striations or groove(s) or other textured surfacing 69 on the exposed areas of the base section side walls facilitates gripping of the base

section for detachment from the cover section. Of course, other relative length dimensions between the base and cover sections are within the scope of the invention.

The cover section side walls 71 intersect at a number of points equal to the points of intersection of the base section side walls and along angles approximately equal to the angles of intersection of the base section side walls, and converge at a common point V above the geometric center of the cover section. The geometric center of the cover section is defined herein as a point in the same plane as and equidistant from each of the bottom edges 72 of the cover section side walls. By this construction the cover section can of course be placed over the base section when the points of intersection of the side walls of the cover and base sections are aligned and whereupon the geometric centers of the cover a base sections are vertically aligned, as shown in FIGS. 11 and 14.

Frictional engagement tabs 68 can be provided for example at points on the exterior of the base section side walls for locking engagement with corresponding detents 74 formed on the interior of the cover section side walls, whereby the base section is frictionally held within the cover section so that the device can be moved by manipulation of the cover section only, while still enabling relatively easy access to the receptacle cavity for emptying and cleaning.

An opening 75 can be provided in at least one of the side walls of the cover section at a point above the top edges of the base section side walls, when the two sections are fully engaged, through which waste items can be passed into the pyramidal cavity of the device. The expanse of the cover section side walls provides ample area for application of advertising or other display media. Additional articles such as tablets can be attached to the cover section side walls as described in connection with the other embodiments.

The two piece embodiment 60 of the invention can be executed in any of the described materials. When constructed of a foldable or bendable material such as paper, cardboard, sheet plastic or polymer or thin metal, the intersecting walls of the base and cover sections can be connected along fold lines in the manner described in connection with the other foldable embodiments, including comparable attachment and securement means to hold the device in a folded configuration such as peripheral flaps, locking tabs and locking tab insertion slots.

The invention thus provides a highly adaptable pyramidal receptacle having a utilitarian and accessible cavity and generally vertically oriented panels ideally suited for carrying printed messages and/or multi-dimensional advertisement displays. In usage, the receptacles are placed wherever containment of articles, including

articles of trash, is required such as table and desk tops, offices, domestically, public areas and all sites of recycling collection. Any advertising or communicative media is applied to the exterior surfaces of the panels of the receptacle. Once the receptacle is filled through apertures 40 it is either discarded or emptied through openable panels, top portion 54, or separation of the base and cover sections.

Although the invention has been described in detail with reference to certain preferred and alternate embodiments, certain modifications and variations, such as for example the number of panels; number, size, shape and relative position of apertures, and overall dimensions, etc. not expressly disclosed are nonetheless within the concepts and principles of the invention as defined by the accompanying claims and equivalents thereto.

CLAIMS

What is claimed is:

1. A foldable table top display and receptacle in the form of a three dimensional pyramidal structure, the table top display and receptacle comprising:

a single sheet of foldable material having at least three fold lines at adjoining edges of four generally triangular interconnected panels including,

a central triangular panel wherein each edge of the central panel is adjoined to adjacent panels and coincident with a fold line,

a right triangular panel having a first edge connected along a first fold line to the central panel, a second edge having a locking tabs extending therefrom, and a third edge having a peripheral flap extending therefrom, the right panel further having locking tab insertion slots positioned along the third edge;

a left triangular panel having a first edge connected along a second fold line to the central panel, second and third edges having a peripheral flap extending therefrom, the left panel further having locking tab insertion slots positioned along the second and third edges,

a bottom triangular panel having a first edge connected along a third fold line to an edge of the central panel, and locking tabs extending from second and third edges,

the right, left and bottom panels being foldable along respective fold lines relative to the central panel to form a pyramidal structure having a triangular base and a single point vertex, the locking tabs of the right panel being lockingly insertable into the locking tab insertion slots along the second edge in the left panel and over the peripheral flap extending from the second edge in the left panel, and the locking tabs of the bottom panel being lockingly insertable into the locking tab insertion slots in the third edges of the right and left panels and over the peripheral flaps extending from the third edges of the right and left panels, and

at least one of the panels further comprising an opening to an interior of the three dimensional pyramidal structure.

2. The pyramidal structure of claim 1 further comprising an article in the form of a plurality of detachably connected papers attached to an exterior surface of at least one of the panels.

3. A foldable pyramidal receptacle and display device comprising:

a single sheet of foldable material having at least three fold lines at adjoining edges of four triangular interconnected panels

including:

a central triangular panel,

a right triangular panel connected along a first fold line to the central panel,

a left triangular panel connected along a second fold line to the central panel,

and a bottom triangular panel connected along a third fold line to the central panel,

the right, left and bottom panels being foldable along respective fold lines relative to the central panel to forma three dimensional pyramidal structure,

at least one of the panels further comprising an opening through which an interior of the three dimensional structure is accessible,

at least one of the panels further comprising a peripheral flap at an edge configured to underlap an adjacent panel when the article is in a folded configuration,

a locking tab on a peripheral edge of at least one of the panels configured to engage a locking tab insertion slot in an adjacent panel to secure the article in a folded configuration, and

a second article attached to an exterior surface of at least one of the panels.

4. The device of claim 3 wherein said second article is a plurality of detachably connected papers.

5. The device of claim 3 further comprising transverse cuts in the central, right and left panels and a transversely disposed hinge mechanism in one of the panels whereby a top section of the device above the transverse slits is openable about the hinge mechanism relative to a bottom section of the device below the transverse slits.

6. A pyramidal waste receptacle and display structure comprising a polygonal base panel and at least four intersecting triangular side panels, each side panel having a bottom edge which intersects with the base and two side edges which abut side edges of adjacent side panels, top points of each of the side panels converged at a common vertex to define a pyramidal cavity between the side panels and the base panel, the pyramidal cavity accessible from the exterior of the receptacle through an opening in at least one of the side panels, and at least one panel of the receptacle being openable with respect to the other panels.

7. The pyramidal structure of claim 6 comprised of a single piece of foldable material folded along lines which define the abutting side edges of the side panels and wherein one edge of the base panel is

connected along a fold line to a bottom edge of one of the side panels.

8. The pyramidal structure of claim 6 further comprising transverse cuts in the side panels and a transversely disposed hinge mechanism in one of the side panels whereby a top section of the structure above the transverse cuts is openable about the hinge mechanism relative to a bottom section of the structure below the cuts.

9. The pyramidal structure of claim 7 further comprising locking tabs which extend from a peripheral edge of at least one side panel and the base panel, and corresponding locking tab insertion slots in at least one side panel positioned to lockingly receive the locking tabs.

10. The pyramidal structure of claim 4 further comprising peripheral edge flaps which extend from the bottom edges of the side panels and are overlapped by the bottom panel when the bottom panel is folded relative to the side panels, and further comprising a peripheral edge flap which extends from a side edge of a side panel which is not connected to an adjacent panel and is overlapped by an abutting panel when the pyramidal structure is in a folded configuration.

11. The pyramidal structure of claim 6 comprising five side panels.

12. The pyramidal structure of claim 6 comprising six side panels.

13. The pyramidal structure of claim 6 comprising seven side panels.

14. The pyramidal structure of claim 3 comprising eight side panels.

15. A pyramidal receptacle and display device comprising a base section and a cover section;

the base section having a planar polygonal bottom piece having intersecting edges and planar polygonal side walls extending upwards from each edge of the bottom piece, the base section side walls intersected at points of intersection of the edges of the polygonal bottom piece and along angles which pass through a common point above a geometric center of the bottom piece, each base section side wall terminating at a top edge in a common plane generally parallel to the bottom piece;

the cover section having side walls equal in number to the

edges of the bottom piece, the cover section side walls intersecting at an angle substantially equal to the angle of intersection of the side walls of the base section, the cover section side walls having bottom edges in a common plane wherein a length of the cover section side wall bottom edges is greater than a length of the base section side wall top edges, the cover section side walls converging at a common point above the geometric center of the bottom piece when the cover section is placed over the base section to form a pyramidal receptacle and display device having a pyramidal internal cavity.

16. The pyramidal receptacle and display device of claim 15 further comprising an opening in one of the cover section side walls.

17. The pyramidal receptacle and display device of claim 15 wherein the bottom piece has three edges.

18. The pyramidal receptacle and display device of claim 15 wherein the bottom piece has four edges.

19. The pyramidal receptacle and display device of claim 15 further comprising advertising markings on an exterior surface of at least one of the cover section side walls.

20. The pyramidal receptacle and display device of claim 15 further comprising friction fit engagement points between the exterior surface of at least one of the base section side walls and an interior surface of at least one of the cover section side walls operative to retain the cover section in engagement over the base section.

21. The pyramidal receptacle and display device of claim 15 wherein the base and cover sections are comprised of a foldable material folded along fold lines to define the intersecting panels which are adjoined at the fold lines.

22. The pyramidal receptacle and display device of claim 15 wherein a length of the bottom edges of the cover section side walls is less than a length of the edges of the bottom piece, whereby the cover section side walls do not completely cover the base section side walls leaving an exposed area of the base section side walls when the cover and base sections are fully engaged.

23. The pyramidal receptacle and display device of claim 23 further comprising a textured surface on the exposed area of the base section side walls.

