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**(54) PACKAGING FOR PROTECTING BOTTLES, FORMED FROM A PUNCHED AND CUT
CARDBOARD SHEET**

VERPACKUNG AUS EINER GESTANZTEN UND AUSGESCHNITTENEN KARTONBAHN
GEFORMT, FÜR DEN SCHUTZ VON FLASCHEN

EMBALLAGE POUR PROTÉGÉ BOUTEILLES, FORMÉ À PARTIR D'UNE FEUILLE DE CARTON
DÉCOUPÉE ET POINÇONNÉE

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Description

FIELD OF THE INVENTION

[0001] The present invention, as indicated by the title thereof, relates to a protected packaging for bottles formed by a punched and cut cardboard sheet, where packaging refers to an assembly for housing bottles in order to improve their transportation, wherein the packaging is protected against knocks and falls in all possible faces, on the front, side and rear parts thereof.

[0002] The present invention is characterised by a specific configuration and design of the cardboard box used to obtain the final form of the packaging, whereby a simple assembly provides a packaging that houses bottles protecting the same from knocking against one another, and is provided with protection means against knocks and falls by the arrangement of a plurality of protruding tabs that protect all the faces of the packaging.

[0003] Consequently, the present invention belongs to the field of bottle containers, and specifically to that of packaging protecting and holding the bottles inside thereof.

BACKGROUND OF THE INVENTION

[0004] The prior art includes bottle packaging such as those described in several patents. Among these the most relevant appears to be the packaging described in FR2769892, which discloses a packaging formed by a single cardboard sheet, duly punched and cut, defining three separate spaces for three bottles in a single chamber, where the central bottle is visible and attached by the neck thereof.

[0005] Although said packaging fulfils the purpose of housing three bottles such that they do not knock against one another and also allows knowing which bottles are contained therein, as at least the central area of one of the bottles is visible, there are improvable aspects, particularly regarding the protection of the contents and the simplicity of assembly.

[0006] Firstly, the internal attachment of each bottle in the individual space defined in the packaging; additionally, in said patent the central bottle is not securely attached and can come out of the space in which it is housed; and finally the assembly as a whole lacks means of protection against external knocks on any of the faces of the packaging.

[0007] It is therefore the object of the present invention to develop a bottle packaging that improves the above-discussed aspects, obtaining a packaging such as that described below with a specific design and allowing a simple assembly, the essence thereof being defined in claim 1.

DESCRIPTION OF THE INVENTION

[0008] The subject matter of the present invention re-

lates to a protected packaging for bottles formed from a single punched and cut sheet, such that when folded three individual spaces are defined separated from each other, housing at least one bottle in each space, the inside of at least the central space being visible from the outside, wherein the packaging has attachment means for each bottle in the corresponding housing thereof, top and bottom attachment means for the central body, and protection means against knocks and falls of the packaging in all of the faces thereof.

[0009] The packaging is formed from single sheet comprising a central element from which emerge laterally a first and a second set of three consecutive segments joined by creases and ending at a closing flap, such that they allow defining a space that is closed on its four sides.

[0010] From the top edge of the central element emerge perforated flaps that hold the neck of the bottles, while from the bottom edge thereof emerge two consecutive segments separated by a crease, wherein the first segment allows forming the base or floor, and the second segment allows forming the front cover at the bottom part of the packaging.

[0011] The sheet includes a plurality of cut-outs which when forming the packaging generate tabs that protrude along the three directional axes meant to protect the bottles from knocks and falls.

[0012] The protection of the packaging is provided by protrusions in the form of tabs that protect the rear part and the sides, the front part and the top part. The bottom of the packaging has no tabs as this would affect the stability of the packaging.

[0013] The features of the sheet used to form the packaging allows, on one hand, to improve the attachment of each bottle in the individual space thereof. They also improve the attachment of the central bottle, which despite being visible from the outside is held by the neck and blocked at the top and bottom thereof. Finally, the packaging is protected against knocks on the three directional axes, providing a much safer packaging.

[0014] Throughout this description and the claims, the term "comprises" and variations thereof do not exclude other technical features, additives, components or steps. For those skilled in the art, other objects, advantages and features of the invention will derive in part from the description and in part from the practice of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] To complement the description and aid a better comprehension of the features of the invention, according to a practical embodiment thereof, a set of drawings is provided forming an integral part of said description where for purposes of illustration and in a non-limiting sense the following is shown.

Figure 1 shows the cardboard sheet used to make the packaging.

Figure 2 shows an initial step in the process of making the packaging.

Figure 3 shows a front view of the packaging before folding the tabs that hold the neck of the bottles.

