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(54) **CARRIER FOR CONTAINERS**

TRÄGER FÜR BEHÄLTER

SUPPORT POUR RÉCIPIENTS

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Description**BACKGROUND OF THE DISCLOSURE**

[0001] The present disclosure generally relates to carriers for holding and dispensing beverage containers or other types of articles.

[0002] US 5,671,845 A discloses a wrap-around, according to the preamble of claim 1, suitable for packaging bottles, the carrier comprising a plurality of panels that extend at least partially around an interior of the carrier, the plurality of panels comprising a top panel, two side panels, and a bottom panel. Said carrier further comprises a plurality of bottle neck openings arranged in two rows in the top panel with the number of bottle neck openings in each row being equal. Furthermore, the carrier known from US 5,671,845 A also comprises retention features extending in the side panels and the bottom panel for retaining the bottles that are received in a respective one of the bottle openings in the first and second row. US 5,671,845 also discloses a blank according to the preamble of claim 14 and a method of forming a carrier. EP 2 096 042 A1, FR 2 717 451 A1 and DE 299 11 392 U1 disclose further carriers for at least partially holding a plurality of bottles. These prior art carriers, however, still leave room for improvement. It is therefore the object of the subject invention to provide for an improved carrier that is suitable to safely transport a plurality of articles being arranged in at least two rows.

SUMMARY OF THE DISCLOSURE

[0003] In general, one aspect of the subject invention is directed to a carrier for at least partially holding a plurality of articles as per claim 1.

[0004] In another aspect, the subject invention is generally directed to a blank for forming a carrier for holding a plurality of articles as per claim 14.

[0005] In another aspect, the subject invention is directed to a method of forming an inventive carrier as per claim 23.

[0006] Other aspects, features, and details of the present disclosure can be more completely understood by reference to the following detailed description of exemplary embodiments taken in conjunction with the drawings and from the appended claims.

[0007] Those skilled in the art will appreciate the above stated advantages and other advantages and benefits of various additional embodiments reading the following detailed description of the embodiments with reference to the below-listed drawing figures. Further, the various features of the drawings discussed below are not necessarily drawn to scale. Dimensions of various features and elements in the drawings may be expanded or reduced to more clearly illustrate the embodiments of the disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS**[0008]**

Fig. 1 is a plan view of an exterior surface of a blank used to form a carrier according to a first embodiment of the disclosure.

Fig. 2 is a detail view of a portion of the blank of Fig. 1 showing retention features according to the first embodiment of the disclosure.

Fig. 3 is a perspective view of a package including the carrier formed from the blank of Fig. 1 and nested containers according to the first embodiment of the disclosure.

Fig. 4 is an end view of the package of Fig. 3.

Figs. 5 and 6 are bottom views of the package of Fig. 3.

Fig. 7 is a plan view of an exterior surface of a blank used to form a carrier according to a second embodiment of the disclosure.

Fig. 8 is a plan view of an exterior surface of a blank used to form a carrier according to a third embodiment of the disclosure.

Fig. 9 is a plan view of an exterior surface of a blank used to form a carrier according to a fourth embodiment of the disclosure.

[0009] Corresponding parts are designated by corresponding reference numbers throughout the drawings.

DETAILED DESCRIPTION OF THE EXEMPLARY EMBODIMENTS

[0010] The present disclosure generally relates to various features for cartons or carriers that contain articles such as containers, bottles, cans, etc. The articles can be used for packaging food and beverage products, for example. The articles can be made from materials suitable in composition for packaging the particular food or beverage item, and the materials include, but are not limited to, aluminum and/or other metals; glass; plastics such as PET, LDPE, LLDPE, HDPE, PP, PS, PVC, EVOH, and Nylon; and the like, or any combination thereof.

[0011] Cartons or carriers according to the present disclosure can accommodate articles of any shape. For the purpose of illustration and not for the purpose of limiting the scope of the disclosure, the following detailed description describes beverage containers (e.g., plastic beverage bottles) as disposed within the carrier embodiments. In this specification, the terms "inner," "interior,"

"outer," "exterior," "lower," "bottom," "upper," and "top" indicate orientations determined in relation to fully erected and upright cartons.

[0012] Fig. 1 is a plan view of an exterior surface 2 of a blank 3, used to form a carrier 5 (Fig. 3) according to a first embodiment of the disclosure. In the illustrated embodiment, the carrier 5 is a carrier having generally open ends 6, 8 that wraps around the containers C (e.g., the carrier 5 may be referred to as a wrap-around carton or carrier). The carrier 5 could be otherwise shaped and arranged such that the ends 6, 8 are at least partially closed such as by end flaps (not shown) or other closing mechanisms. The carrier 5 can be used to house a plurality of articles such as containers C (Figs. 3-6) to form a package 7 (Fig. 3). In the illustrated embodiment, the containers C are beverage bottles having a wide bottom B and a narrow top or neck N including a cap CP. The carrier 5 can be sized to house eight containers in a single layer in a "nested" arrangement having two outer rows of three bottles per row and one inner row of two bottles. In one embodiment, the nesting of the containers C in the carrier 5 allows the carrier to hold the containers in more than two rows since the outer rows can help retain the inner row that is nested with the outer rows. In the illustrated embodiment, the carrier 5 can include retention features including article receiver features 9 for receiving the upper portions N of the containers C and bottom retention features 11 for engaging the bottom portions B of the containers C that are disposed adjacent the sides of the carrier 5. In addition, the carrier 5 can include one or two handles, generally indicated at 13, for grasping and carrying the carrier.

[0013] Various other nested bottle arrangements could be used with the first embodiment, or other illustrated and non-illustrated embodiments of the disclosure. Alternative nested pack arrangements can include an arrangement with eleven bottles with two outer rows of four bottles per row and one inner row of three bottles, an arrangement with ten bottles with two outer rows of three bottles per row and two inner rows of two bottles per row, etc. In one embodiment, such nesting arrangements can be considered "internal nesting arrangements" since the interior row(s) of containers are generally shorter than the outer rows of containers (e.g., the outer rows have one more container each than the inner row(s)). Other nested or non-nested arrangements of the containers could be provided without departing from the disclosure. For example, the inner row(s) could be longer than the outer rows in an alternative embodiment. In another embodiment, an arrangement with thirteen containers can have two outer rows with three bottles per row, two inner rows with two bottles per row, and a central row with three bottles disposed between the two inner rows, for example. In the different arrangements, the containers can be nested in an at least partially staggered arrangement so that the containers in the inner row(s) are generally offset from the containers in the outer rows, as generally shown in Figs. 3 and 4. The containers C could be otherwise

arranged without departing from the disclosure.

[0014] The blank 3 has a longitudinal axis L1 and a lateral axis L2. In the illustrated embodiment, the blank 3 comprises a top panel 20 foldably connected to a first side panel 22 at a first lateral fold line 24, a first bottom panel 26 foldably connected to the first side panel 22 at a second lateral fold line 28, a second side panel 30 foldably connected to the top panel 20 at a third lateral fold line 32, and a second bottom panel 34 foldably connected to the second side panel 30 at a fourth lateral fold line 36. In the illustrated embodiment, the first bottom panel 26 includes a first bottom bevel panel 38 defined by lateral fold lines 28 and 40 and having an intermediate fold line 41. The second bottom panel 34 includes a second bottom bevel panel 42 defined by lateral fold lines 36 and 44 and having an intermediate fold line 45. The lateral fold lines 40, 44 can include multiple segments each, wherein a longitudinal cut is disposed at each end of each segment. In the illustrated embodiment, the first side panel 22 can include a first top bevel panel 46 defined by lateral fold lines 24 and 47 and having an intermediate fold line 48, and the second side panel 30 can include a second top bevel panel 49 defined by lateral fold lines 32 and 50 and having an intermediate fold line 51. The blank 3 could be otherwise shaped, arranged, positioned, and/or configured without departing from the disclosure. For example, any of the bevel panels 38, 42, 46, 49 could be omitted or otherwise shaped, arranged, positioned, and/or configured without departing from the disclosure.