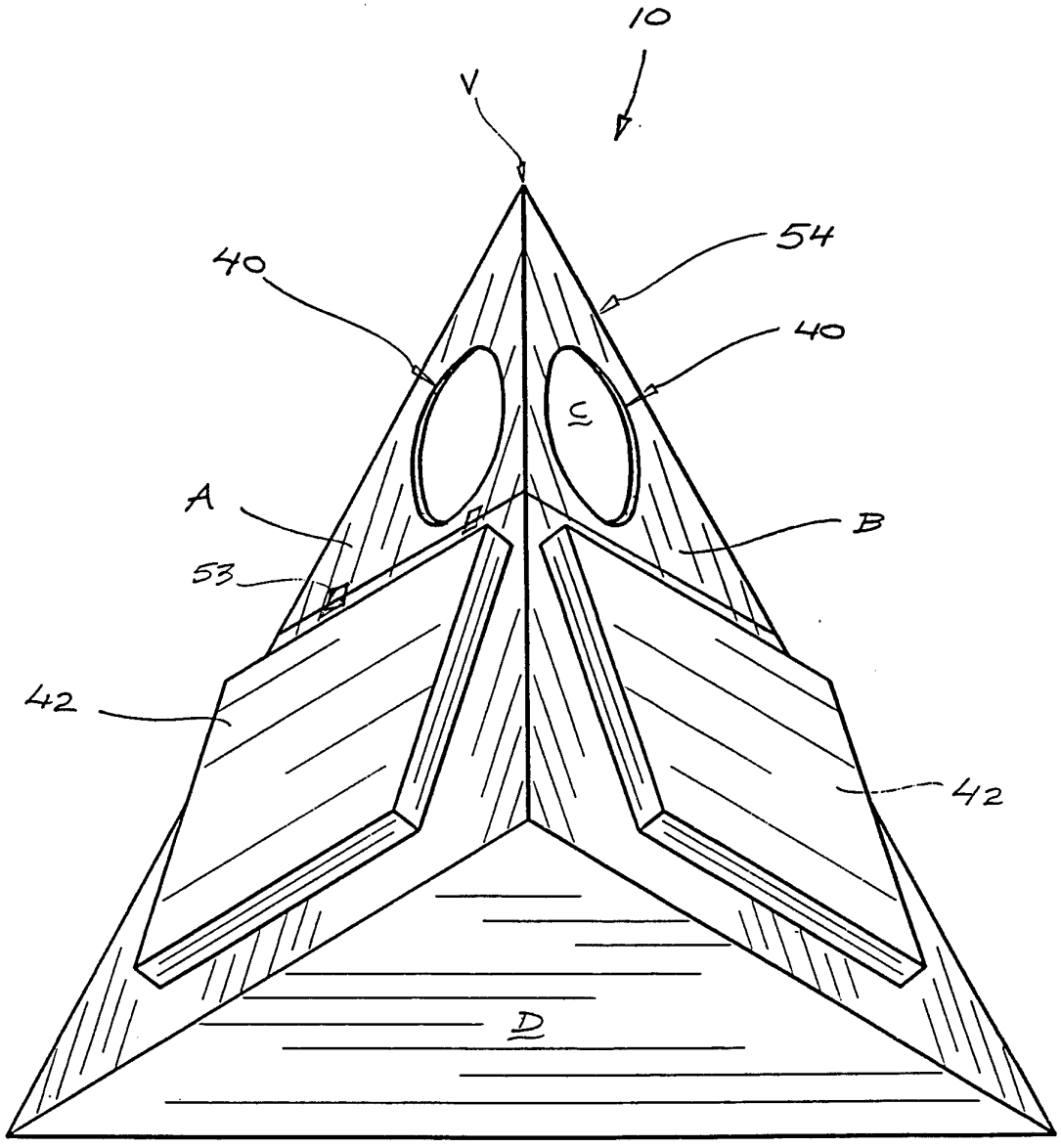

FIG. 1

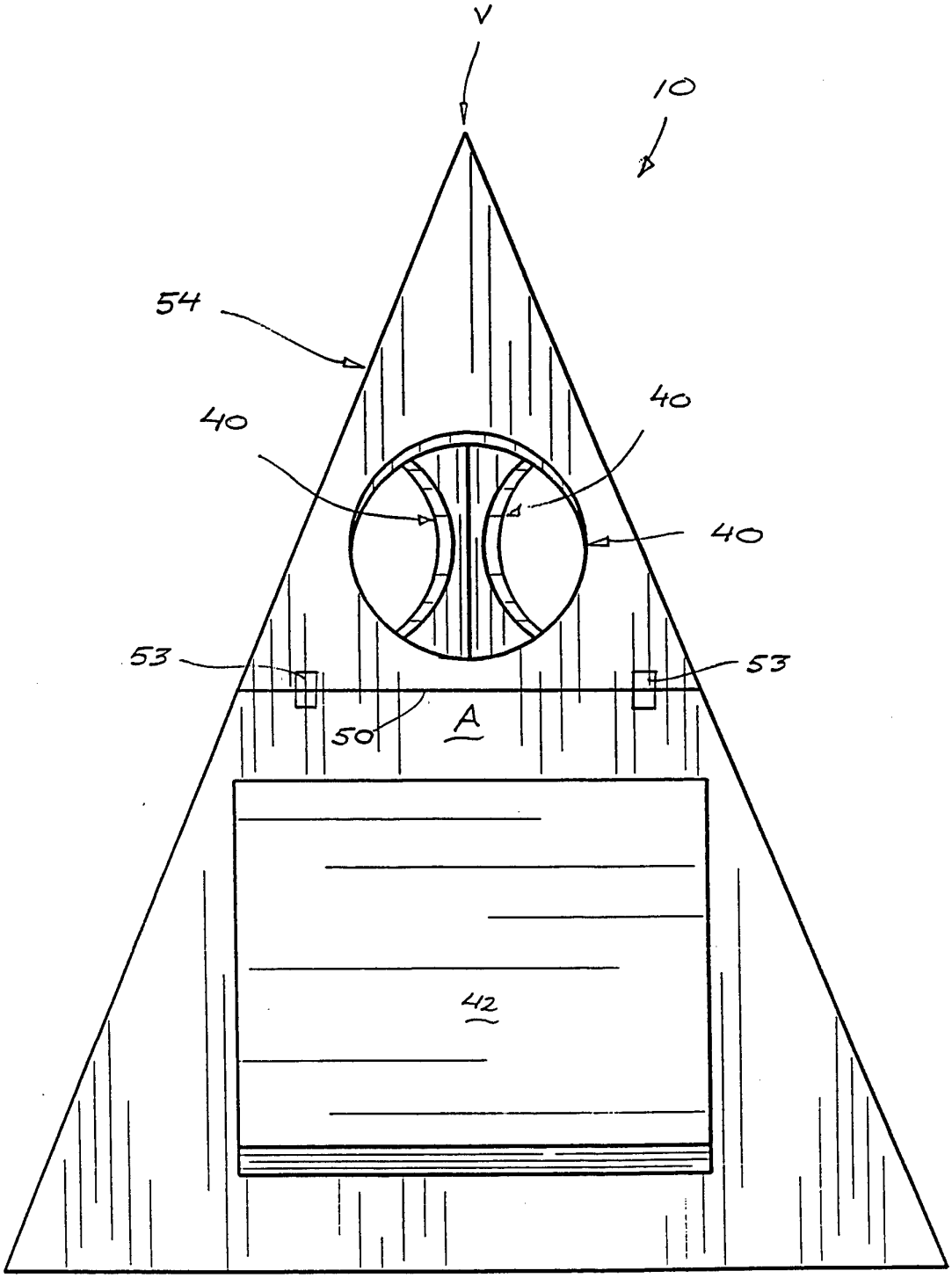

FIG. 2

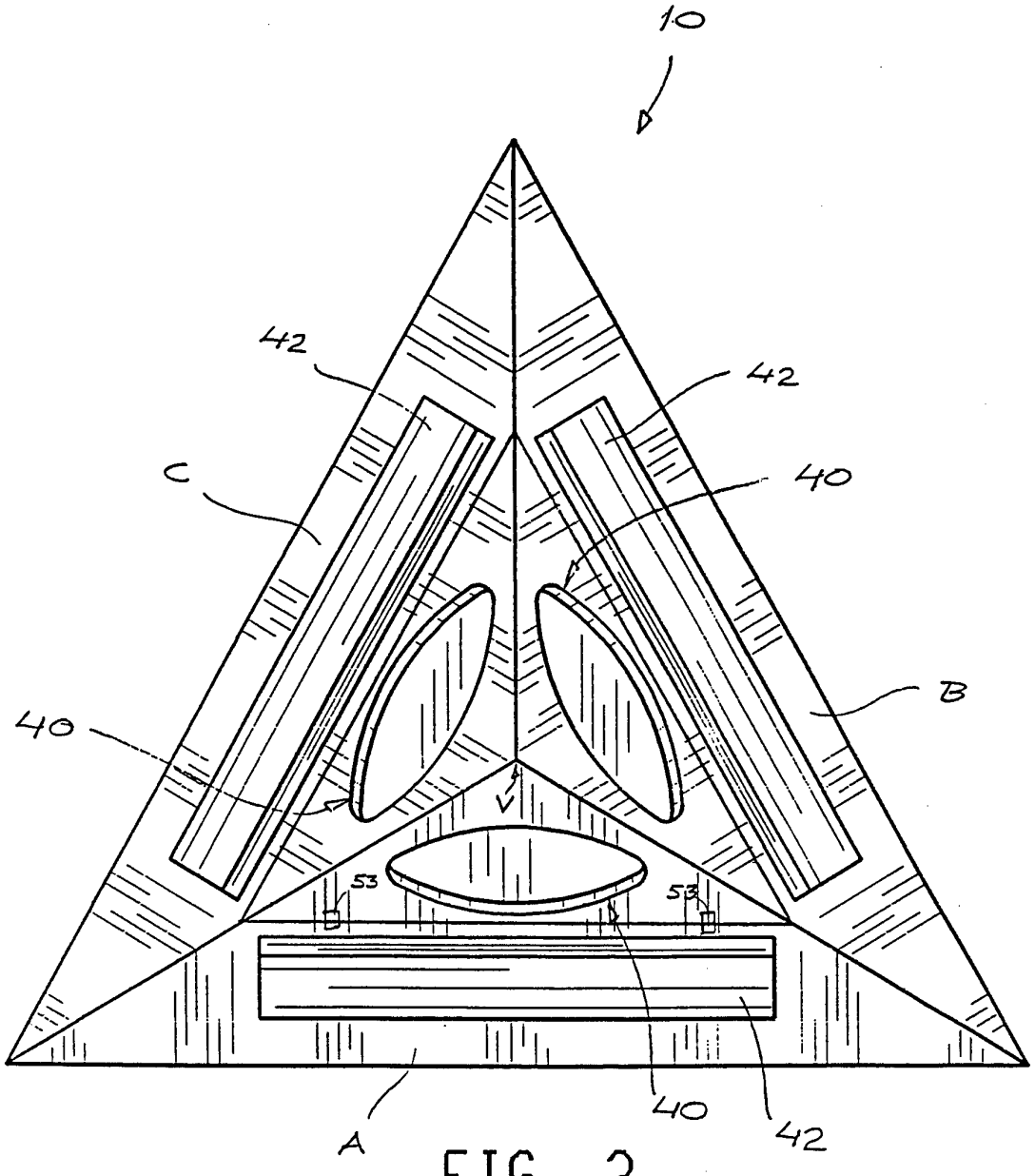

FIG. 3