Figure 4 shows the packaging completely formed.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT OF THE INVENTION

[0016] A preferred embodiment of the invention is described below with reference to the figures.

[0017] Figure 1 shows the sheet used to form a packaging with the described advantages. Said sheet, as can be seen, comprises a central element (1) with a first set (2) of three consecutive segments of side extensions emerging from a first side, while from the opposite side emerges a second set (3) of three consecutive segments of side extensions.

[0018] The first set (2) of three consecutive segments comprises a first segment (2.1) followed by a second segment (2.2) or intermediate segment, in turn followed by a third segment (2.3) provided on the free end thereof with an attachment tab (2.4).

[0019] The second set (3) of three consecutive segments comprises a first segment (3.1) followed by a second segment (3.2) or intermediate segment, in turn followed by a third or final segment (3.3) provided on the free end thereof with an attachment tab (3.4).

[0020] From the top edge of the central element (1) emerge three perforated flaps (4) with identical or slightly smaller dimensions than the free end defined by each of the sets of three consecutive segments of side extensions.

[0021] Said perforated flaps (4) have a central orifice (4.1) and a circular crown (4.2) arranged around the central orifice (4.1) and provided with a plurality of radial slits (4.3) such that the circular crown (4.2) is divided into crown segments (4.4) and when the neck of the bottle is passed through the central orifice, the segments in the form of crown segments (4.4) will retain and centre the neck of the bottle.

[0022] From the top edge of the perforated flaps (4) may in turn emerge extensions (4.5).

[0023] From the bottom edge of the central element (1) emerges a segment that acts as the base (5) of the packaging and is followed by a second segment that acts as a front closure (6) of the packaging, having a greater width than the base segment (5) and lateral protruding tabs (6.1), and in its central part a plurality of slits (6.2).

[0024] In the crease between the base segment (5) and the front closure segment (6) there are slits (5.1) used to house and close each one of the prismatic conformations defined by the housing of the tabs (2.2.1) and (3.2.1) that emerge from the bottom edge of each of the second segments (2.2) and (3.2) respectively.

[0025] In the crease between the central segment (1)

and the first segment of the sets of side extensions are a plurality of slits in a crenelated arrangement, such that when the two parts are folded tabs (7) are defined used to protect the packaging from knocks and falls.

[0026] In the crease between the second segment (2.2) or (3.2) or intermediate segments and the third segment (2.3) or (3.3) there is also a plurality of slits defining a top tab (8), an intermediate tab (9) and a lower tab (10) with a hook shape.

[0027] The top tab (8) acts as a spacer or protector for the packaging in the front part, as can be seen in figures 3 and 4. The intermediate tab (9) limits the movement of the bottle in the intermediate housing, and the lower tab (10) protects against knocks in the front part and, because of its hook shape and the fact that it crosses the slits (6.2) of the front closure (6) allows retaining and securing said front closure.

[0028] The intermediate segments (2.2) and (3.2) of the side extension sets extend outward by a flap (11) that is above the third segment (2.3) and (3.3) respectively, such that superimposed they acts as a closure for the packaging and the intermediate space defined to contain the central bottle inside the packaging.

[0029] Figure 2 shows the packaging formation process, wherein the attachment flaps (2.4) and (3.4) are attached to the rear part of the packaging, allowing to form hollow towers inside which the bottles are housed.

[0030] The tabs (7) provide protection against knocks for the rear and sides, the tabs (8) and (10) protect the packaging from front knocks, the tabs (2.2.1) and (3.2.1) protect the packaging on the bottom, that is, the base, while the flaps (11) protect the bottles on the top part. Consequently, the packaging is protected on its six faces.

[0031] Figure 3 shows the packaging before folding the perforated flaps (4) to hold the bottles by the necks, while figure 4 shows the packaging with said flaps folded, acting as a centring and attachment means for the bottles, to prevent the bottles from falling out the top part.

[0032] Therefore, the described features provide a bottle packaging with protective means against knocks in the three directions, that is, against knocks on the rear part, sides, front part, base or support and top part, as well as securing the bottles inside the space defined for each one, preventing undesired exit thereof.

[0033] Also provided is a packaging that is very easily formed, particularly because it is assembled by attaching the closure flaps and inserting the tabs in the corresponding slits, which simplifies assembly mainly for persons not accustomed to working with packaging.

[0034] Having described the nature of the present invention and its execution, it is noted that without departing from the essence thereof the invention can be reduced to practice with other embodiments different in details from that described by way of example, which will also be protected provided the essence thereof is not altered, changed or modified.