[0015] The first bottom panel 26, which is the inner bottom panel in the assembled carrier 5, includes cutouts forming primary female locking edges 52 that are shaped and positioned to engage primary male locking tab projections 54 on the second bottom panel 34. The first bottom panel 26 also includes slits 56 shaped and positioned to receive outer secondary locking tab projections 58 of the second bottom panel 34. As shown in Fig. 1, the slits 56 can define tabs that are foldably connected to the first bottom panel 26. In the illustrated embodiment, the second bottom panel 34, which is the outer bottom panel in the completed carrier 5, includes a lateral fold line 60, which can be interrupted by the slits that define the primary male locking tab projections 54. In addition, each of the secondary locking tab projections 58 can include a lateral fold line 62. Although the locking elements of the blank 3 are illustrated to demonstrate a particular bottom panel locking arrangement suitable for use with the carrier 5, it is understood that any alternative form of bottom panel locking structure may be employed without departing from the disclosure. Additionally, or alternatively, the bottom panels 26, 34 could be glued together.

[0016] As shown in Fig. 1, the article receiver features 9 are top openings 9 that can be formed in the top panel 20 in three rows R1, R2, R3, in one embodiment. In other embodiments, the top openings 9 can be formed in different arrangements to accommodate the different container arrangements described above. The outer rows R1, R3 can include three top openings 9 each, and the

inner row R2 can include two top openings 9 that are offset from the top openings 9 in the outer rows R1, R3. In the illustrated embodiment, the top openings 9 in the inner row R2 are offset from the remaining openings so that each of the top openings 9 in the inner row R2 has a center A that is disposed generally halfway between two of the top openings 9 in the outer rows R1, R3. Accordingly, the top openings 9 in the inner row R2 are positioned with respect to the top openings 9 in the outer rows R1, R3 so that the openings are in a staggered arrangement and the containers C that are received in the top openings 9 in the inner row R2 are nested with the containers C that are received in the top openings 9 in the outer rows R1, R3 (Figs. 3 and 4). In one embodiment, the top openings 9 in the outer rows R1, R3 can partially interrupt the respective lateral fold lines 24, 32, and cuts 63 can extend in the top bevel panels 46, 49 adjacent the outer openings. Any of the article receiver features or top openings 9 and/or the rows R1, R2, R3 could be omitted or could be otherwise positioned, shaped, configured, and/or arranged without departing from the disclosure. For example, the article receiver features could comprise tabs, flaps, and/or other features in addition to or instead of the top openings 9.

[0017] In one embodiment, the bottom retention features 11 in the first side panel 22 and the first bottom panel 26 are shown in detail in Fig. 2; however, the bottom retention features 11 in the second side panel 30 and the second bottom panel 34 are similar or substantially identical to the bottom retention features 11 in the first side panel 22 and the first bottom panel 26 as shown in Fig. 1. As shown in Figs. 1 and 2, the bottom retention features 11 can include two retention tabs 64 adjacent a respective bottom or corner opening 66 for each of the containers C in the outer row R1. Each of the retention tabs 64 can be foldably connected to the bottom bevel panel 38 along a respective fold line 68 and can include V-shaped folds 70. A hook-shaped cut 72 can extend from each of the retention tabs 64 into the first side panel 22 for allowing additional folding and/or flexing of the tabs 64 and/or the side panel 22 to accommodate the respective container C.

[0018] As shown in Figs. 1 and 2, the bottom retention features 11 can include a corner retainer 74 at each end of the bottom panels 26, 34. As shown in Fig. 2, each of the corner retainers 74 can include a retention panel 76 foldably connected to the bottom bevel panel 38 along a longitudinal fold line 78, a first gusset panel 80 foldably connected to the retention panel 76 along a lateral fold line 82, and a second gusset panel 84 foldably connected to the first gusset panel along a longitudinal fold line 86. Each of the second gusset panels 84 can be foldably connected to the first bottom panel 26 along a respective oblique fold line 88 and can be separable from the first bottom panel 26 along a respective cut line 90. Each of the corner retainers 74 can at least partially define a cut-out 92 in one embodiment. Any of the bottom retention features 11, including the retention tabs 64, the corner

openings 66, and/or the corner retainers 74 could be omitted or could be otherwise shaped, arranged, positioned, and/or configured without departing from the disclosure.

[0019] As shown in Figs. 1 and 2, each of the handles 13 includes two finger flaps 94, each respectively formed by a respective curved cut line 96 and foldably attached to the respective side panel 22, 30 at a respective longitudinal fold line 98. The handles 13 could include other features for carrying the carrier 5, any of the finger flaps 94 could be omitted or could be otherwise positioned, shaped, configured, and/or arranged, or one or both of the handles 13 could be omitted from the carrier without departing from the disclosure.

[0020] As shown in Fig. 3, the carrier 5 can be erected by wrapping the blank 3 around the containers C and interlocking the first and second bottom panels 26, 34 to form the package 7. Particularly, the containers C can be arranged into the staggered, nested arrangement of the two outer rows R1, R3 of three containers C each and one inner row R2 of two containers C. The blank 3 can be positioned in relation to the arranged containers C so that each of the top openings 9 is generally aligned with a respective one of the containers C. The blank 3 and/or the containers C can be moved so that the blank 3 and the containers C are moved together and at least the upper portions N of the containers C are received in the respective top openings 9. The side panels 22, 30 can be downwardly folded along the fold lines 24, 32, and the top bevel panels 46, 49 can fold along the respective fold lines 47, 48 and 50, 51 to at least partially accommodate the shoulders of the containers C in the outer rows R1, R3.

[0021] In one embodiment, as the bottom panels 26, 34 are folded inwardly toward one another, the bottoms B of the containers C in the outer rows R1, R3 can be at least partially received in the respective corner openings 66 to engage the respective retention tabs 64. Also, while the bottom panels 26, 34 are folded along lateral fold lines 28, 36, the bottom bevel panels 38, 42 can fold along the respective fold lines 40, 41 and 44, 45 to extend obliquely between the side panels 22, 30 and the remainder of the bottom panels 26, 34. As shown in Figs. 3-6, the corner retainers 74 can be folded inwardly to position the gusset panels 80, 84 in face-to-face contact with one another and to tuck in the gusset panels 80, 84 between the respective bottom panel 26, 34 and the bottom B of a respectively adjacent container C (Figs. 5 and 6) so that the respective retention panel 76 extends over a portion of an end of the carrier 5 (Figs. 4 and 5). Accordingly, the retention tabs 64 and the corner openings 66 can help retain the respective containers C in the outer rows R1, R3 in place adjacent the respective side panels 22, 30, and the corner retainers 74 can help retain the containers C at the ends of the outer rows R1, R3 adjacent the open ends 6, 8 of the carrier 5.