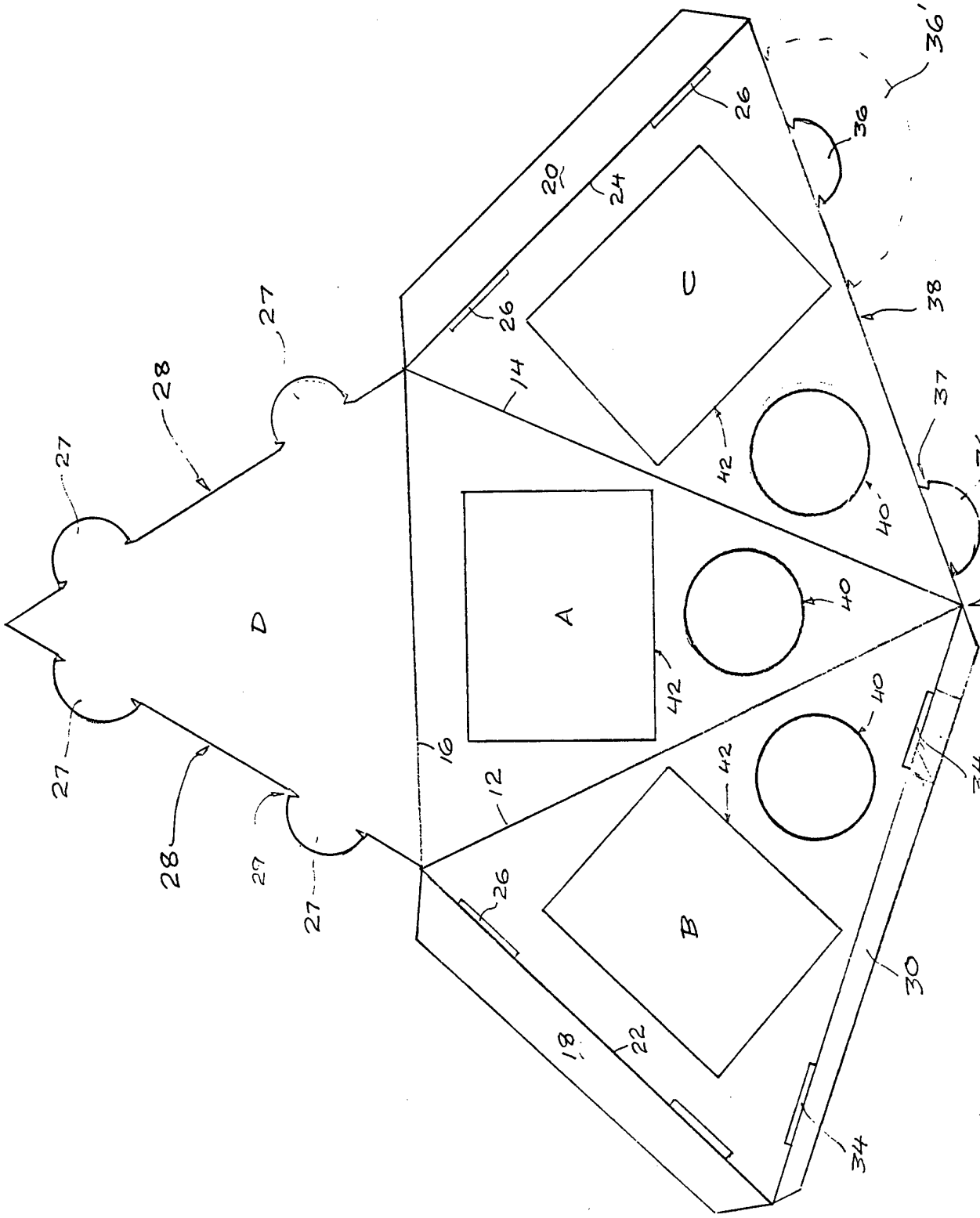

FIG 1

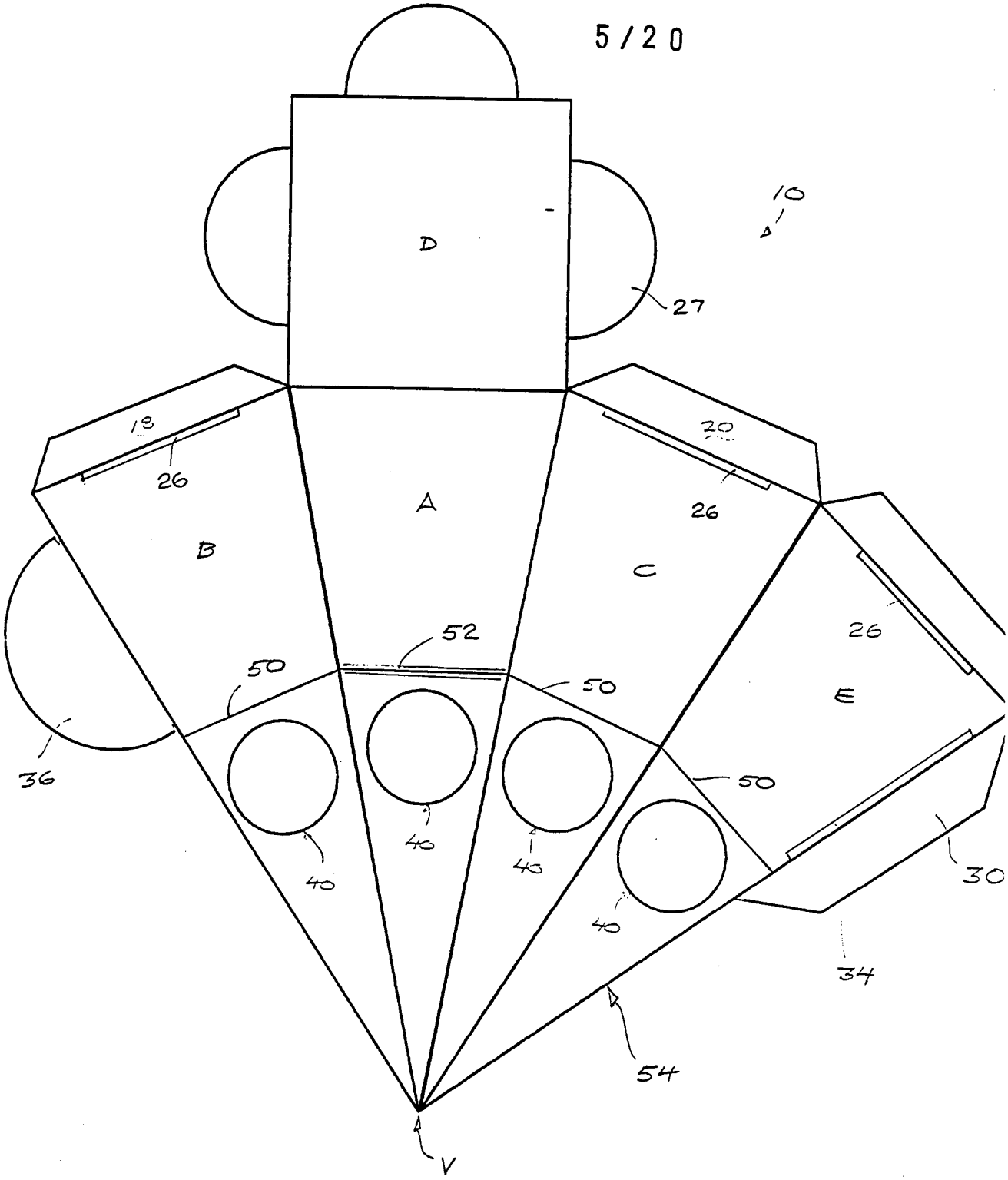

FIG. 5

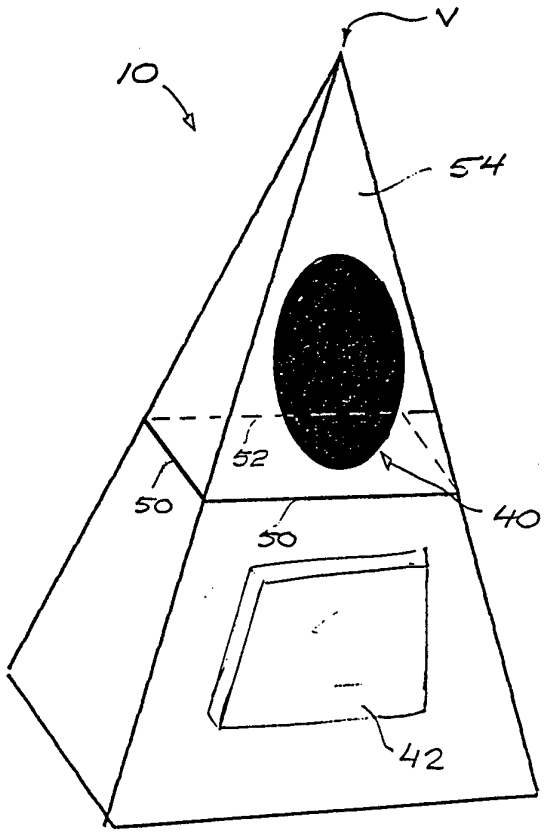

FIG. 5A

