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(71) Applicant: **Farfaglia Evoluzioni Grafiche S.R.L.**
37041 Albaredo D'Adige (VR) (IT)

(72) Inventor: **Ferron, Luca**
37040 Arcole (Verona) (IT)

(74) Representative: **Maroscia, Antonio**
Maroscia & Associati Srl
Piazza del Castello, 26
36100 Vicenza (IT)

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(54) **A FOLDABLE STAND**

(57) A foldable stand (1) comprising a first panel (2) with peripheral portions (3, 4), a slot (6) formed in the first panel (2) and having closed ends (7, 8) and a second sheet-like panel (9) joined to one of the peripheral portions (3, 4) of the first panel (2) and having a free opposite end (10). The first panel (2) and the second panel (9) are adapted to move from a folded configuration in which

they lie one on top of the other, to a deployed configuration in which the free end (10) of the second panel (9) extends through the slot (6) and the first panel (2) defines a support structure (19). Holding means (33) are provided, which are associated with the slot (6) to promote retention of the second panel (9) by friction when the stand (1) is in the deployed configuration.

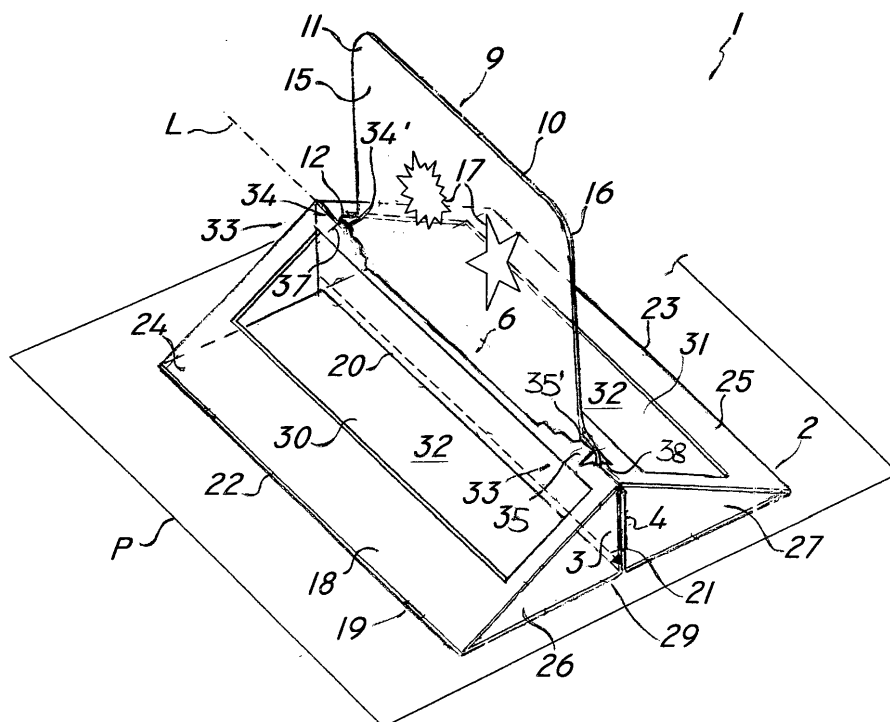


FIG. 3

Description

Field of the invention

[0001] The present invention generally finds application in the field of product presentation to the public and particularly relates to a foldable stand.

Background art

[0002] Foldable stands are known to be generally used in shops or points of sale for presentation of small- to medium-sized items and/or articles to the public.

[0003] Particularly, such stands are formed with one or more movable panels of sheet material, which are appropriately shaped to assume a flat, folded configuration during storage, to minimize their dimensions, and a deployed configuration for product display.

[0004] Furthermore, advertising prints or decorative elements are often provided on the faces of such panels, to identify the particular product being displayed, and motivate consumers to purchase it.

[0005] IT1335144 discloses a foldable stand comprising a single sheet of material divided into a plurality of adjacent panels by substantially parallel folding lines.

[0006] In the folded configuration, the panels lie substantially one on top of the other to form a flat structure, to minimize dimensions. To assume the deployed configuration, one of the panels is partially inserted into a slot formed along the central folding line of another panel.

[0007] Furthermore, in the deployed position certain panels are folded along their respective folding lines to form a lower support structure that can support the panel inserted in the slot, substantially orthogonal to the support plane.

[0008] In this configuration, the support structure defines an opening that can be accessed from outside for introducing and storing any product to be displayed.

[0009] One drawback of this arrangement is its relative instability, because the panels of the support structure are not mutually restrained and may slide relative to each other, thereby causing the stand to collapse, thereby affecting readability and understanding of the prints by a consumer.

[0010] A further drawback of this known arrangement is that, in the folded position, the advertising images on the faces of the stand panel that is designed to be inserted into the slot are not visible.

[0011] This is because the prints can be only displayed by at least partially introducing the main panel into the slot, thereby actually causing the stand to assume its deployed position.