[0022] In the illustrated embodiment, as shown in Figs. 5 and 6, the second bottom panel 34 is secured to the

first bottom panel 26 by first folding the second bottom panel 34 along the lateral fold line 60 to at least partially separate the primary male locking tabs 54 from the second bottom panel 34 and respectively engaging the primary male locking tabs 54 with the primary female locking edges 52 (Figs. 4 and 5). The secondary male locking flaps 58 are respectively inserted through, and cooperatively interact with, the slits 56 to further secure the second bottom panel 34 to the first bottom panel 26. The interlocked bottom panels 26, 34 cooperate to form a bottom panel 99 of the carrier 5. The carrier 5 could be erected and/or the package 7 could be formed by alternative steps without departing from the disclosure.

[0023] In one embodiment, one or both of the handles 13 can be actuated by folding the finger flaps 94 inwardly along the respective fold lines 98 for grasping the respective side panel 22, 30 at the respective openings formed therein. The package 7 could be otherwise carried without departing from the disclosure.

[0024] In the illustrated embodiment, the nested arrangement of the containers can help the wrap-style carrier 5 to hold the containers in the three rows R1, R2, R3. For example, the nested configuration can allow the containers in the outer rows R1, R3 to retain the containers in the inner row R2 in the interior of the carrier. The containers C adjacent the ends of the carrier 5 in the outer rows R1, R3 interfere with the containers in the inner row R2 so that containers in the inner row would have to push past the outer, end containers to be forced out of the carrier prior to intended removal. The containers in the outer rows are further retained by retention tabs 64, the corner openings 66, and the corner retainers 74. Accordingly, while the containers C in the inner row R2 are spaced from the side panels 22, 30 and the retention features 11, they are at least partially retained by the respective top openings 9 in the top panel 20 and the respectively nested containers C in the outer rows R1, R3. In one embodiment, a non-nested inner row in an alternative carrier with more than two rows will generally fail. For example, it can be more difficult to retain the containers in the inner row if they are not nested with and retained by the containers in the outer row. If one or more containers is unintentionally removed from (e.g., falls out of) the alternative carrier, the alternative carrier could collapse, some or all of the containers could fall out of the alternative carrier, and/or the alternative carrier could otherwise fail. Additionally, the nested arrangement of the containers C can be generally narrower than an arrangement with aligned rows that are not nested, and the amount of material added to the blank 3 to include the third row (e.g., the inner row) is less than would be required if the containers were arranged in three non-nested rows. Further, the carrier 5 can be more noticeable on a shelf by having a different look than other cartons and carriers, in one embodiment.

[0025] Fig. 7 is a plan view of an exterior surface 202 of a blank 203 for forming a carrier (not shown) according to a second embodiment of the disclosure. The second

embodiment is generally similar to the first embodiment, except for variations noted and variations that will be apparent to one of ordinary skill in the art. Accordingly, similar or identical features of the embodiments have been given like or similar reference numbers. As shown in Fig. 7, the blank 203 includes alternative bottom retention features 211 wherein the corner retainers 74 of the first embodiment are omitted, and the retention tabs 264 are generally larger so that the openings are substantially closed prior to the formation of the package (not shown). Accordingly, the retention tabs 264 are separable from one another along respective longitudinal cut lines 267 and from the respective side panels 222, 230 and the respective bottom panels 226, 234 along respective lateral cut lines 269. Each of the retention tabs 264 can be connected to the respective side panels 222, 230 and the respective bottom panels 226, 234 along two oblique fold lines 268 in one embodiment. Additionally, each of the retention tabs 264 can include a V-shaped fold 270. As shown in Fig. 7, the lateral fold lines 228, 236 can be interrupted by the bottom retention features 211, and the fold lines 40, 41, 44, 46 of the first embodiment can be omitted so that the bottom bevel panels 38, 42 of the first embodiment are not included in the blank 203. The side panels 222, 230 of the second embodiment can include cutouts 215 at each end for at least partially accommodating the shape of the containers C. Alternatively, the edges of the side panels 222, 230 could have a different shape to correspond to a different container shape or to reflect a particular logo, or the edges could be straight. The blank 203 could be otherwise shaped, arranged, and/or configured without departing from the disclosure.

[0026] Fig. 8 is a plan view of an exterior surface 402 of a blank 403 for forming a carrier (not shown) according to a third embodiment of the disclosure. The third embodiment is generally similar to the second embodiment, except for variations noted and variations that will be apparent to one of ordinary skill in the art. Accordingly, similar or identical features of the embodiments have been given like or similar reference numbers. As shown in Fig. 8, the blank 403 has different locking features for interlocking the bottom panels 426, 434. The second bottom panel 434 can include three secondary locking tabs 458 that are generally aligned with the respective primary locking tabs 454. The first bottom panel 426 can include an inner primary female locking edge 452a and an inner slit 456a for receiving the respective inner primary male locking tab 454 and inner secondary male locking tab 458. Additionally, the first bottom panel 426 can include outer primary female locking edges 452b and outer secondary female locking edges 456b adjacent a respective opening 455. An outer retention tab 457 can be foldably connected to the first bottom panel 426 along a respective longitudinal fold line 459 and can include respective curved folds 461. Accordingly, when the outer primary male locking tabs 454 engage the respective outer primary female locking edges 452b and the outer secondary male locking tabs 458 engage the respective outer sec-

ondary female locking edges 456b, the respective outer retention tabs 457 are folded inwardly into the interior of the carrier (not shown) to engage and/or to help retain a respectively adjacent container C. Any of the locking features of the bottom panels 426, 434 could be omitted or could be otherwise shaped, arranged, positioned, and/or configured without departing from the disclosure. Additionally, the blank 403 could be otherwise shaped, arranged, and/or configured without departing from the disclosure.

[0027] Fig. 9 is a plan view of an exterior surface 602 of a blank 603 for forming a carrier (not shown) according to a fourth embodiment of the disclosure. The fourth embodiment is generally similar to the third embodiment, except for variations noted and variations that will be apparent to one of ordinary skill in the art. Accordingly, similar or identical features of the embodiments have been given like or similar reference numbers. As shown in Fig. 9, the blank 603 includes side panels 22, 30 with generally straight free edges similar or identical to the first embodiment (Fig. 1), retention features 211 in the first side panel 22 and the first bottom panel 426 that are similar to the second embodiment (Fig. 7), and locking features for interlocking the bottom panels 426, 434 similar or identical to the third embodiment (Fig. 8). Additionally, the blank 603 can include bottom retention features 611 in the second side panel 30 and the second bottom panel 434. The bottom retention features 611 can include retention tabs 264 similar to those in the second embodiment (Fig. 7) and corner retainers 74 similar to those in the first embodiment (Figs. 1 and 2). As shown in Fig. 9, the retention flaps 264 of the retention features 211, 611 are generally the same as the retention flaps 264 of the blanks 203, 403 of the second and third embodiments except that the retention flaps in the blank 603 are relatively smaller than the retention flaps 264 of the blanks 203, 403. The blank 603 could be otherwise shaped, arranged, and/or configured without departing from the disclosure.