Claims

1. Protected packaging for bottles formed from a single punched and cut sheet, such that when folded three individual spaces 11, one central and two lateral, are defined separated from each other, housing at least one bottle in each space, provided with a central element (1) from which emerges on one side a first set (2) of three consecutive segments of side extensions, while from the opposite side emerges a second set (3) of three consecutive segments of side extensions, from the top edge of the central element (1) emerge three perforated flaps (4) and from the bottom edge of the central element (1) emerges one segment that acts as the base (5) of the packaging, followed by a second segment that acts as a front closure (6) for the packaging, **characterised in that:** the central space is visible from the outside, the packaging being further provided with attachment means for each bottle in the corresponding housing thereof, top and bottom attachment means for the central bottle, and protection means against knocks and falls of the packaging in all of the faces thereof.
2. Protected packaging for bottles according to claim 1, **characterised in that** the perforated flaps (4) have a central orifice (4.1) and a circular crown (4.2) arranged around the central orifice (4.1) and provided with a plurality of radial slits (4.3) such that the circular crown (4.2) is divided into crown segments (4.4) such that when the neck of the bottle is passed through the central orifice, the segments in the form of crown segments (4.4) will retain and centre the neck of the bottle.
3. Protected packaging for bottles according to claim 1, **characterised in that** the first set (2) of three consecutive segments comprises a first segment (2.1) followed by a second segment (2.2) or intermediate segment, in turn followed by a third segment (2.3) provided on the free end thereof with an attachment tab (2.4), while the second set (3) of three consecutive segments comprises a first segment (3.1) followed by a second segment (3.2) or intermediate segment, in turn followed by a third or final segment (3.3) provided on the free end thereof with an attachment tab (3.4).
4. Protected packaging for bottles according to claim 3, **characterised in that** the top and bottom attachment means for the central bottle comprise:
 - A flap (11) that emerges towards the outside of the central segments (2.2) and (3.2) and is placed above the third segment (2.3) and (3.3) respectively;
 - An intermediate tab (9) defined in the crease between the second segment (2.2) or (3.2) and the third segment (2.3) or (3.3) respectively;
5. Protected packaging for bottles according to claim 4, **characterised in that** the means for protection against knocks and falls of the packaging in any of the faces thereof comprise:
 - Tabs (7) formed in the crease between the central element (1) and the first segment (2.1) or (3.1) of each of the sets of side extensions (2) and (3) respectively;
 - Upper tabs (8) defined in the crease between the second segment (2.2) or (3.2) and the third segment (2.3) or (3.3) respectively;
 - Lower tabs (10) also defined in the crease between the second segment (2.2) or (3.2) and the third segment (2.3) or (3.3) respectively; and
 - tabs (6.1) that emerge from the lateral edges of the front closure element (6);
 - Tabs (2.2.1) and (3.2.1) from the bottom edge of the central segments that emerge through the slits (5.1) at the bottom of the base of the packaging;
 - The flaps (11) that remain above the perforated flaps (4) when folded. bottles.
6. Protected packaging for bottles according to claim 3, **characterised in that** the front closure (6) is attached by the lower tabs (10) defined in the crease between the second segment (2.2; 3.2) or intermediate segment and the third segment (2.3; 3.3), which have a hook shape, when passing through the slits (6.2) of the front closure segment (6).

Patentansprüche

1. Verpackung aus einer gestanzten und ausgeschnittenen Bahn, gebildet für den Schutz von Flaschen, so dass im gefalteten Zustand drei individuelle Räume gebildet werden, von denen einer zentral und zwei seitlich sind und diese voneinander getrennt definiert sind, wobei mindestens eine Flasche in jedem Raum untergebracht wird, ausgestattet mit einem zentralen Element (1), aus dem an einer Seite ein erster Satz (2) von drei aufeinander folgenden Segmenten von Seitenverlängerungen ausgeht, während aus der gegenüberliegenden Seite ein zweiter Satz (3) von drei aufeinander folgenden Segmenten von Seitenverlängerungen ausgeht, von dem oberen Rand des zentralen Elements (1) drei perforierte Laschen (4) ausgehen und von dem unteren Rand des zentralen Elements (1) ein Segment ausgeht, das als die Basis (5) der Verpackung wirkt, gefolgt von einem zweiten Segment, das als vorderer Verschluss (6) der Verpackung wirkt, **dadurch gekennzeichnet, dass** der zentrale Raum von der

Außenseite sichtbar ist, wobei die Verpackung ferner mit Befestigungsmitteln für jede Flasche in deren entsprechendem Fach, oberen und unteren Befestigungsmitteln für die zentrale Flasche und Schutzmitteln gegen Stöße und Fallen der Verpackung auf alle ihrer Seiten ausgestattet ist.