Disclosure of the invention

[0012] The object of the present invention is to overcome the above drawbacks, by providing a foldable stand that is highly efficient and relatively cost-effective.

[0013] A particular object of the present invention is to provide a foldable stand that can stably maintain a deployed position for display of advertisements and/or products.

5 **[0014]** A further object of the present invention is to provide a foldable stand that has a reduced size in its folded position

[0015] A further object of the present invention is to provide a foldable stand that allows simplified recognition of the information associated therewith even in the folded position.

[0016] Also, a further object of the present invention is to provide a foldable stand that has a simple construction and is easy to use.

15 **[0017]** These and other objects, as better explained hereafter, are fulfilled by a foldable stand as defined in claim 1.

[0018] Advantageous embodiments of the invention are defined in accordance with the dependent claims.

Brief Description of the Drawings

[0019] Further features and advantages of the invention will be more apparent from the detailed description of a preferred embodiment of a foldable stand, which is described as a non-limiting example with the help of the annexed drawings, in which:

FIG. 1 is a plan view of the stand of the invention; FIGS. 1A and 1B are enlarged views of first and second details of Fig. 1;

FIG. 2 is a lateral view of Fig. 1 in a folded configuration;

FIG. 3 is a perspective view of Fig. 1 in a deployed configuration;

FIG. 4 is a perspective view of the stand of Fig. 1 during the transition from the folded configuration to the deployed configuration;

FIG. 5 is an enlarged perspective view of a detail of Fig. 3;

FIG. 6 is a top view of Fig. 3.

Detailed description of a preferred embodiment

45 **[0020]** Referring to the accompanying figures, there is shown a foldable stand, generally identified with numeral 1, which is designed to be employed in shops or other points of sale to display multiple items for sale, such as cosmetic containers, drugs, stationery articles, candies or other similar products.

[0021] In the particular embodiment of the invention as shown in the figures, the stand 1 comprises a first panel 2 with mutually joined peripheral portions 3, 4, having a slot 6 with a pair of closed ends 7, 8.

55 **[0022]** In the particular configuration of the invention as shown in the figures, the slot 6 extends along a longitudinal axis L, and the first panel 2 is a substantially sheet-like member with a central longitudinal folding line 5 dis-

posed level with the slot 6.

[0023] The stand also comprises a second panel 9 which is joined to one of the end portions 3, 4 of the first panel 2 and has an opposite free end 10.

[0024] Preferably, as shown in FIGS. 1 and 3 to 5, the second panel 9 may also be a sheet-like member and have a narrower portion 11 comprising the free end 10 and a wider portion 12, which is joined to the peripheral portions 3, 4 of the first panel 2.

[0025] Particularly, as best shown in FIGS. 1 and 4, the larger portion 12 of the second panel 9 may be joined to the first panel 2 at a longitudinal end edge 13 thereof.

[0026] In the embodiment as shown in the figures, the first panel 2 and the second panel 9 may be formed from a single sheet member 14.

[0027] Particularly, the single sheet 14 may be obtained by die-cutting a base sheet material selected from the group comprising paper, cardboard or polymeric materials.

[0028] Alternatively, in a further embodiment, not shown, the first panel 2 and the second panel 9 may be obtained by die-cutting two distinct sheet members and be joined at a later time.

[0029] In this case, the first panel 2 and the second panel 9 may be obtained from sheet members made from equal and/or different materials.

[0030] As shown in FIGS. 1 and 3, the narrower portion 11 of the second panel 9 may carry one or more decorative images and/or advertising captions 17 on at least one face 15, 16 thereof.

[0031] For example, the decorative designs 17 may be printed on both faces 15, 16 of the narrower portion 11 of the second panel 9 by known techniques, such as off-set printing, digital printing, embossing or other similar processes.

[0032] Further decorative designs 17 may be also provided on the first panel 2, particularly on its outer surface 18, by means of techniques such as those mentioned above.

[0033] Alternatively, the decorative designs 17 may be of adhesive type and be attached to the faces 15, 16 of the second panel 9 or the outer surface 18 of the first panel 2.

[0034] Furthermore, the first panel 2 and the second panel 9 may comprise a layer of transparent polymeric material, not shown, overlapping the outer surface 18 of the first panel 2 and the faces 15, 16 of the second panel 9 respectively, to protect the printed decorative designs 17 and increase the overall gloss of the stand 1.

[0035] Conveniently, the first panel 2 and the second panel 9 are designed to move from a folded configuration, as shown in FIG. 2, to a deployed configuration, as shown in FIG. 3.

[0036] In the folded configuration, the first panel 2 and the second panel 9 are one on top of the other, whereas in the deployed configuration the free end 10 of the second panel 9 extends through the slot 6 and the first panel 2 defines a support structure 19 for stably supporting the

second panel 9 substantially perpendicular to the bearing plane P upon which the stand 1 rests.