[0028] Any of the features of the various embodiments of the disclosure can be combined with, replaced by, or otherwise configured with other features of other embodiments of the disclosure without departing from the scope of this disclosure. Further, it is noted that the retention features and/or the container configurations of the various embodiments can be incorporated into a carton or carrier having any carton style or panel configuration. The carrier styles and panel configurations described above are included by way of example. Additionally, the shapes of the retention features can be substantially any shape. The shapes described above and included in the figures are included by way of example.

[0029] In general, the blanks according to the present disclosure can be constructed from paperboard having a caliper so that it is heavier and more rigid than ordinary paper. The blanks can also be constructed of other materials, such as cardboard, or any other material having properties suitable for enabling the carton to function at

least generally as described above. The blanks can be coated with, for example, a clay coating. The clay coating may then be printed over with product, advertising, and other information or images. The blanks may then be coated with a varnish to protect information printed on the blanks. The blanks may also be coated with, for example, a moisture barrier layer, on either or both sides of the blanks. The blanks can also be laminated to or coated with one or more sheet-like materials at selected panels or panel sections.

[0030] In accordance with the exemplary embodiments, a fold line can be any substantially linear, although not necessarily straight, form of weakening that facilitates folding therealong. More specifically, but not for the purpose of narrowing the scope of the present disclosure, fold lines include: a score line, such as lines formed with a blunt scoring knife, or the like, which creates a crushed or depressed portion in the material along the desired line of weakness; a cut that extends partially into a material along the desired line of weakness, and/or a series of cuts that extend partially into and/or completely through the material along the desired line of weakness; and various combinations of these features. In situations where cutting is used to create a fold line, typically the cutting will not be overly extensive in a manner that might cause a reasonable user to incorrectly consider the fold line to be a tear line.

[0031] The above embodiments may be described as having one or more panels adhered together by glue during erection of the carton embodiments. The term "glue" is intended to encompass all manner of adhesives commonly used to secure carton panels in place.

[0032] The foregoing description of the disclosure illustrates and describes various exemplary embodiments. Various additions, modifications, changes, etc., could be made to the exemplary embodiments without departing from the scope of the disclosure. It is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense. Additionally, the disclosure shows and describes only selected embodiments of the disclosure, but the disclosure is capable of use in various other combinations, modifications, and environments and is capable of changes or modifications within the scope of the inventive concept which is defined by the appended claims.

Claims

1. A carrier (5) for at least partially holding a plurality of articles (C), the carrier (5) comprising
 - a plurality of panels (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) that extends at least partially around an interior of the carrier (5), the plurality of panels (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) comprising at least a top panel (20), a

- side panel (22, 30, 222, 230), and a bottom panel (26, 34, 226, 234, 426, 434);
a plurality of article receiver features (9) disposed in at least the top panel (20) in at least a first row (R1, R3) and a second row (R2), each article receiver feature (9) of the plurality of article receiver features (9) being for at least partially receiving a respective article (C) of the plurality of articles (C); and
a retention feature (11, 211, 611) extending in at least one of the side panel (22, 30, 222, 230) and the bottom panel (26, 34, 226, 234, 426, 434), the retention feature (11, 211, 611) being for at least partially retaining at least one article (C) that is at least partially received in a respective one of the article receiver features (9) in the first row (R1, R3),
characterized in that the first row (R1, R3) comprises at least one more article receiver feature (9) than the second row (R2).
2. The carrier (5) of claim 1, wherein the first row (R1, R3) is disposed adjacent the side panel (22, 30, 222, 230) and the second row (R2) is spaced apart from the side panel (22, 30, 222, 230) by the first row (R1, R3).
 3. The carrier (5) of claim 1, wherein the article receiver features (9) of the plurality of article receiver features (9) are arranged in the first row (R1), the second row (R2), and a third row (R3), the third row (R3) comprising at least one more article receiver feature (9) than the second row (R2).
 4. The carrier (5) of claim 3, wherein the side panel (22, 30, 222, 230) is a first side panel (22, 222), the plurality of panels (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) further comprises a second side panel (30, 230) disposed opposite to the first side panel (22, 222), the first row (R1) is disposed adjacent the first side panel (22, 222), the third row (R3) is disposed adjacent the second side panel (30, 230), and the second row (R2) is spaced from the first side panel (22, 222) and the second side panel (30, 230) by the respective first row (R1) and third row (R3).
 5. The carrier (5) of claim 3, wherein:

the side panel (22, 30, 222, 230) is a first side panel (22, 222), the bottom panel (26, 34, 226, 234, 426, 434) is a first bottom panel (26, 226, 426), the retention feature (11, 211, 611) is a first retention feature (11, 211, 611);
the plurality of panels (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) further comprises a second side panel (30, 230) and a second bottom panel (34, 234, 434), and a second retention feature (11, 211, 611) extends in at least one of the second side panel (30, 230) and the second bottom panel (26, 226, 426); and
the second retention feature (11, 211, 611) is for at least partially retaining at least one article (C) that is at least partially received in a respective one of the article receiver features (9) in the third row (R3).
 6. The carrier (5) of claim 3, wherein the article receiver features (9) of the second row (R2) are staggered with respect to the article receiver features (9) of the first row (R1) and the third row (R3).
 7. The carrier (5) of claim 6, wherein the article receiver features (9) of the second row (R2) are offset from the article receiver features (9) of the first row (R1) and the third row (R3) so that a respective center (A) of each article receiver feature (9) of the second row (R2) is disposed generally halfway between two of the article receiver features (9) in the first row (R1) and between two of the article receiver features (9) of the third row (R3).
 8. The carrier (5) of claim 1, wherein the article receiver features (9) of the second row (R2) are staggered with respect to the article receiver features (9) of the first row (R1, R3).
 9. The carrier (5) of claim 8, wherein the article receiver features (9) of the second row (R2) are offset from the article receiver features (9) of the first row (R1, R3) so that a respective center (A) of each article receiver feature (9) of the second row (R2) is disposed generally halfway between two adjacent article receiver features (9) in the first row (R1, R3).
 10. The carrier (5) of claim 1, wherein the retention feature (11, 211, 611) comprises a corner retainer (74) for at least partially retaining an article (C) disposed adjacent the side panel (22, 30, 222, 230) and an end (6, 8) of the carrier (5).
 11. The carrier (5) of claim 10, wherein the retention feature (11, 211, 611) comprises a retention panel (76) foldably connected to at least one of the side panel (22, 30, 222, 230) and the bottom panel (26, 34, 226, 234, 426, 434), a first gusset panel (80) foldably connected to the retention panel (76), and a second gusset panel (84) foldably connected to the first gusset panel (80) and the bottom panel (26, 34, 226, 234, 426, 434), the retention panel (76) extending at least partially over the end (6, 8) of the carrier (5).
 12. The carrier (5) of claim 11, wherein the first gusset panel (80) and the second gusset panel (84) are at least partially in face-to-face contact with one another and are for being at least partially disposed between the bottom panel (26, 34, 226, 234, 426, 434)

and an article (C) of the plurality of articles (C).