2. Verpackung zum Schutz von Flaschen nach Anspruch 1, **dadurch gekennzeichnet, dass** die perforierten Laschen (4) eine zentrale Öffnung (4.1) und eine runde Krone (4.2) aufweisen, die um die zentrale Öffnung (4.1) herum angeordnet und mit einer Vielzahl radialer Schlitze (4.3) ausgestattet ist, so dass die runde Krone (4.2) in Kronensegmente (4.4) unterteilt ist, damit die Segmente in Form von Kronensegmenten (4.4), wenn der Hals der Flasche durch die zentrale Öffnung geführt wird, den Hals der Flasche halten und zentrieren.

3. Verpackung zum Schutz von Flaschen nach Anspruch 1, **dadurch gekennzeichnet, dass** der erste Satz (2) von drei aufeinander folgenden Segmenten ein erstes Segment (2.1), gefolgt von einem zweiten Segment (2.2) oder Zwischensegment umfasst, wiederum gefolgt von einem dritten Segment (2.3), das an dessen freiem Ende mit einer Befestigungslasche (2.4) ausgestattet ist, während der zweite Satz (3) von drei aufeinander folgenden Segmenten ein erstes Segment (3.1), gefolgt von einem zweiten Segment (3.2) oder Zwischensegment umfasst, wiederum gefolgt von einem dritten oder Endsegment (3.3), das an dessen freiem Ende mit einer Befestigungslasche (3.4) ausgestattet ist.

4. Verpackung zum Schutz von Flaschen nach Anspruch 3, **dadurch gekennzeichnet, dass** die oberen und unteren Befestigungsmittel für die zentrale Flasche umfassen:

- eine Lasche (11), die in Richtung der Außenseite der zentralen Segmente (2.2) und (3.2) austritt und oberhalb des dritten Segments (2.3) beziehungsweise (3.3) angeordnet ist;
- eine Zwischenlasche (9), die in der Falte zwischen dem zweiten Segment (2.2) oder (3.2) und dem dritten Segment (2.3) beziehungsweise (3.3) definiert ist;
- den vorderen Verschluss (6).

5. Verpackung zum Schutz von Flaschen nach Anspruch 4, **dadurch gekennzeichnet, dass** die Mittel zum Schützen vor Stößen und Fallen der Verpackung in jedweden ihrer Seiten umfasst:

- Laschen (7), die in der Falte zwischen dem zentralen Element (1) und dem ersten Segment (2.1) oder (3.1) von jedem der Sätze der Seitenverlängerungen (2) und (3) gebildet sind;

- obere Laschen (8), die in der Falte zwischen dem zweiten Segment (2.2) oder (3.2) und dem dritten Segment (2.3) beziehungsweise (3.3) definiert sind;

- untere Laschen (10), die auch in der Falte zwischen dem zweiten Segment (2.2) oder (3.2) und dem dritten Segment (2.3) beziehungsweise (3.3) definiert sind; und

- Laschen (6.1), die aus den seitlichen Rändern des vorderen Verschlusselements (6) austreten;

- Laschen (2.2.1) und (3.2.1) aus dem unteren Rand der zentralen Segmente, die durch die Schlitze (5.1) am Boden der Basis der Verpackung austreten;

- Laschen (11), die oberhalb der perforierten Laschen (4) bleiben, wenn sie gefaltet werden.

6. Verpackung zum Schutz von Flaschen nach Anspruch 3, **dadurch gekennzeichnet, dass** der vordere Verschluss (6) durch die unteren Laschen (10) befestigt ist, die in der Falte zwischen dem zweiten Segment (2.2; 3.2) oder Zwischensegment und dem dritten Segment (2.3; 3.3) definiert sind, die eine Hakenform aufweisen, wenn sie die Schlitze (6.2) des vorderen Verschlusssegments (6) passieren.

Revendications

1. Emballage protégé pour bouteilles formé d'une seule feuille découpée et perforée, de telle sorte que lorsqu'elle est pliée, trois espaces individuels, un central et deux latéraux, soient définis séparés les uns des autres, recevant au moins une bouteille dans chaque espace, comprenant un élément central (1) depuis lequel fait saillie sur un côté un premier ensemble (2) de trois segments consécutifs d'extensions latérales, tandis que, depuis le côté opposé, fait saillie un second ensemble (3) de trois segments consécutifs d'extensions latérales, depuis le bord supérieur de l'élément central (1) font saillie trois rabats perforés (4) et, depuis le bord inférieur de l'élément central (1), fait saillie un segment qui agit comme la base (5) de l'emballage, suivi par un deuxième segment qui agit comme une fermeture avant (6) pour l'emballage, **caractérisé en ce que** : l'espace central est visible depuis l'extérieur, l'emballage comprenant en outre un moyen de fixation pour chaque bouteille dans son logement correspondant, des moyens de fixation supérieur et inférieur pour la bouteille centrale et un moyen de protection contre les coups et les chutes de l'emballage dans toutes ses faces.