[0037] In the particular embodiment of the invention as shown in the figures, when the stand is in the folded configuration, the first panel 2 and the second panel 9 are substantially one on top of the other to minimize dimensions for storage or displacement purposes.

[0038] Preferably, as best shown in FIGS. 1, 3 and 4, the first panel 2 may have a pair of peripheral folding lines 20, 21 and at least one pair of intermediate folding line 22, 23, which are formed on opposite sides from the central folding line 5, at respective predetermined distances d_1 , d_2 therefrom.

[0039] In the representation of the figures, the first panel 2 has a single pair of peripheral folding lines 20, 21 and the folding lines 20, 21; 22, 23 of each pair may be located at equal distances from the central folding line 5.

[0040] Furthermore, the intermediate folding lines 22, 23 may be located at a distance d_2 from the central folding line 5 which is smaller than the distance d_1 therefrom of the peripheral folding lines 20, 21.

[0041] Conveniently, as shown in FIGS. 1, 3 and 4, the first panel 2 may define a pair of first portions 24, 25, delimited by the pair of intermediate folding lines 22, 23 and the central folding line 5.

[0042] Furthermore, a pair of second portions 26, 27 may be defined, which are delimited by the intermediate folding lines 22, 23 and the peripheral folding lines 20, 21.

[0043] As shown in FIGS. 2, 3, and 4, the peripheral portions 3, 4 of the first panel 2 may be defined by the area delimited by their respective peripheral folding lines 20, 21 and the longitudinal end edges 13, 28 of the first panel 2.

[0044] Advantageously, as best shown in FIG. 3, the support structure 19 may be defined by the pair of first portions 24, 25 and the pair of second portions 26, 27.

[0045] Particularly, when the stand 1 is in the deployed configuration, the second portions 26, 27 may be substantially coplanar, to define a support surface 29 to be placed on the bearing plane P, as best shown in FIG. 3.

[0046] In the deployed configuration, the support structure 19 will have a substantially triangular cross-sectional shape, and preferably the shape of an isosceles triangle, with the base defined by the pair of second portions 26, 27, the sides defined by the pair of first portions 24, 25 and the height defined by the peripheral portions 3, 4 of the first panel 2.

[0047] In an alternative embodiment of the invention, not shown, the stand may comprise additional pairs of peripheral folding lines, equally spaced from the central folding line, and at a shorter distance therefrom than the intermediate folding lines.

[0048] Thus, in the deployed configuration, the support structure may have a cross sectional shape that slightly differs from the triangular shape, for example it may have a pair of raised edges, substantially perpendicular to the support plane, each joining a corresponding first portion to a respective second portion.

[0049] As shown in the figures, the first portions 23, 24 may have at least one opening 30, 31 for defining a compartment 32 in the support structure 19 for containing the products being displayed when the stand 1 is in the deployed configuration.

[0050] In the configuration of the invention as shown in FIGS. 1 to 4, the first panel has a pair of openings 30, 31 level with the first portions 24, 25.

[0051] The openings 30, 31 may have equal shapes and sizes, and may be placed at the same distance d_3 from the central folding line 5.

[0052] Advantageously, the openings 30, 31 may be located in the pair of first portions 24, 25, for the decorative and/or advertising designs 17 formed in both faces 15, 16 of the second panel 9 to be visible when the stand 1 is in the deployed configuration, as best shown in FIG. 2.

[0053] Thus, the user may look at the decorative designs 17 even when the stand 1 is in its folded configuration.

[0054] According to a peculiar feature of the invention, the stand 1 comprises holding means 33 associated with the slot 6, which are adapted to promote retention of the second panel 9 by friction when the stand 1 is in the deployed configuration.

[0055] The holding means 33 are adapted to stably hold the stand 1 in its deployed configuration by preventing the second panel 9 from slipping relative to the first panel 2, and from thereby affecting readability and understanding of the decorative designs 17 by the consumer.

[0056] Furthermore, the holding means 33 allow quick release of the second panel 9 from the slot 6 to move the stand 1 from the deployed configuration to the folded configuration.

[0057] Preferably, the holding means 33 may comprise at least one pair of movable appendices 34 formed at or near one of the ends 7, 8 of the slot 6 in mutually facing positions for frictionally retaining the opposite faces 15, 16 of the second panel 9.

[0058] In the illustrated embodiment, the holding means 33 comprise two pairs of appendices formed near the ends 7, 8 of the slot 6, referenced 34 and 35 respectively.

[0059] As best shown in FIG. 5, the pairs of appendices 34, 35 are designed to interact with the wider portion 12 of the second panel when the stand 1 is in the deployed position.

[0060] In a preferred embodiment of the invention as shown in FIG. 6, the slot 6 may have a central portion 36 of predetermined width s_1 , allowing the second panel 9 to fit therein with some clearance, with narrower end portions 36', 36" located on opposite sides from the central portion 36.