13. The carrier (5) of claim 1, wherein the retention feature (11, 211, 611) comprises two retention tabs (64, 264) foldably connected to at least one of the side panel (22, 30, 222, 230) and the bottom panel (26, 34, 226, 234, 426, 434) adjacent a corner opening (66). 5
14. A blank (3, 203, 403, 603) for forming a carrier (5) 10
for holding a plurality of articles (C), the blank (3, 203, 403, 603) comprising:
a plurality of panels (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) comprising at least a top panel (20), a side panel (22, 30, 222, 230), and a bottom panel (26, 34, 226, 234, 426, 434); 15
a plurality of article receiver features (9) disposed in at least the top panel (20) in at least a first row (R1, R3) and a second row (R2), each article receiver feature (9) of the plurality of article receiver features (9) being for at least partially receiving a respective article (C) of the plurality of articles (C) when the carrier (5) is formed from the blank (3, 203, 403, 603); and 20
a retention feature (11, 211, 611) extending in at least one of the side panel (22, 30, 222, 230) and the bottom panel (26, 34, 226, 234, 426, 434), the retention feature (11, 211, 611) being for at least partially retaining at least one article (C) that is at least partially received in a respective one of the article receiver features (9) in the first row (R1, R3) when the carrier (5) is formed from the blank (3, 203, 403, 603), 25
characterized in that the first row (R1, R3) comprises at least one more article receiver feature (9) than the second row (R2). 30
15. The blank (3, 203, 403, 603) of claim 14, wherein the first row (R1, R3) is disposed adjacent the side panel (22, 30, 222, 230) and the second row (R2) is spaced apart from the side panel (22, 30, 222, 230) by the first row (R1, R3). 35
16. The blank (3, 203, 403, 603) of claim 14, wherein the article receiver features (9) of the plurality of article receiver features (9) are arranged in the first row (R1), the second row (R2), and a third row (R3), the third row (R3) comprising at least one more article receiver feature (9) than the second row (R2). 40
17. The blank (3, 203, 403, 603) of claim 16, wherein the side panel (22, 30, 222, 230) is a first side panel (22, 222), the plurality of panels (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) further comprises a second side panel (30, 230) disposed on an opposite side of the top panel (20) from the first side panel (22, 222), the first row (R1) is disposed adjacent the 45

first side panel (22, 222), the third row (R3) is disposed adjacent the second side panel (30, 230), and the second row (R2) is spaced from the first side panel (22, 222) and the second side panel (30, 230) by the respective first row (R1) and third row (R3).

18. The blank (3, 203, 403, 603) of claim 16, wherein:
the side panel (22, 30, 222, 230) is a first side panel (22, 222), the bottom panel (26, 34, 226, 234, 426, 434) is a first bottom panel (26, 226, 426), the retention feature (11, 211, 611) is a first retention feature (11, 211, 611);
the plurality of panels (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) further comprises a second side panel (30, 230) and a second bottom panel (34, 234, 434), and a second retention feature (11, 211, 611) extends in at least one of the second side panel (30, 230) and the second bottom panel (34, 234, 434); and
the second retention feature (11, 211, 611) is for at least partially retaining at least one article (C) that is at least partially received in a respective one of the article receiver features (9) in the third row (R3) when the carrier (5) is formed from the blank (3, 203, 403, 603). 50
19. The blank (3, 203, 403, 603) of claim 16, wherein the article receiver features (9) of the second row (R2) are staggered with respect to the article receiver features (9) of the first row (R1) and the third row (R3), the article receiver features (9) of the second row (R2) are offset from the article receiver features (9) of the first row (R1) and the third row (R3) so that a respective center (A) of each article receiver feature (9) of the second row (R2) is disposed generally halfway between two of the article receiver features (9) in the first row (R1) and between two of the article receiver features (9) of the third row (R3). 55
20. The blank (3, 203, 403, 603) of claim 14, wherein the article receiver features (9) of the second row (R2) are staggered with respect to the article receiver features (9) of the first row (R1, R3), the article receiver features (9) of the second row (R2) are offset from the article receiver features (9) of the first row (R1, R3) so that a respective center (A) of each article receiver feature (9) of the second row (R2) is disposed generally halfway between two adjacent article receiver features (9) in the first row (R1, R3).
21. The blank (3, 203, 403, 603) of claim 14, wherein the retention feature (11, 211, 611) comprises a corner retainer (74) for at least partially retaining an article (C) disposed adjacent the side panel (22, 30, 222, 230) and an end (6, 8) of the carrier (5) when the carrier (5) is formed from the blank (3, 203, 403, 603), the retention feature (11, 211, 611) comprises

a retention panel (76) foldably connected to at least one of the side panel (22, 30, 222, 230) and the bottom panel (26, 34, 226, 234, 426, 434), a first gusset panel (80) foldably connected to the retention panel (76), and a second gusset panel (84) foldably connected to the first gusset panel (80) and the bottom panel (26, 34, 226, 234, 426, 434).

22. The blank (3, 203, 403, 603) of claim 14, wherein the retention feature (11, 211, 611) comprises two retention tabs (64, 264) foldably connected to at least one of the side panel (22, 30, 222, 230) and the bottom panel (26, 34, 226, 234, 426, 434) adjacent a corner opening (66).

23. A method of forming the carrier of claim 1, the method comprising:

obtaining a plurality of articles (C) and a blank (3, 203, 403, 603) comprising the plurality of panels (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) and the plurality of article receiver features (9) disposed in at least the top panel (20); arranging the articles (C) of the plurality of articles (C) in at least the first row (R1, R3) and the second row (R2), the first row (R1, R3) comprising at least one more article (C) than the second row (R2); and forming the carrier (5) from the blank (3, 203, 403, 603) by positioning the top panel (20) relative to the articles (C) of the plurality of articles (C) so that each article receiver feature (9) of the plurality of article receiver features (9) at least partially receives a top portion (N) of a respective article (C) of the plurality of articles (C) and wrapping the plurality of panels (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) at least partially around the plurality of articles (C), the carrier (5) having substantially open ends (6, 8).

24. The method of claim 23, wherein the arranging the articles (C) further comprises positioning the articles (C) in the second row (R2) to be nested with the articles (C) in the first row (R1, R3).

25. The method of claim 23, wherein the arranging the articles (C) further comprises arranging the articles (C) in a third row (R3) and positioning the articles (C) in the second row (R2) to be nested with the articles (C) in the first row (R1) and the third row (R3).

26. The method of claim 23, wherein the wrapping the plurality of panels (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) comprises folding the side panel (22, 30, 222, 230) with respect to the top panel (20) to be positioned adjacent the articles (C) in the first row (R1, R3), the articles (C) in the second row (R2) being spaced from the side panel (22, 30, 222, 230) by the

first row (R1, R3).

27. The method of claim 23, wherein the bottom panel (26, 34, 226, 234, 426, 434) is foldably connected to the side panel (22, 30, 222, 230), and the forming the carrier (5) further comprising positioning the side panel (22, 30, 222, 230) and the bottom panel (26, 34, 226, 234, 426, 434) so that the retention feature (11, 211, 611) at least partially retains at least one article (C) in the first row (R1, R3).