2. Emballage protégé pour bouteilles selon la revendication 1, **caractérisé en ce que** les rabats perforés (4) ont un orifice central (4.1) et une couronne circu-

laire (4.2) disposée autour de l'orifice central (4.1) et comprenant une pluralité de fentes radiales (4.3), de sorte que la couronne circulaire (4.2) soit divisée en segments de couronne (4.4), de sorte que, lorsque le goulot de la bouteille est passé à travers l'orifice central, les segments sous la forme de segments de couronne (4.4) retiennent et centrent le goulot de la bouteille.

3. Emballage protégé pour bouteilles selon la revendication 1, **caractérisé en ce que** le premier ensemble (2) de trois segments consécutifs comprend un premier segment (2.1) suivi par un deuxième segment (2.2) ou segment intermédiaire, à son tour suivi par un troisième segment (2.3) présentant sur son extrémité libre une languette de fixation (2.4), tandis que le second ensemble (3) de trois segments consécutifs comprend un premier segment (3.1) suivi par un deuxième segment (3.2) ou segment intermédiaire, à son tour suivi par un troisième segment ou segment final (3.3) présentant sur son extrémité libre une languette de fixation (3.4).

4. Emballage protégé pour bouteilles selon la revendication 3, **caractérisé en ce que** les moyens de fixation supérieur et inférieur pour la bouteille centrale comprennent :

- un rabat (11) qui fait saillie vers l'extérieur des segments centraux (2.2) et (3.2) et est placé au-dessus du troisième segment (2.3) et (3.3) respectivement ;
- une languette intermédiaire (9) définie dans le pli entre le deuxième segment (2.2) ou (3.2) et le troisième segment (2.3) ou (3.3) respectivement ;
- la fermeture avant (6).

5. Emballage protégé pour bouteilles selon la revendication 4, **caractérisé en ce que** le moyen de protection contre les coups et les chutes de l'emballage dans l'une quelconque de ses faces comprend :

- des languettes (7) formées dans le pli entre l'élément central (1) et le premier segment (2.1) ou (3.1) de chacun des ensembles d'extensions latérales (2) et (3) respectivement ;
- des languettes supérieures (8) définies dans le pli entre le deuxième segment (2.2) ou (3.2) et le troisième segment (2.3) ou (3.3) respectivement ;
- des languettes inférieures (10) également définies dans le pli entre le deuxième segment (2.2) ou (3.2) et le troisième segment (2.3) ou (3.3) respectivement ; et
- des languettes (6.1) qui font saillie depuis les bords latéraux de l'élément de fermeture avant (6) ;

- des languettes (2.2.1) et (3.2.1) depuis le bord inférieur des segments centraux qui font saillie à travers les fentes (5.1) au niveau du fond de la base de l'emballage ;
- les rabats (11) qui restent au-dessus des rabats perforés (4) lorsqu'ils sont pliés sur des bouteilles.

6. Emballage protégé pour bouteilles selon la revendication 3, **caractérisé en ce que** la fermeture avant (6) est fixée par les languettes inférieures (10) définies dans le pli entre le deuxième segment (2.2 ; 3.2) ou segment intermédiaire et le troisième segment (2.3 ; 3.3), qui ont une forme de crochet, lorsqu'elles passent à travers les fentes (6.2) du segment de fermeture avant (6).