[0061] The appendices 34, 35 of each pair are formed at respective narrower end portions 36', 36" and are delimited by respective transverse slits 37, 38 formed in the first panel 2 at a corresponding end 7, 8 of the slot 6.

[0062] Furthermore, the appendices 34, 35 have re-

spective longitudinal edges 34', 35', as best shown in FIGS. 1A, 1B, 2 and 5.

[0063] The appendices 34, 35 are adapted to move upwards to allow the second panel 9 to contact their edges 34', 35' and interact therewith with its opposite faces 15, 16 by friction.

[0064] Advantageously, the narrower end portions 36', 36" may have a stepped profile and comprise tip zones 39', 39" defining the appendices 34, 35. Furthermore, the tip zone 39', 39" may define respective pairs of appendices, each having mutually facing and contacting longitudinal edges 34', 35'.

[0065] Furthermore, each of the end portions 36', 36" of the slot 6 may have a predetermined longitudinal extent d_4 and will be longitudinally delimited by the corresponding slit 37, 38.

[0066] In operation, to move the stand 1 from the folded position to the deployed position, the user will grasp the first panel 2 while moving the intermediate folding lines 22, 23 apart in a transverse direction T.

[0067] As shown in FIG. 4, as the intermediate folding lines 22, 23 are moved apart, the free end 10 of the second panel 9 will fit into the slot 6 and the first portions 24, 25 and the second portions 26, 27 will accordingly move to form the substantially triangular support structure 19.

[0068] The second panel 9 will fit deeper into the slot 6 until the faces 15, 16 of the wider portion 12 interact with the appendices 34, 35 thereby causing them to lift and their edges 34', 35' to interact with the faces 15, 16 of the second panel 9. This will afford stable retention of the deployed configuration of the stand.

[0069] Then, when the user forces the wider portion 12 to disengage from the appendices 34, 35, the edges 34', 35' of the latter will be released from contact with the second panel 9 thereby promoting the descent of the appendices 34, 35 toward a rest position, substantially coplanar to the first panel 2. Furthermore, as the second panel 9 progressively comes off the slot 6, the first panel 2 will collapse into the folded configuration.

[0070] The above description clearly shows that the foldable stand fulfills the intended objects and particularly meets the requirement of maintaining high stability when it is in the deployed configuration, and to make the decorative and/or advertising designs visible to the consumer even when it is in the folded configuration.

[0071] The foldable stand of the invention is susceptible of a number of changes and variants, within the inventive concept as disclosed in the appended claims.

[0072] All the details thereof may be replaced by other technically equivalent parts, and the materials may vary depending on different needs, without departure from the scope of the invention.

[0073] While the foldable stand has been described with particular reference to the accompanying figures, the numerals referred to in the disclosure and claims are only used for the sake of a better intelligibility of the invention and shall not be intended to limit the claimed scope in any manner.

Industrial applicability

[0074] The present invention may find application in industry, because it can be produced on an industrial scale in factories for production of devices for displaying products to the public and may be used for various commercial activities.

Claims

1. A foldable stand (1) comprising:

- a first panel (2) with mutually connected peripheral portions (3, 4);
 - a slot (6) formed in said first panel (2) along a longitudinal axis (L) and having closed ends (7, 8);
 - a second panel (9) joined to one of said peripheral portions (3, 4) of said first panel (2) and having a free end (10) and a pair of opposite faces (15, 16);
 - holding means (33) associated with said slot (6) and adapted to promote retention of said second panel (9) by friction;
- wherein said first panel (2) and said second panel (9) are adapted to move from a folded configuration in which they lie one on top of the other, to a deployed configuration in which the free end (10) of said second panel (9) extends through said slot (6) and said first panel (2) defines a support structure (19);
- characterized in that** said slot (6) comprises a wider central portion (36) which is adapted to allow the second panel (9) to fit therein with some clearance, and narrower end portions (36', 36''), said holding means (33) comprising at least one pair of appendices (34, 35) formed at a respective narrower end portion (36', 36'') and delimited by a respective transverse slit (37, 38) formed in said first panel (2) proximate to a corresponding end (7, 8) of said slot (6), said appendices (34, 35) of at least one pair having respective longitudinal edges (34', 35') and being movable upwards to allow said second panel (9) to contact said longitudinal edges (34', 35') and frictionally interact with said opposite faces (15, 16) of said second panel (9).

2. Stand as claimed in claim 1, **characterized in that** said narrower end portions (36', 36'') have a stepped profile and comprise tip zones (39', 39'') defining said appendices (34, 35), with said longitudinal edges (34', 35') substantially contacting each other.

3. Stand as claimed in claim 1, **characterized in that** said second panel (9) has a narrower portion (11) comprising said free end (10) and a wider portion

(12) joined to said peripheral portions (3, 4) of said first panel (2) and designed to interact with said pairs of movable appendices (34, 35).