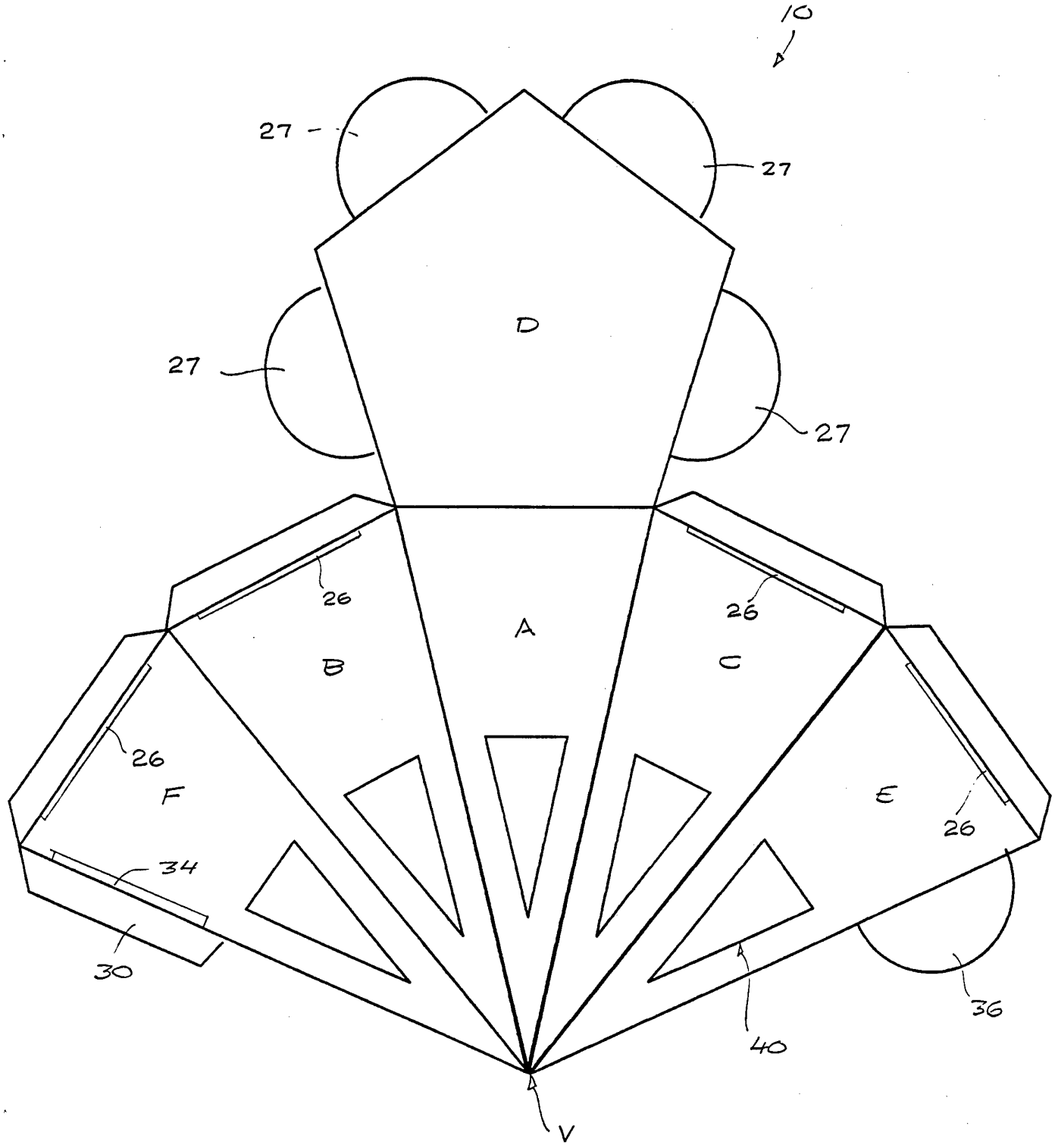

FIG. 6

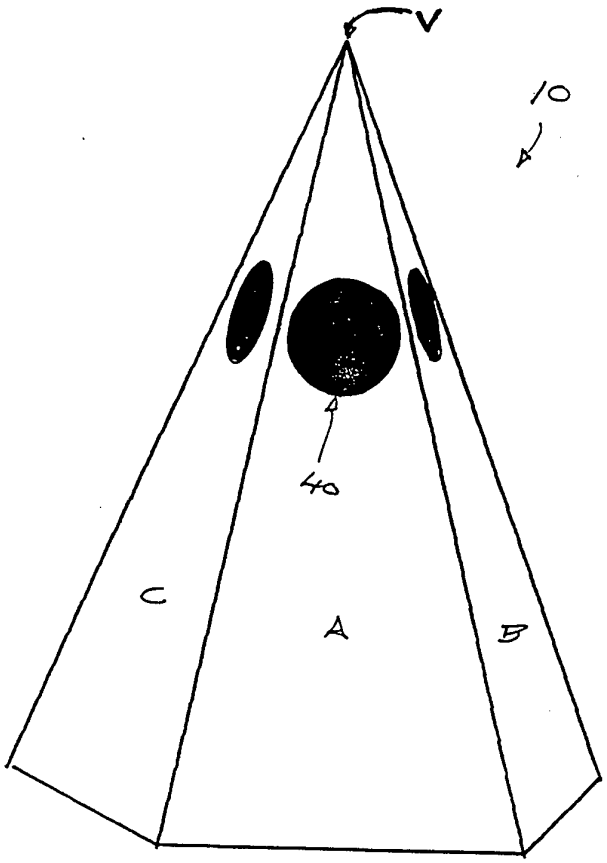

FIG. 6A

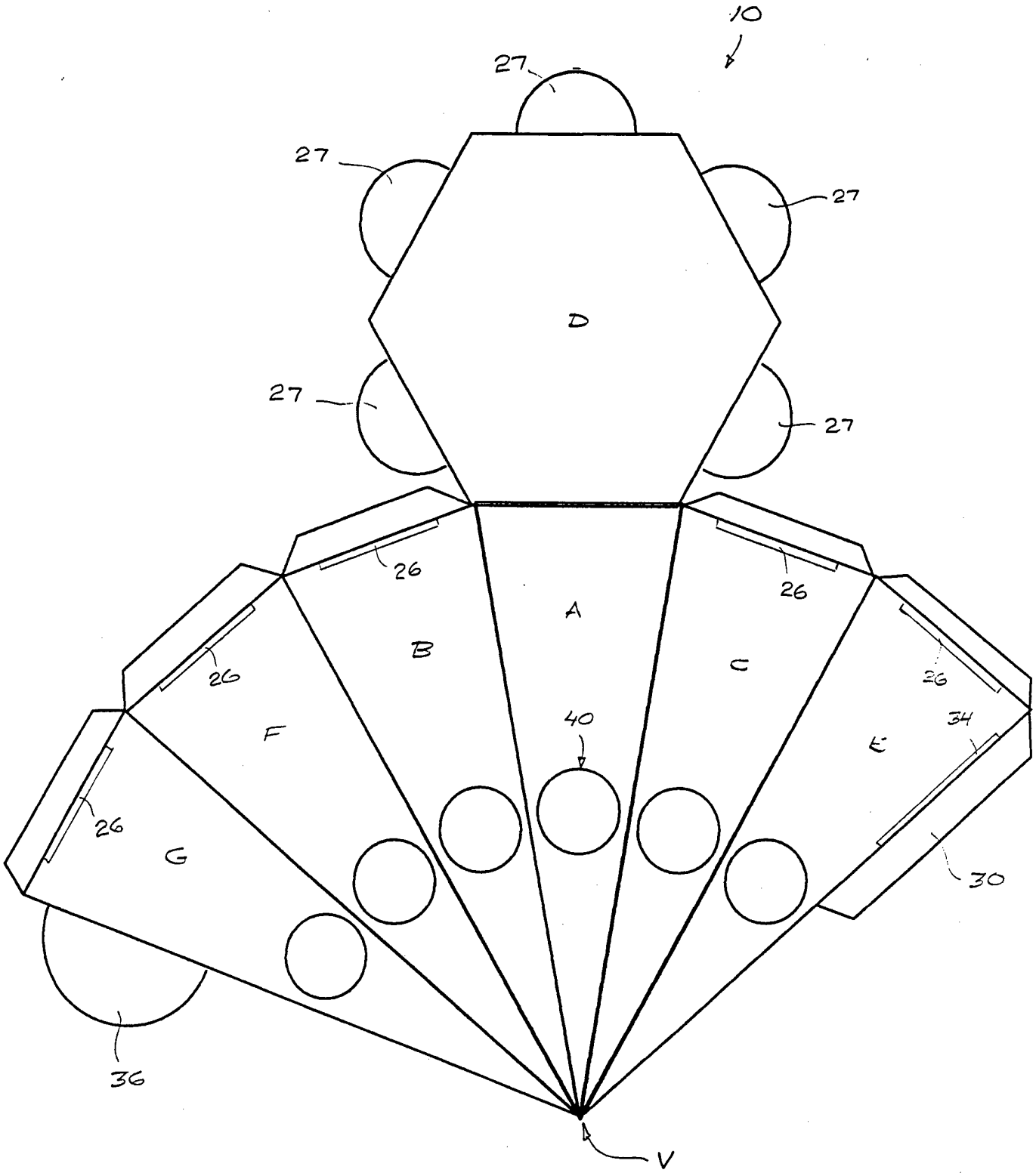

FIG. 7