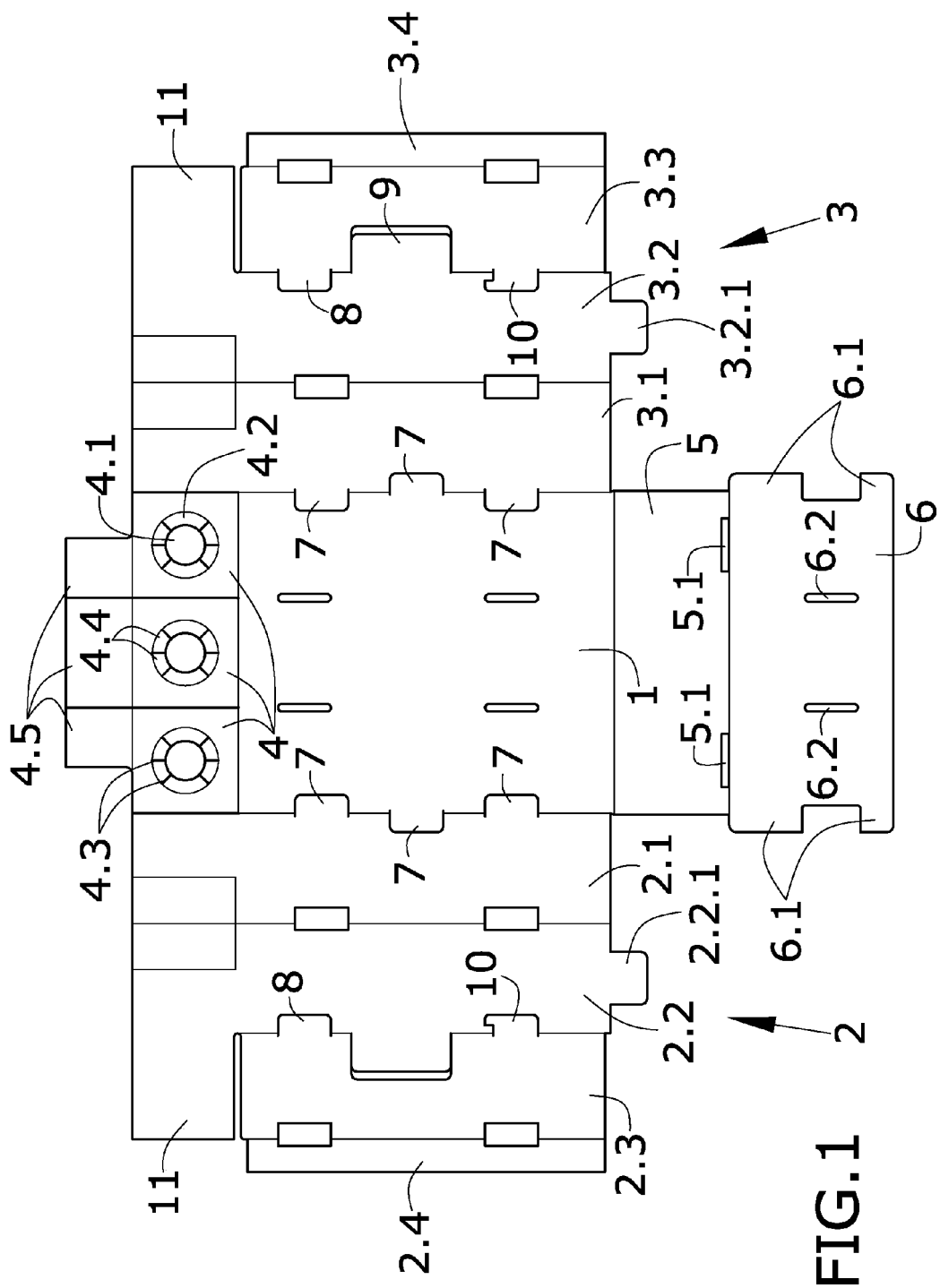