4. Stand as claimed in claim 3, **characterized in that** said narrower portion (11) of said second panel (9) is adapted to carry one or more decorative and/or advertising designs (17).

5. Stand as claimed in claim 4, **characterized in that** said first panel (2) has a central folding line (5) formed at said slot (6), a pair of peripheral folding lines (20, 21) and at least one pair of intermediate folding lines (22, 23) formed on opposite sides from said central folding line (5) at predetermined distances (d_1 , d_2) therefrom.

6. A stand as claimed in claim 5, **characterized in that** said first panel (2) defines a pair of first portions (24, 25), which extend between said at least one pair of intermediate folding lines (22, 23) and said central folding line (5) and a pair of second portions (26, 27) which extend between said at least one pair of intermediate folding lines (22, 23) and said pair of peripheral folding lines (20, 21).

7. Stand as claimed in claim 6, **characterized in that** said support structure (19) is defined by said pair of first portions (24, 25) and said pair of second portions (26, 27) and has a substantially triangular cross sectional shape when the stand is in the deployed configuration, with said second portions (26, 27) substantially coplanar, to define a support structure (29).

8. Stand as claimed in claim 6, **characterized in that** said first portions (24, 25) have at least one opening (30, 31) for defining a compartment (32) in said support structure (19) for containing the products being displayed when the stand (1) is in the deployed configuration.

9. Stand as claimed in claim 8, **characterized in that** said at least one opening (30, 31) is placed in said first panel (2) in such a position that the decorative and/or advertising designs (17) carried by said second panel (9) are visible when the stand (1) is in the folded configuration.

10. Stand as claimed in claim 1, **characterized in that** said first panel (2) and said second panel (9) are formed from a single sheet member (14) which is made of a material selected from the group comprising paper, cardboard, polymeric materials or the like.