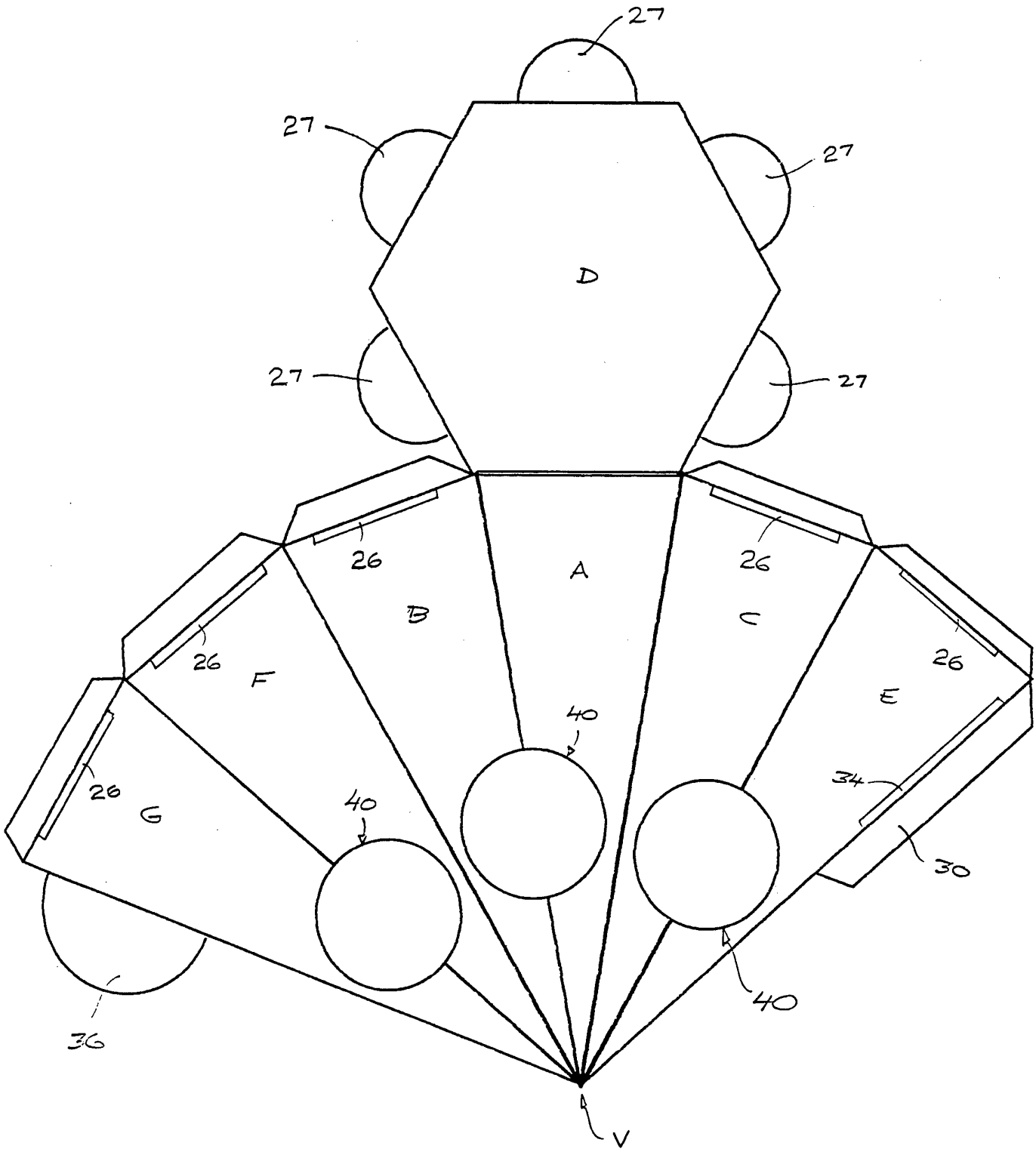

FIG. 7A

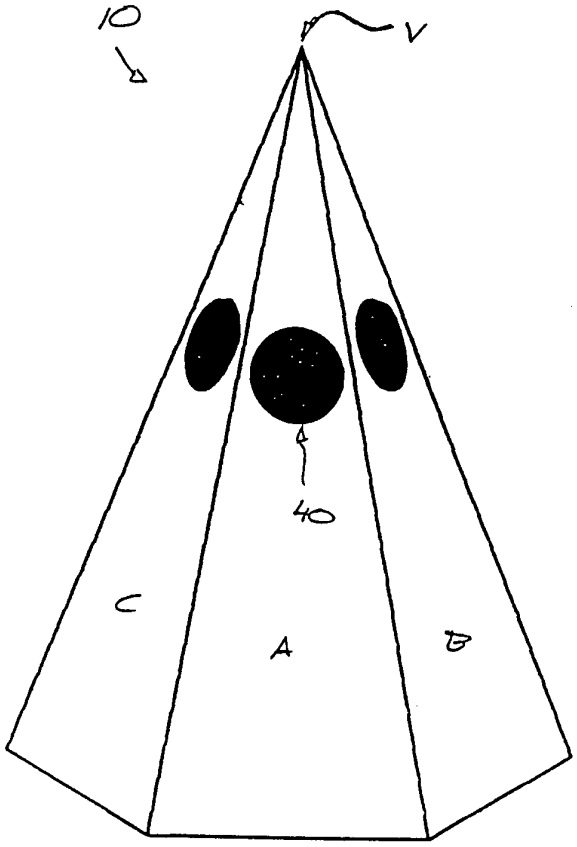

FIG. 7B

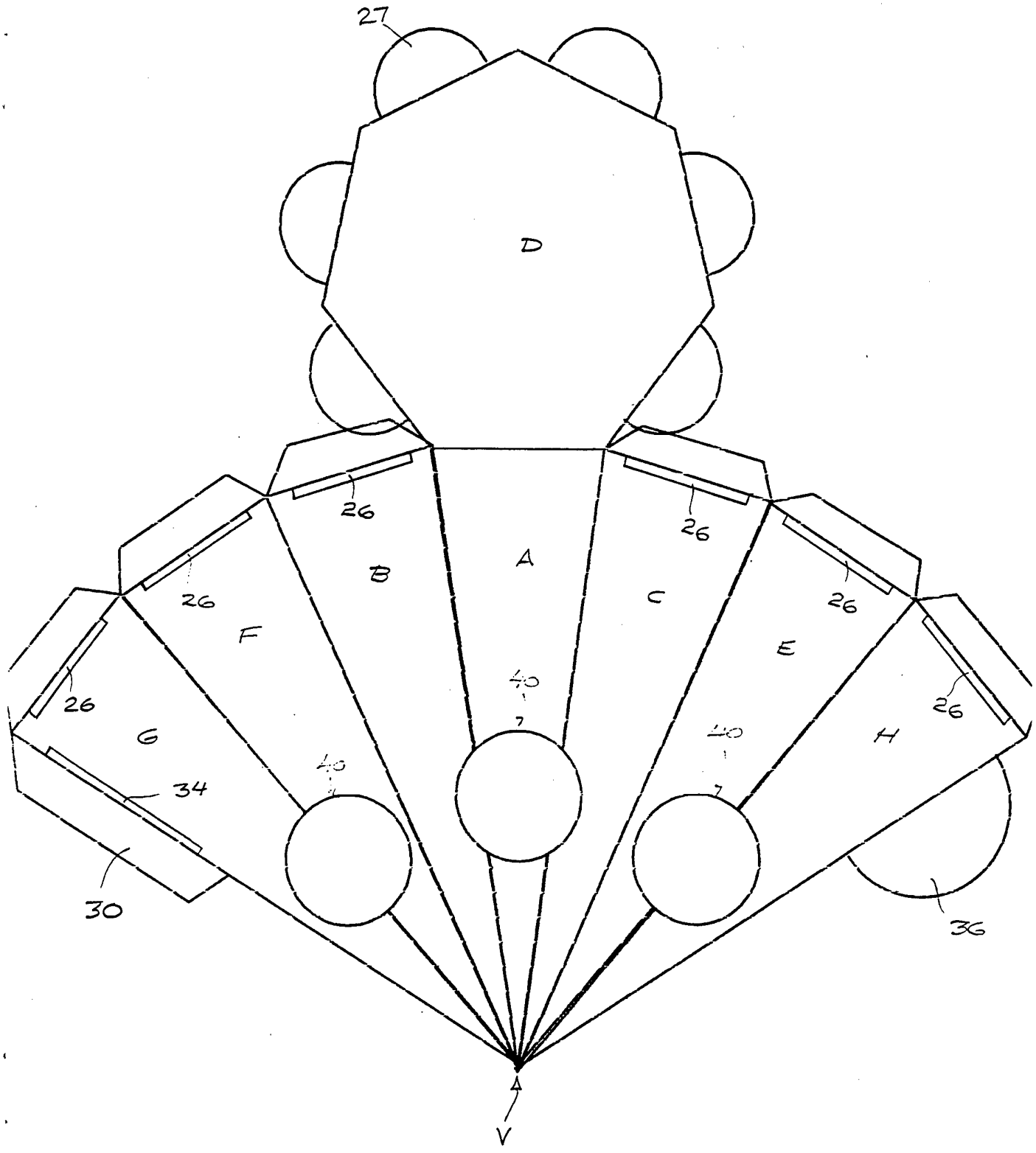

FIG. 8