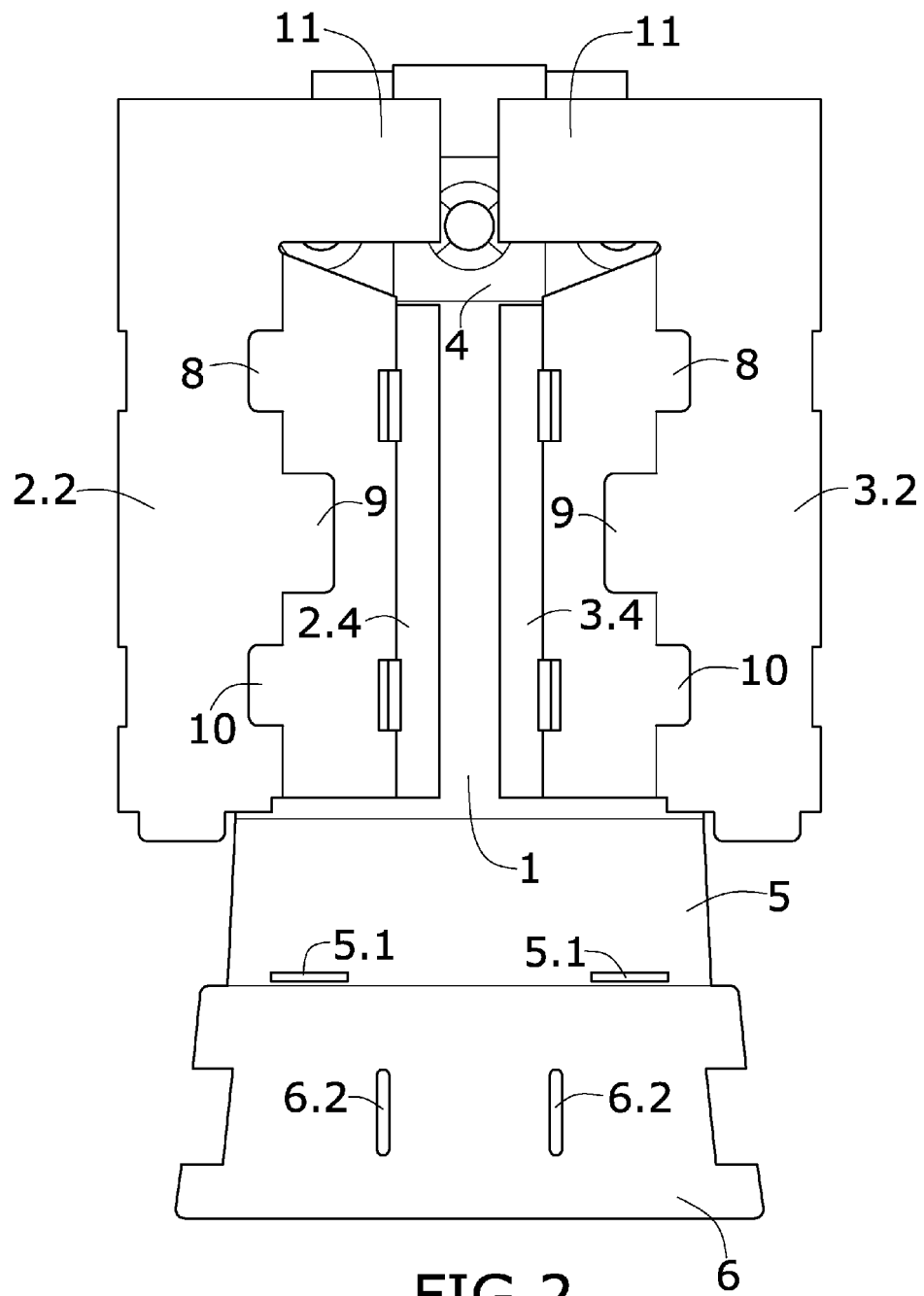