Patentansprüche

1. Träger (5) zum wenigstens teilweisen Halten einer Vielzahl von Artikeln (C), wobei der Träger (5) umfasst:

eine Vielzahl von Feldern (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434), die sich wenigstens teilweise um ein Inneres des Trägers (5) erstrecken, wobei die Vielzahl von Feldern (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) wenigstens ein Deckfeld (20), ein Seitenfeld (22, 30, 222, 230) und ein Bodenfeld (26, 34, 226, 234, 426, 434) umfasst;

eine Vielzahl von Articlempfängermerkmalen (9), die in wenigstens dem Deckfeld (20) in wenigstens einer ersten Reihe (R1, R3) und einer zweiten Reihe (R2) angeordnet ist, wobei jedes Articlempfängermerkmal (9) der Vielzahl von Articlempfängermerkmalen (9) zum wenigstens teilweisen Empfangen eines jeweiligen Artikels (C) der Vielzahl von Artikeln (C) bestimmt ist; und

ein Rückhaltermerkmal (11, 211, 611), das sich in wenigstens eines der Seitenfelder (22, 30, 222, 230) und des Bodenfeldes (26, 34, 226, 234, 426, 434) erstreckt, wobei das Rückhaltermerkmal (11, 211, 611) für das wenigstens teilweise Halten wenigstens eines Artikels (C) bestimmt ist, der wenigstens teilweise von jeweils einem der Artikelrückhaltermerkmale (9) in der ersten Reihe (R1, R3) empfangen wird,

dadurch gekennzeichnet, dass die erste Reihe (R1, R3) wenigstens ein Articlempfangsmerkmal (9) mehr als die zweite Reihe (R2) umfasst.

2. Träger (5) nach Anspruch 1, wobei die erste Reihe (R1, R3) angrenzend zum Seitenfeld (22, 30, 222, 230) angeordnet ist und die zweite Reihe (R2) vom Seitenfeld (22, 30, 222, 230) durch die erste Reihe (R1, R3) beabstandet ist.

3. Träger (5) nach Anspruch 1, wobei die Articlempfängermerkmale (9) der Vielzahl von Articlempfängermerkmalen (9) in der ersten Reihe (R1), der zwei-

ten Reihe (R2) und einer dritten Reihe (R3) angeordnet sind, wobei die dritte Reihe (R3) wenigstens ein Arteikelempfängermerkmal (9) mehr als die zweite Reihe (R2) aufweist.

4. Träger (5) nach Anspruch 3, wobei das Seitenfeld (22, 30, 222, 230) ein erstes Seitenfeld (22, 222) ist, wobei die Vielzahl der Felder (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) ferner ein zweites Seitenfeld (30, 230), das gegenüber dem ersten Seitenfeld (22, 222) angeordnet ist, umfasst, wobei die erste Reihe (R1) angrenzend zum ersten Seitenfeld (22, 222) angeordnet ist, die dritte Reihe (R3) angrenzend zum zweiten Seitenfeld (30, 230) angeordnet ist und die zweite Reihe (R2) beabstandet vom ersten Seitenfeld (22, 222) und vom zweiten Seitenfeld (30, 230) durch die jeweilige erste Reihe (R1) und dritte Reihe (R3) ist.

5. Träger (5) nach Anspruch 3, wobei:

das Seitenfeld (22, 30, 222, 230) ein erstes Seitenfeld (22, 222) ist, das Bodenfeld (26, 34, 226, 234, 426, 434) ein erstes Bodenfeld (26, 226, 426) ist, das Rückhaltermerkmal (11, 211, 611) ein erstes Rückhaltermerkmal (11, 211, 611) ist; die Vielzahl der Felder (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) ferner ein zweites Seitenfeld (30, 230) und ein zweites Bodenfeld (34, 234, 434) umfasst und ein zweites Rückhaltermerkmal (11, 211, 611) sich in wenigstens einem des zweiten Seitenfeldes (30, 230) und des zweiten Bodenfeldes (26, 226, 426) erstreckt; und

das zweite Rückhaltermerkmal (11, 211, 611) für das wenigstens teilweise Halten wenigstens eines Artikels (C) bestimmt ist, der wenigstens teilweise in jeweils einem der Artikelrückhaltermerkmale (9) in der dritten Reihe (R3) empfangen wird.

6. Träger (5) nach Anspruch 3, wobei die Arteikelempfängermerkmale (9) der zweiten Reihe (R2) in Bezug auf die Arteikelempfängermerkmale (9) der ersten Reihe (R1) und der dritten Reihe (R3) versetzt angeordnet sind.

7. Träger (5) nach Anspruch 6, wobei die Arteikelempfängermerkmale (9) der zweiten Reihe (R2) von den Arteikelempfängermerkmalen (9) der ersten Reihe (R1) und der dritten Reihe (R3) versetzt sind, sodass ein jeweiliges Zentrum (A) jedes Arteikelempfängermerkmals (9) der zweiten Reihe (R2) im Allgemeinen auf halber Strecke zwischen zwei der Arteikelempfängermerkmale (9) in der ersten Reihe (R1) und zwischen zwei der Arteikelempfängermerkmale (9) der dritten Reihe (R3) angeordnet ist.

8. Träger (5) nach Anspruch 1, wobei die Arteikelempfängermerkmale (9) der zweiten Reihe (R2) in Bezug auf die Arteikelempfängermerkmale (9) der ersten Reihe (R1, R3) versetzt angeordnet sind.

9. Träger (5) nach Anspruch 8, wobei die Arteikelempfängermerkmale (9) der zweiten Reihe (R2) von den Arteikelempfängermerkmalen (9) der ersten Reihe (R1, R3) versetzt sind, sodass ein jeweiliges Zentrum (A) jedes Arteikelempfängermerkmals (9) der zweiten Reihe (R2) im Allgemeinen auf halber Strecke zwischen zwei angrenzenden Arteikelempfängermerkmalen (9) in der ersten Reihe (R1, R3) angeordnet ist.

10. Träger (5) nach Anspruch 1, wobei das Rückhaltermerkmal (11, 211, 611) eine Eckenhalterung (74) zum wenigstens teilweisen Halten eines Artikels (C) umfasst, der angrenzend zu dem Seitenfeld (22, 30, 222, 230) und einem Ende (6, 8) des Trägers (5) angeordnet ist.

11. Träger (5) nach Anspruch 10, wobei das Rückhaltermerkmal (11, 211, 611) ein Rückhalterfeld (76) umfasst, das faltbar mit wenigstens einem des Seitenfeldes (22, 30, 222, 230) und des Bodenfeldes (26, 34, 226, 234, 426, 434) verbunden ist, wobei ein erstes Zwickelfeld (80) faltbar mit dem Rückhalterfeld (76) verbunden ist und ein zweites Zwickelfeld (84) faltbar mit dem ersten Zwickelfeld (80) und dem Bodenfeld (26, 34, 226, 234, 426, 434) verbunden ist, wobei sich das Rückhalterfeld (76) wenigstens teilweise über das Ende (6, 8) des Trägers (5) erstreckt.

12. Träger (5) nach Anspruch 11, wobei das erste Zwickelfeld (80) und das zweite Zwickelfeld (84) wenigstens teilweise in direktem Kontakt miteinander stehen und wenigstens teilweise zwischen dem Bodenfeld (26, 34, 226, 234, 426, 434) und einem Artikel (C) der Vielzahl von Artikeln (C) angeordnet sind.

13. Träger (5) nach Anspruch 1, wobei das Rückhaltermerkmal (11, 211, 611) zwei Rückhaltelaschen (64, 264) umfasst, die faltbar mit wenigstens einem aus Seitenfeld (22, 30, 222, 230) und aus Bodenfeld (26, 34, 226, 234, 426, 434) angrenzend einer Ecköffnung (66) verbunden sind.