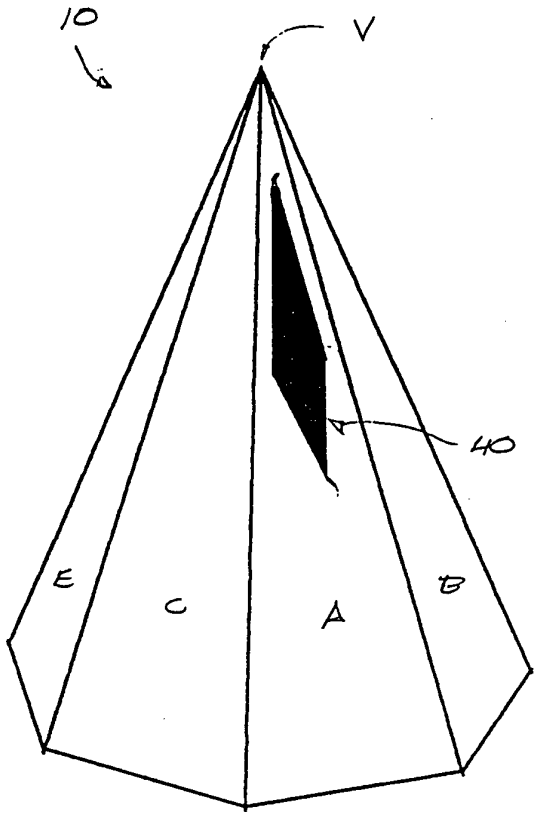

FIG. 8A

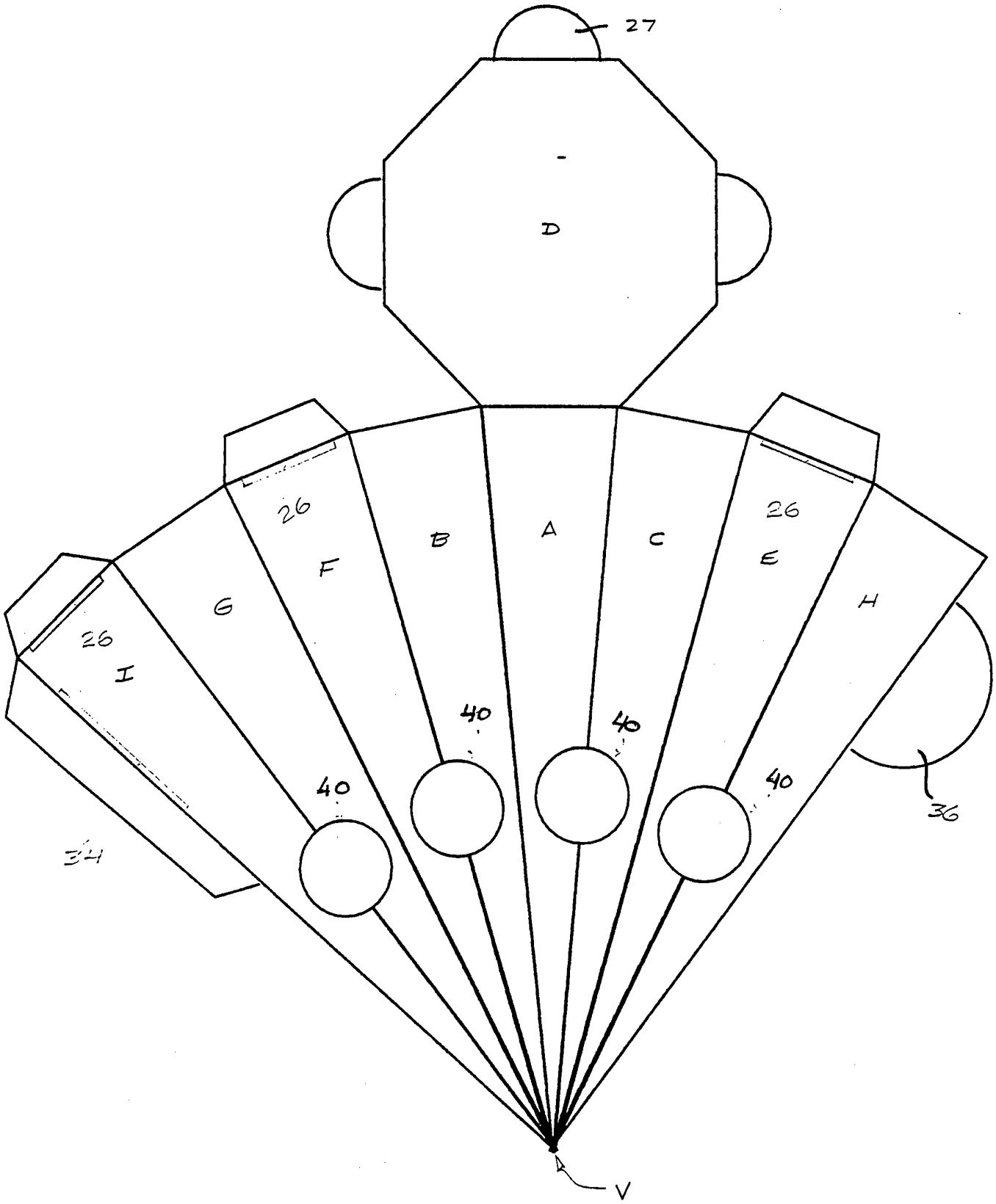

FIG. 9

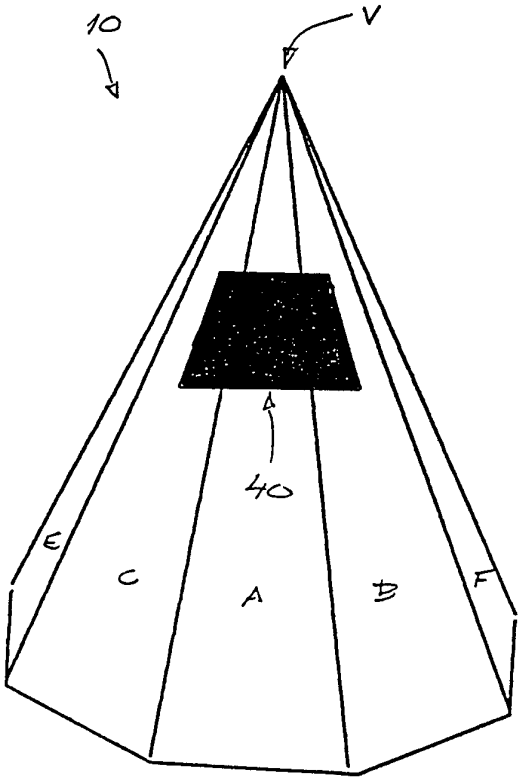

FIG. 9A