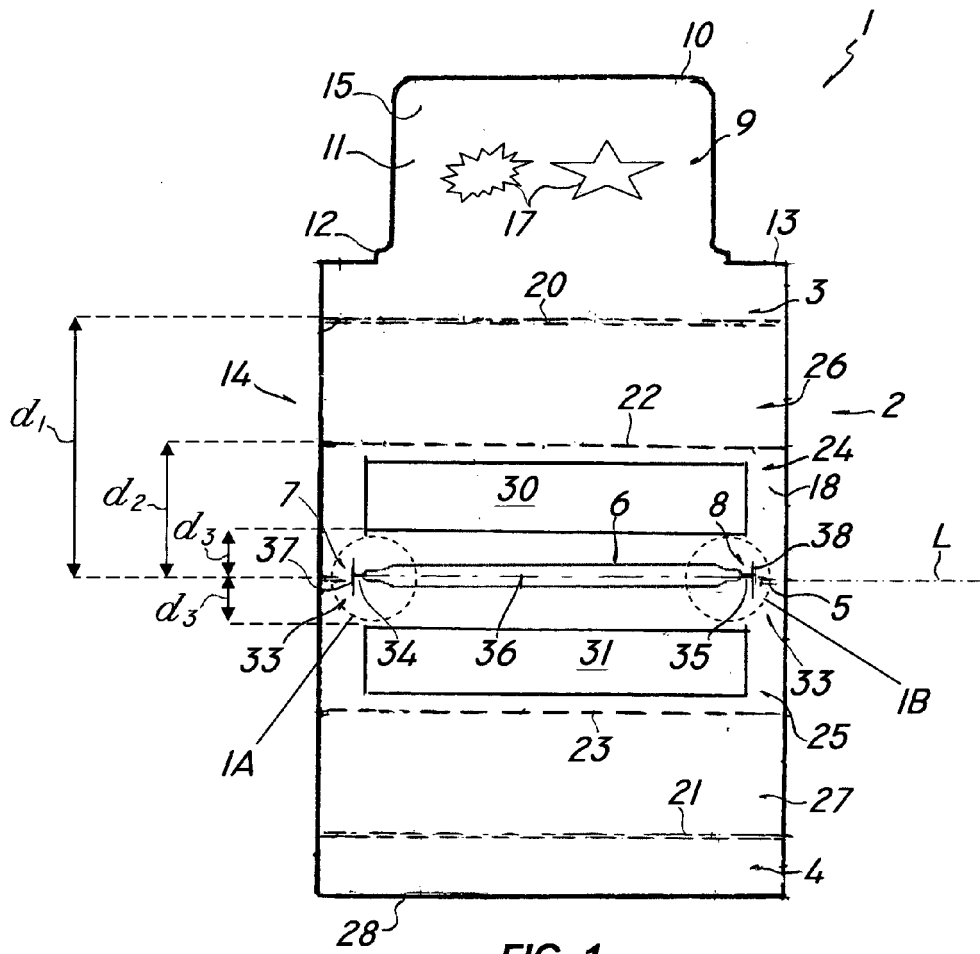


FIG. 1

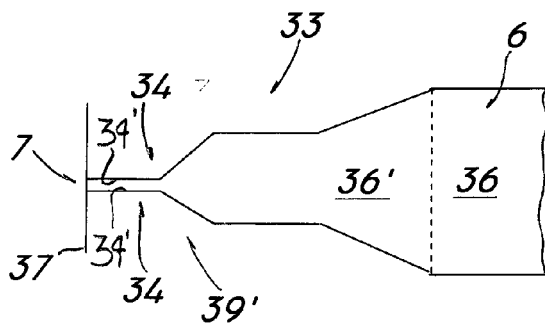


FIG. 1A

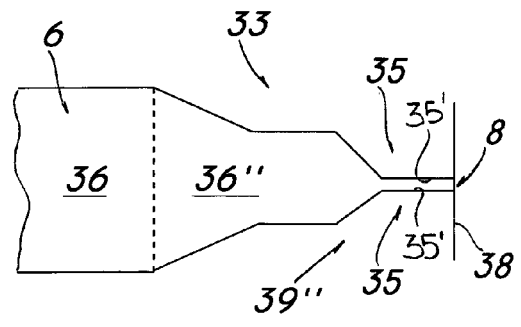


FIG. 1B