14. Zuschnitt (3, 203, 403, 603) zum Bilden eines Trägers (5) zum Halten einer Vielzahl von Artikeln (C), wobei der Zuschnitt (3, 203, 403, 603) umfasst:

eine Vielzahl von Feldern (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434), die wenigstens ein Deckelfeld (20), ein Seitenfeld (22, 30, 222, 230) und ein Bodenfeld (26, 34, 226, 234, 426, 434) umfasst;
eine Vielzahl von Arteikelempfängermerkmalen

- (9), die wenigstens im Deckelfeld (20) in wenigstens einer ersten Reihe (R1, R2) und einer zweiten Reihe (R2) angeordnet ist, wobei jedes der Articlempfängermerkmale (9) der Vielzahl von Articlempfängermerkmalen (9) zum wenigstens teilweisen Empfangen eines jeweiligen Artikels (C) der Vielzahl von Artikeln (C) bestimmt ist, wenn der Träger (5) aus dem Zuschnitt (3, 203, 403, 603) gebildet wird; und ein Rückhaltermerkmal (11, 211, 611), das sich in wenigstens einem des Seitenfeldes (22, 30, 222, 230) und des Bodenfeldes (26, 34, 226, 234, 426, 434) erstreckt, wobei das Rückhaltermerkmal (11, 211, 611) wenigstens teilweise für das Halten wenigstens eines Artikels (C) bestimmt ist, der wenigstens teilweise in jeweils einem der Articlempfängermerkmale (9) in der ersten Reihe (R1, R3) empfangen wird, wenn der Träger (5) aus dem Zuschnitt (3, 203, 403, 603) gebildet wird,
- dadurch gekennzeichnet, dass** die erste Reihe (R1, R3) wenigstens ein Articlempfängermerkmal (9) mehr umfasst als die zweite Reihe (R2).
15. Zuschnitt (3, 203, 403, 603) nach Anspruch 14, wobei die erste Reihe (R1, R3) angrenzend zum Seitenfeld (22, 30, 222, 230) angeordnet ist und die zweite Reihe (R2) von dem Seitenfeld (22, 30, 222, 230) durch die erste Reihe (R1, R3) beabstandet ist.
16. Zuschnitt (3, 203, 403, 603) nach Anspruch 14, wobei die Articlempfängermerkmale (9) der Vielzahl von Articlempfängermerkmalen (9) angeordnet in der ersten Reihe (R1), der zweiten Reihe (R2) und einer dritten Reihe (R3) sind, wobei die dritte Reihe (R3) wenigstens ein Articlempfängermerkmal (9) mehr als die zweite Reihe (R2) umfasst.
17. Zuschnitt (3, 203, 403, 603) nach Anspruch 16, wobei das Seitenfeld (22, 30, 222, 230) ein erstes Seitenfeld (22, 222) ist, wobei die Vielzahl von Feldern (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) ferner ein zweites Seitenfeld (30, 230) umfasst, das gegenüber des Deckelfeldes (20) von dem ersten Seitenfeld (22, 222) angeordnet ist, wobei die erste Reihe (R1) angrenzend zum ersten Seitenfeld (22, 222) angeordnet ist, die dritte Reihe (R3) angrenzend zum zweiten Seitenfeld (30, 230) angeordnet ist und die zweite Reihe (R2) vom ersten Seitenfeld (22, 222) und vom zweiten Seitenfeld (30, 230) durch die jeweilige aus erster Reihe (R1) und aus dritter Reihe (R3) beabstandet ist.
18. Zuschnitt (3, 203, 403, 603) nach Anspruch 16, wobei:
- das Seitenfeld (22, 30, 222, 230) ein erstes Seitenfeld (22, 222) ist, das Bodenfeld (26, 34, 226, 234, 426, 434) ein erstes Bodenfeld (26, 226, 426) ist, das Rückhaltermerkmal (11, 211, 611) ein erstes Rückhaltermerkmal (11, 211, 611) ist; die Vielzahl von Feldern (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) ferner ein zweites Seitenfeld (30, 230) und ein zweites Bodenfeld (34, 234, 434) und ein zweites Rückhaltermerkmal (11, 211, 611), das sich in wenigstens einem des zweiten Seitenfeldes (30, 230) und des zweiten Bodenfeldes (34, 234, 434) erstreckt, umfasst; und das zweite Rückhaltermerkmal (11, 211, 611) für das wenigstens teilweise Halten wenigstens eines Artikels (C) vorgesehen ist, der wenigstens teilweise in jeweils einem der Articlempfängermerkmale (9) in der dritten Reihe (R3) empfangen wird, wenn der Träger (5) durch den Zuschnitt (3, 203, 403, 603) gebildet wird.
19. Zuschnitt (3, 203, 403, 603) nach Anspruch 16, wobei die Articlempfängermerkmale (9) der zweiten Reihe (R2) in Bezug auf die Articlempfängermerkmale (9) der ersten Reihe (R1) und der dritten Reihe (R3) versetzt angeordnet sind, wobei die Articlempfängermerkmale (9) der zweiten Reihe (R2) von den Articlempfängermerkmalen (9) der ersten Reihe (R1) und der dritten Reihe (R3) so versetzt sind, dass ein jeweiliges Zentrum (A) jedes Articlempfängermerkmals (9) der zweiten Reihe (R2) im Allgemeinen auf halber Strecke zwischen zwei der Articlempfängermerkmale (9) in der ersten Reihe (R1) und zwischen zwei der Articlempfängermerkmale (9) der dritten Reihe (R3) angeordnet ist.
20. Zuschnitt (3, 203, 403, 603) nach Anspruch 14, wobei die Articlempfängermerkmale (9) der zweiten Reihe (R2) in Bezug auf die Articlempfängermerkmale (9) der ersten Reihe (R1, R3) versetzt sind, wobei die Articlempfängermerkmale (9) der zweiten Reihe (R2) zu den Articlempfängermerkmalen (9) der ersten Reihe (R1, R3) so versetzt sind, dass ein jeweiliges Zentrum (A) jedes Articlempfängermerkmals (9) der zweiten Reihe (R2) im Allgemeinen auf halber Strecke zwischen zwei angrenzenden Articlempfängermerkmalen (9) in der ersten Reihe (R1, R3) angeordnet ist.
21. Zuschnitt (3, 203, 403, 603) nach Anspruch 14, wobei das Rückhaltermerkmal (11, 211, 611) eine Eckenhalterung (74) für das wenigstens teilweise Halten eines Artikels (C) umfasst, die angrenzend zum Seitenfeld (22, 30, 222, 230) und einem Ende (6, 8) des Trägers (5) angeordnet ist, wenn der Träger (5) aus dem Zuschnitt (3, 203, 403, 603) gebildet wird, wobei das Rückhaltermerkmal (11, 211, 611) ein Rückhaltefeld (76), das faltbar mit wenigstens einem aus Seitenfeld (22, 30, 222, 230) und aus Bo-

denfeld (26, 34, 226, 234, 426, 434) verbunden ist, ein erstes Zwickelfeld (80), das faltbar mit dem Rückhaltefeld (76) verbunden ist, und ein zweites Zwickelfeld (84) umfasst, das faltbar mit dem ersten Zwickelfeld (80) und dem Bodenfeld (26, 34, 226, 234, 426, 434) verbunden ist.