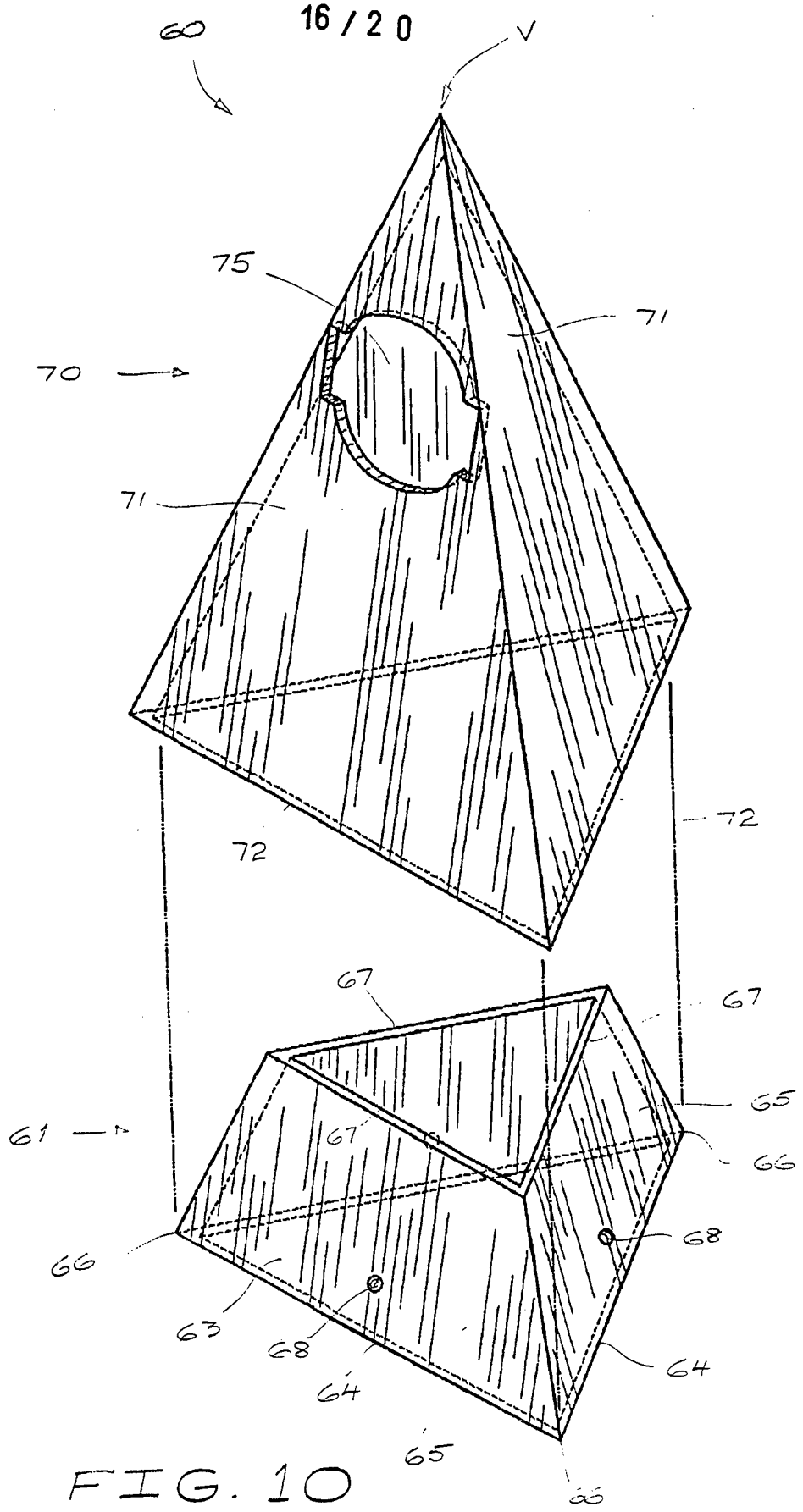

FIG. 10

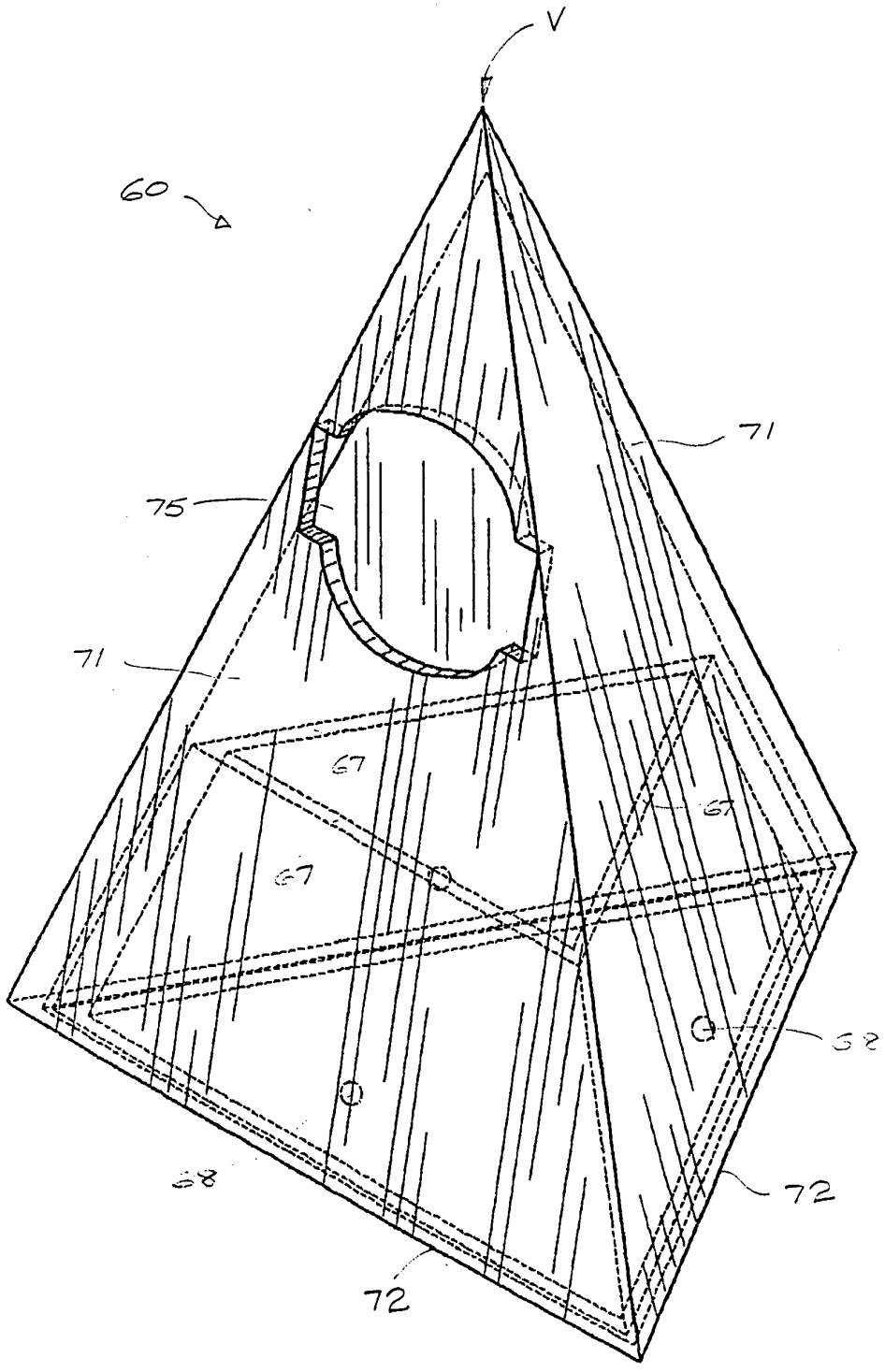

FIG. 11

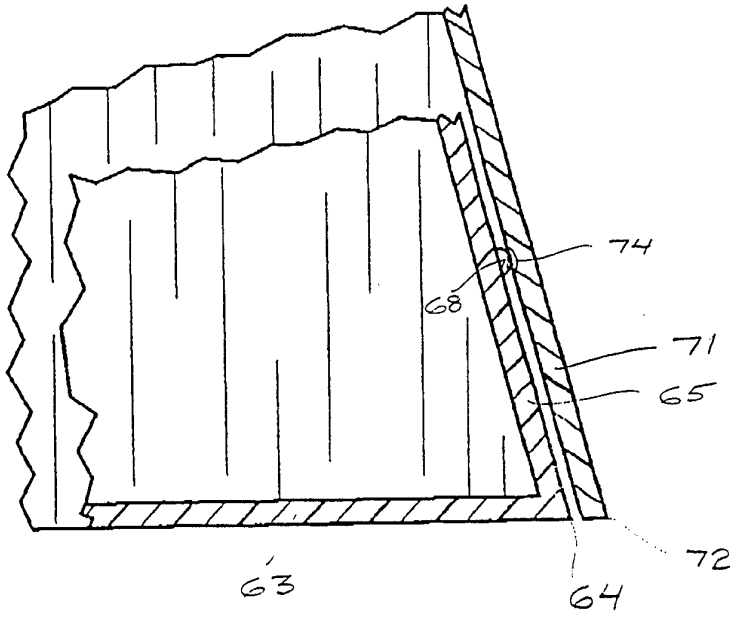

FIG. 12A.