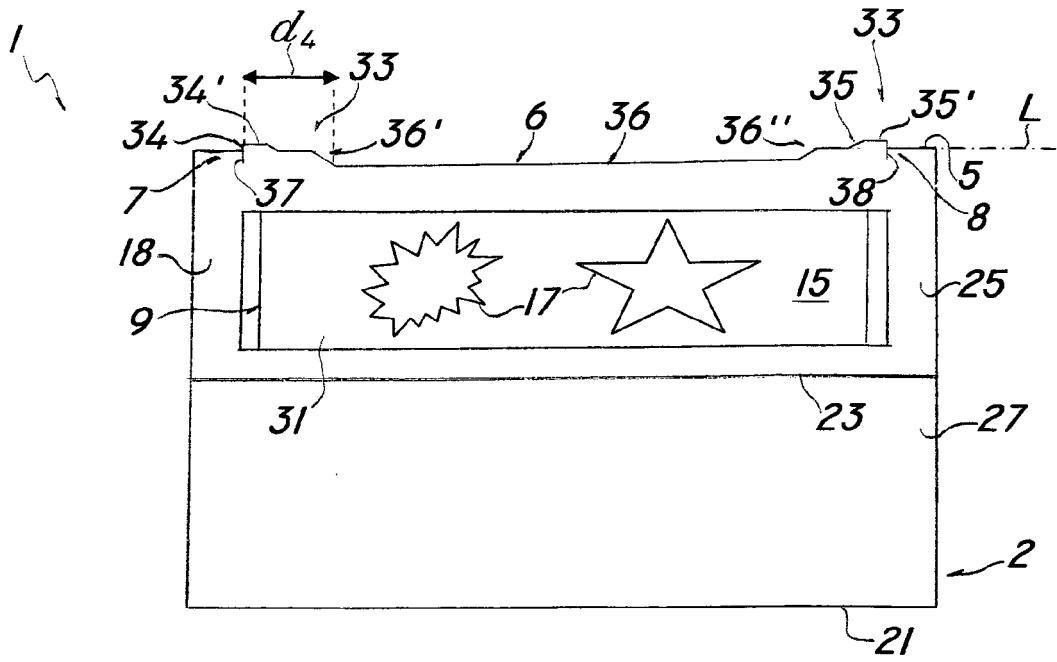


FIG. 2

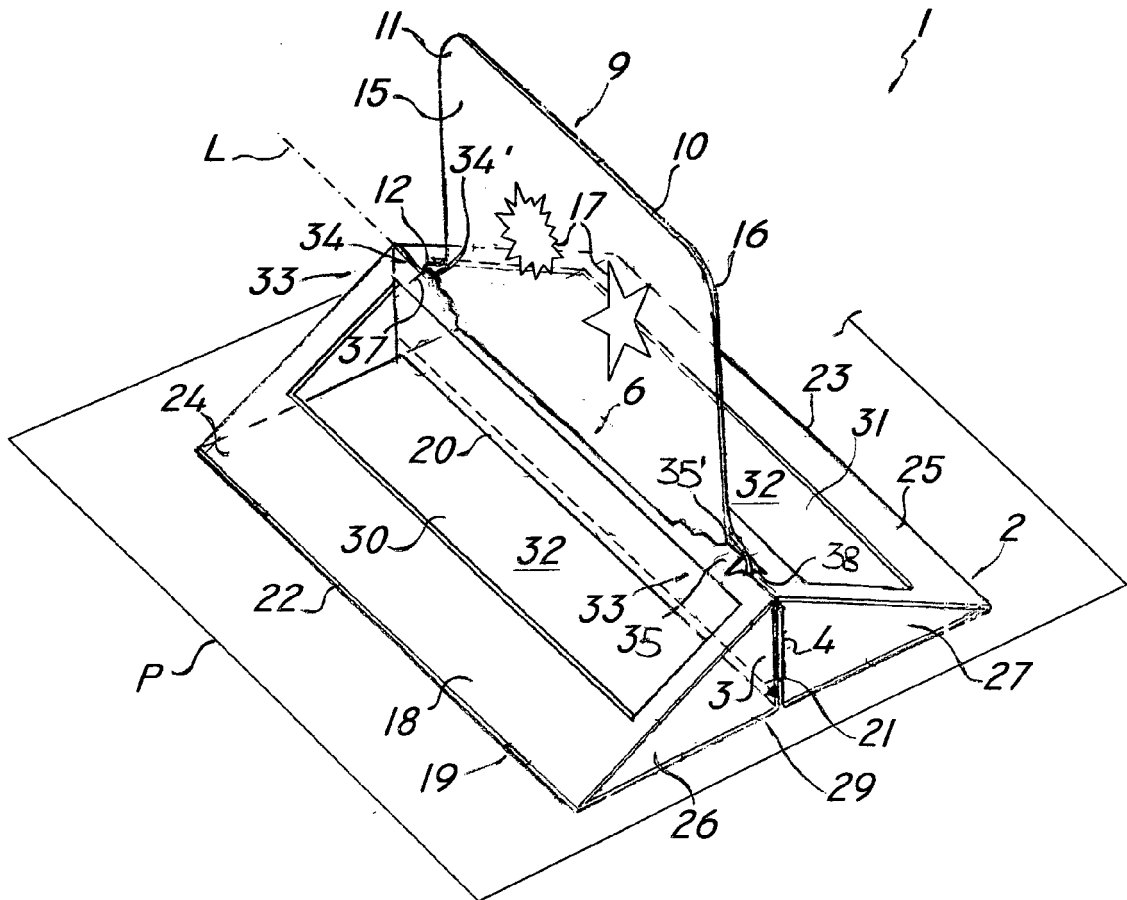
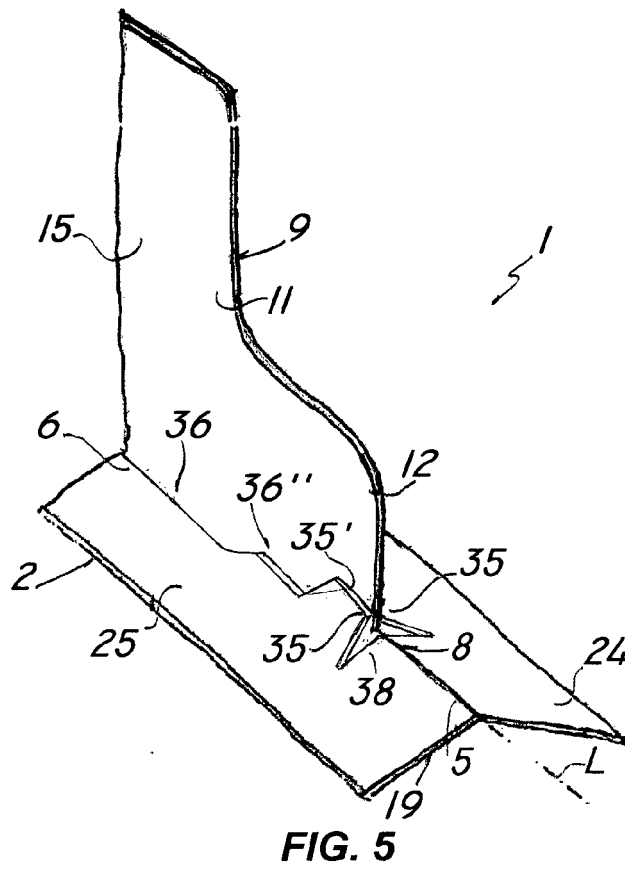
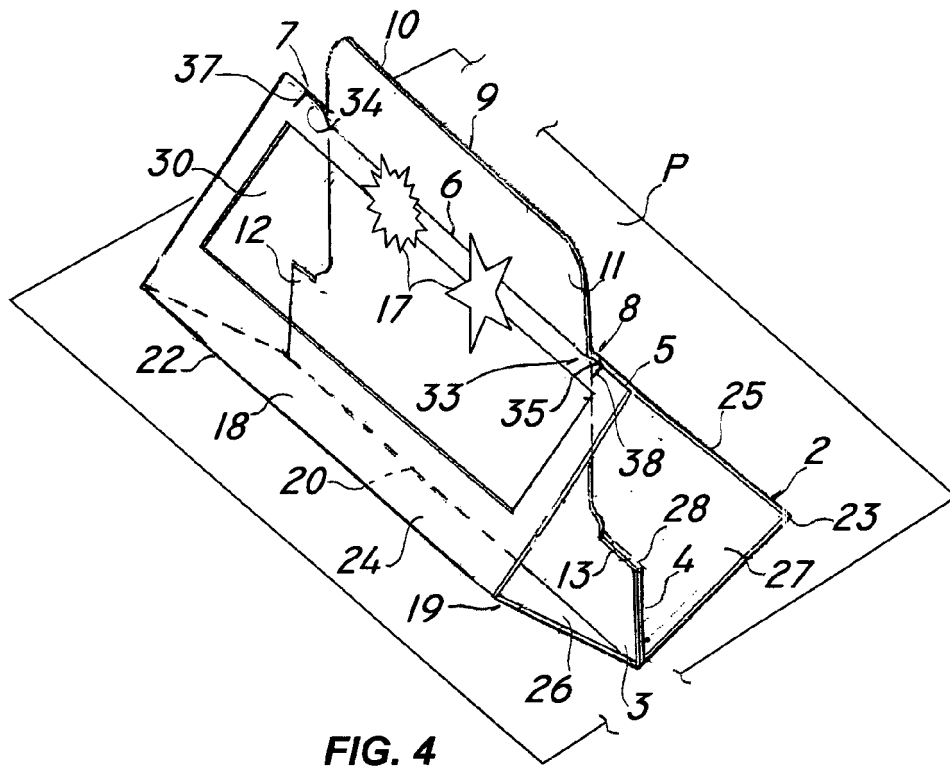