FIG.1



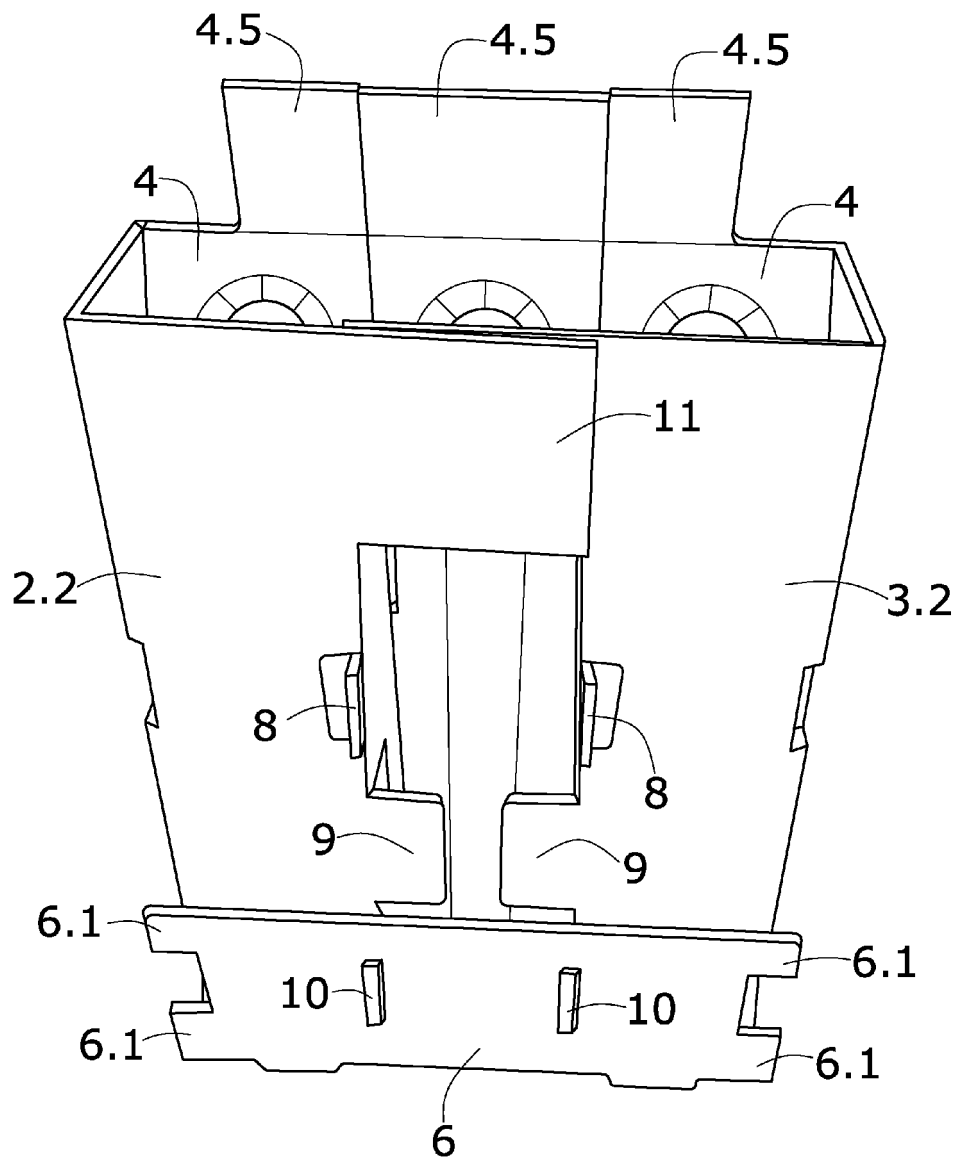


FIG.3

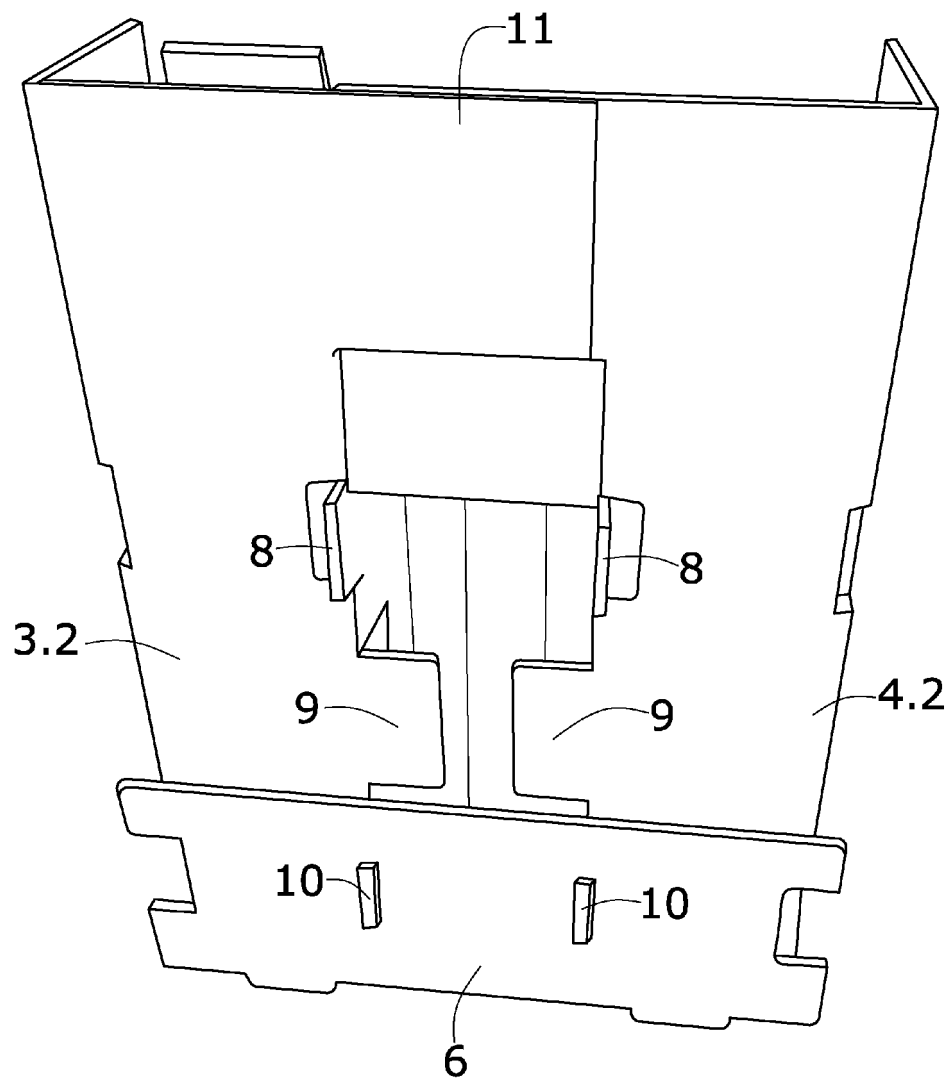


FIG.4

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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