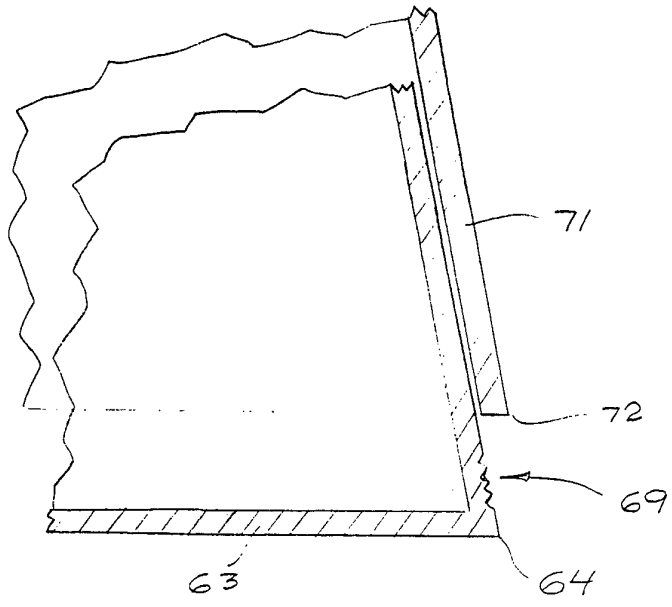

FIG. 12B

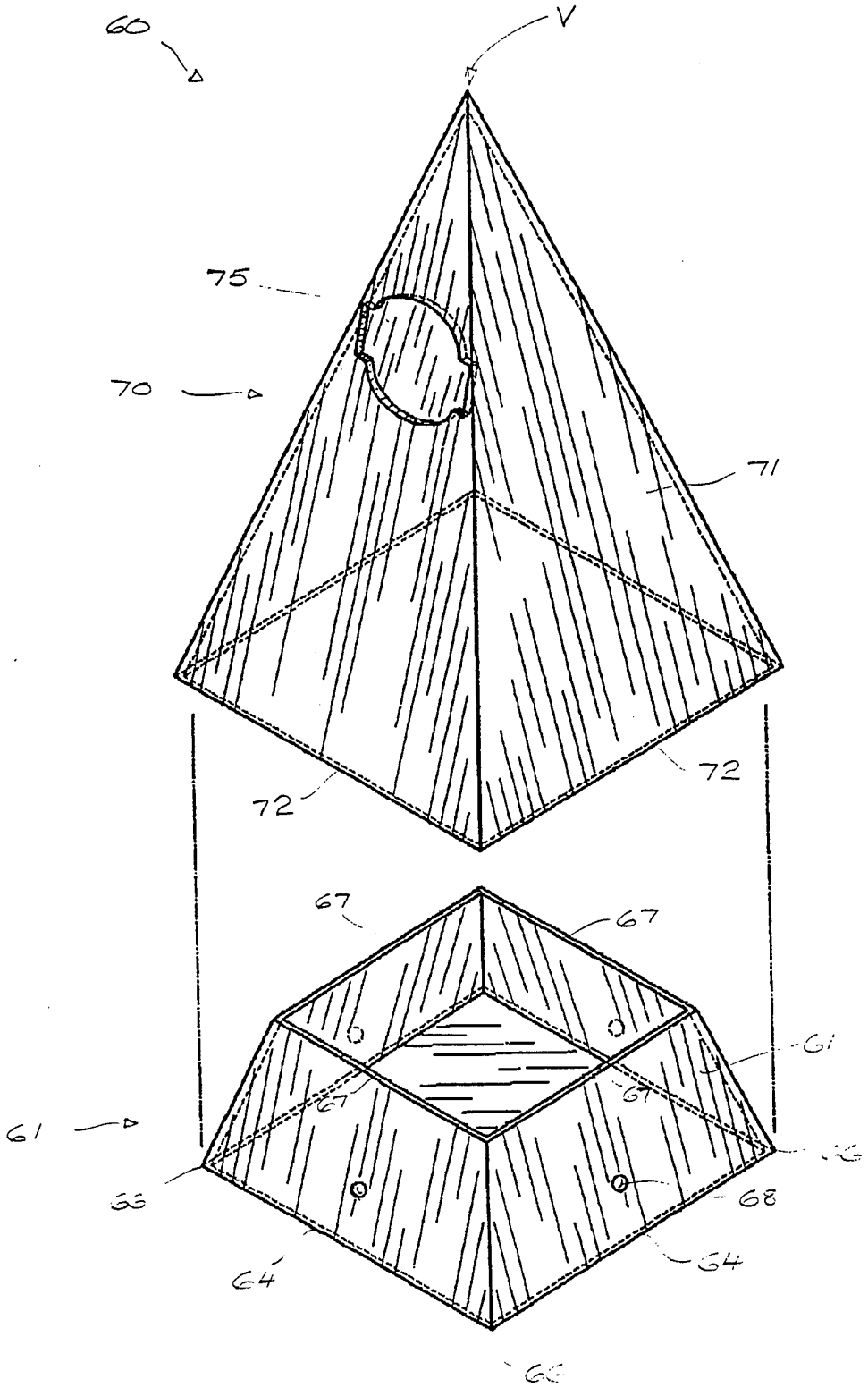

FIG. 13

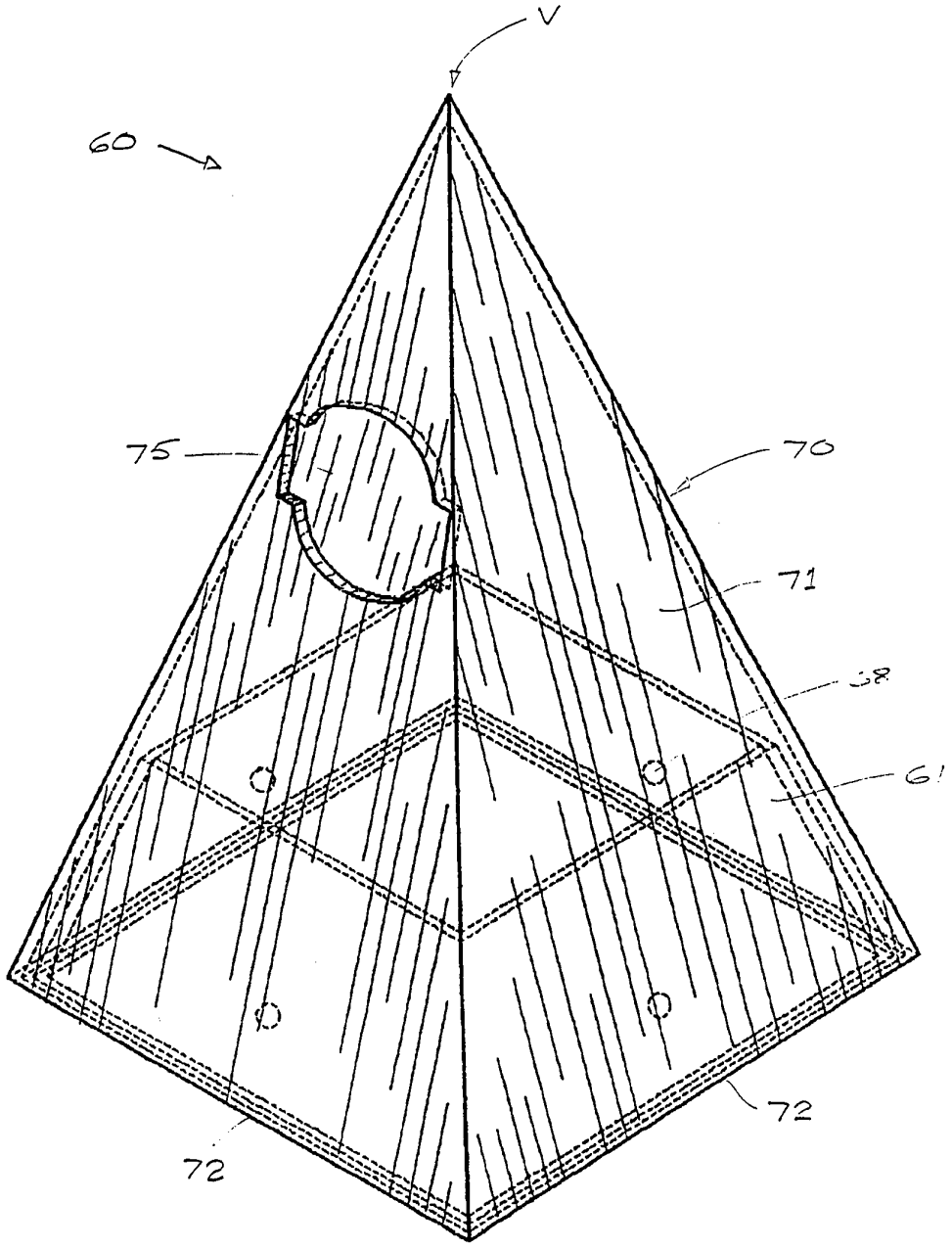

FIG. 14

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US96/13589

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :B65D 5/00
US CL :229/116; 206/577; 220/910
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)

U.S. : 220/908, 910; 229/115, 116; 206/216, 232, 577

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

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.
Y	US, A, 490,680 (ROBERTS) 31 JANUARY 1893 (31.01.93) See Figs 1-11	1-23
A	US, A, 4,798,747 (LARAMEE) 17 JANUARY 1989 (17.01.89) See Fig 1	1-23
A	US, A, 4,237,097 (McDuffie) 02 DECEMBER 1980 (02.12.80) See Figs 1-4	1-23

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

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"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

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
10 DECEMBER 1996	13 JAN 1997
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer For JACOB K. ACKUN JR. Telephone No. (703) 308-3867

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Paralegal Specialist
Group 3200

Form PCT/ISA/210 (second sheet)(July 1992)★