FIG. 3



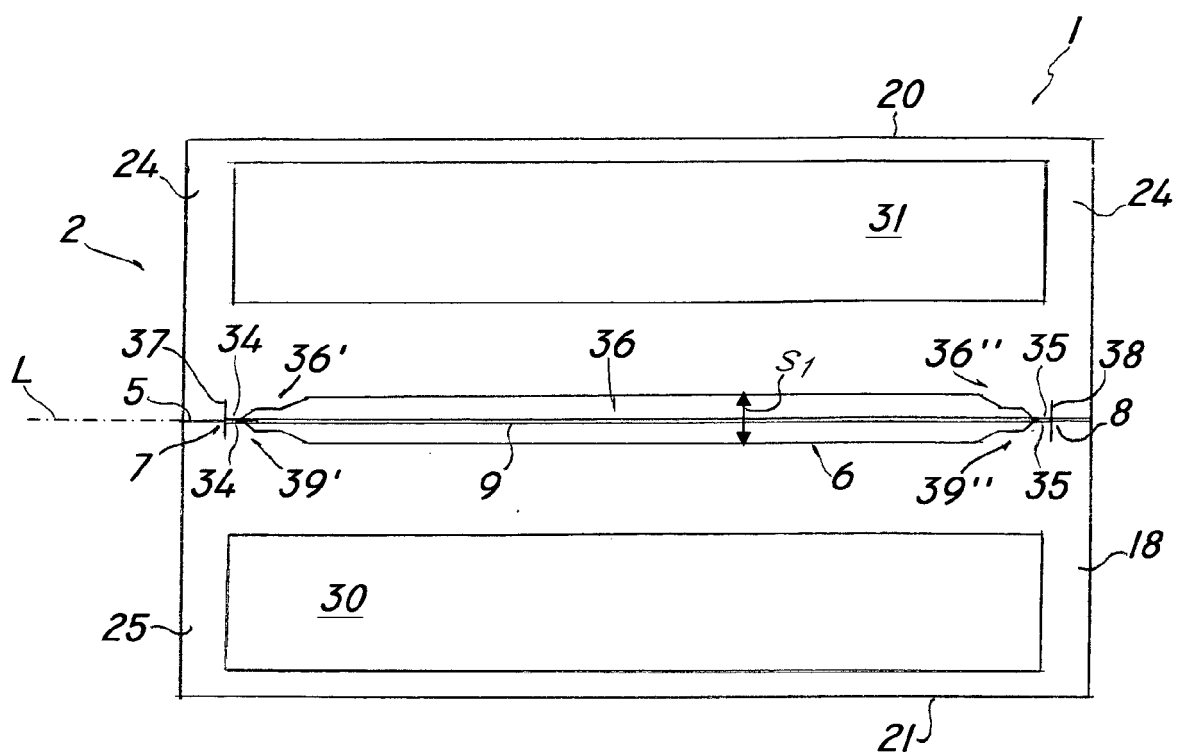


FIG. 6



EUROPEAN SEARCH REPORT

 Application Number
 EP 15 00 1203

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DOCUMENTS CONSIDERED TO BE RELEVANT			
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A	US 5 641 063 A (GAMBARDELLA JOHN [US] ET AL) 24 June 1997 (1997-06-24) * column 10, line 1 - line 38; figures 16,17 *	1-10	INV. A47F5/11 B65D71/60
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			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		26 August 2015	Vehrer, Zsolt
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 15 00 1203

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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