22. Zuschnitt (3, 203, 403, 603) nach Anspruch 14, wobei das Rückhaltemerkmal (11, 211, 611) zwei Rückhaltelaschen (64, 264) umfasst, die faltbar mit wenigstens einem aus Seitenfeld (22, 30, 222, 230) und aus Bodenfeld (26, 34, 226, 234, 426, 434) angrenzend einer Ecköffnung (66) verbunden sind.

23. Verfahren zum Bilden des Trägers nach Anspruch 1, wobei das Verfahren umfasst:

Erhalten einer Vielzahl von Artikeln (C) und eines Zuschnitts (3, 203, 403, 603), der die Vielzahl von Feldern (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) und die Vielzahl von Artikel-empfängermerkmalen (9) umfasst, die in wenigstens dem Deckelfeld (20) angeordnet sind; Anordnen der Artikel (C) der Vielzahl von Artikeln (C) in wenigstens der ersten Reihe (R1, R3) und der zweiten Reihe (R2), wobei die erste Reihe (R1, R3) wenigstens einen Artikel (C) mehr als die zweite Reihe (R2) umfasst; und Bilden des Trägers (5) aus dem Zuschnitt (3, 203, 403, 603) durch das Positionieren des Deckelfeldes (20) relativ zu den Artikeln (C) der Vielzahl von Artikeln (C), sodass jedes der Artikel-empfängermerkmale (9) der Vielzahl von Artikel-empfängermerkmalen (9) wenigstens teilweise einen oberen Abschnitt (N) eines jeweiligen Artikels (C) der Vielzahl von Artikeln (C) empfängt und Umwickeln der Vielzahl von Felder (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) wenigstens teilweise um die Vielzahl von Artikel (C), wobei der Träger (5) im Wesentlichen offene Enden (6, 8) aufweist.

24. Verfahren nach Anspruch 23, wobei das Anordnen der Artikel (C) ferner das Positionieren der Artikel (C) in der zweiten Reihe (R2) umfasst, um mit den Artikeln (C) in der ersten Reihe (R1, R3) verschachtelt zu sein.

25. Verfahren nach Anspruch 23, wobei das Anordnen der Artikel (C) ferner das Anordnen der Artikel (C) in einer dritten Reihe (R3) und das Positionieren der Artikel (C) in der zweiten Reihe (R2) umfasst, um mit den Artikeln (C) in der ersten Reihe (R1) und der dritten Reihe (R3) verschachtelt zu sein.

26. Verfahren nach Anspruch 23, wobei das Umwickeln der Vielzahl der Felder (20, 22, 26, 30, 34, 222, 226, 230, 234, 426, 434) das Falten des Seitenfeldes (22,

30, 222, 230) in Bezug auf das Deckelfeld (20) umfasst, um angrenzend zu den Artikeln (C) in der ersten Reihe (R1, R3) positioniert zu sein, wobei die Artikel (C) in der zweiten Reihe (R2) vom Seitenfeld (22, 30, 222, 230) durch die erste Reihe (R1, R3) beabstandet sind.

27. Verfahren nach Anspruch 23, wobei das Bodenfeld (26, 34, 226, 234, 426, 434) faltbar mit dem Seitenfeld (22, 30, 222, 230) verbunden ist und das Bilden des Trägers (5) ferner das Positionieren des Seitenfeldes (22, 30, 222, 230) und des Bodenfeldes (26, 34, 226, 234, 426, 434) so umfasst, dass das Rückhaltemerkmal (11, 211, 611) wenigstens teilweise wenigstens einen Artikel (C) in der ersten Reihe (R1, R3) hält.

Revendications

- Dispositif de transport (5) destiné à contenir une pluralité de conteneurs (C), le dispositif de transport (5) comprenant
une pluralité de panneaux (20, 22, 26, 30, 34, 222, 226, 230, 234, 434) s'étendant au moins partiellement autour d'un intérieur du dispositif de transport (5), la pluralité de panneaux (20, 22, 26, 30, 34, 222, 226, 230, 234, 434) comprenant au moins un panneau supérieur (20), un panneau latéral (22, 30, 222, 230) et un panneau inférieur (26, 34, 226, 234, 426, 434) ;
une pluralité d'éléments de réception d'article (9) disposés au moins dans le panneau supérieur (20) dans au moins une première rangée (R1, R3) et une deuxième rangée (R2), chaque élément de réception d'article (9) parmi la pluralité d'éléments de réception d'article (9) étant destiné à recevoir au moins partiellement un article (C) respectif de la pluralité d'articles (C) ; et
un élément de retenue (11, 211, 611) s'étendant dans l'un au moins parmi le panneau latéral (22, 30, 222, 230) et le panneau inférieur (26, 34, 226, 234, 426, 434), l'élément de retenue (11, 211, 611) étant destiné à retenir au moins partiellement au moins un article (C) au moins partiellement reçu dans l'un respectif des éléments de réception d'article (9) dans la première rangée (R1, R3),
caractérisé en ce que la première rangée (R1, R3) comprend au moins un élément de réception d'article (9) de plus que la deuxième rangée (R2).
- Dispositif de transport (5) selon la revendication 1, dans lequel la première rangée (R1, R3) est disposée à côté du panneau latéral (22, 30, 222, 230) et la deuxième rangée (R2) est espacée du panneau latéral (22, 30, 222, 230) par la première rangée (R1, R3).

3. Dispositif de transport (5) selon la revendication 1, dans lequel les éléments de réception d'article (9) parmi la pluralité d'éléments de réception d'article (9) sont disposés dans la première rangée (R1), la deuxième rangée (R2) et une troisième rangée (R3), la troisième rangée (R3) comprenant au moins un élément de réception d'article (9) de plus que la deuxième rangée (R2). 5
4. Dispositif de transport (5) selon la revendication 3, dans lequel le panneau latéral (22, 30, 222, 230) est un premier panneau latéral (22, 222), la pluralité de panneaux (20, 22, 26, 30, 34, 222, 226, 230, 234, 434) comprend en outre un deuxième panneau latéral (30, 230) disposé à l'opposé du premier panneau latéral (22, 222), la première rangée (R1) est disposée à côté du premier panneau latéral (22, 222), la troisième rangée (R3) est disposée à côté du deuxième panneau latéral (30, 230), et la deuxième rangée (R2) est espacée du premier panneau latéral (22, 222) et du deuxième panneau latéral (30, 230) par la première rangée (R1) et la troisième rangée (R3) respectives. 10
5. Dispositif de transport (5) selon la revendication 3, dans lequel : 25

le panneau latéral (22, 30, 222, 230) est un premier panneau latéral (22, 222), le panneau inférieur (26, 34, 226, 234, 426, 434) est un premier panneau inférieur (26, 226, 426), l'élément de retenue (11, 211, 611) est un premier élément de retenue (11, 211, 611) ; 30

la pluralité de panneaux (20, 22, 26, 30, 34, 222, 226, 230, 234, 434) comprend en outre un deuxième panneau latéral (30, 230) et un deuxième panneau inférieur (34, 234, 434), et un deuxième élément de retenue (11, 211, 611) s'étend dans l'un au moins parmi le deuxième panneau latéral (30, 230) et le deuxième panneau inférieur (26, 226, 426) ; et 35

le deuxième élément de retenue (11, 211, 611) est destiné à retenir au moins partiellement au moins un article (C) au moins partiellement reçu dans l'un respectif des éléments de réception d'article (9) dans la troisième rangée (R3). 40
6. Dispositif de transport (5) selon la revendication 3, dans lequel les éléments de réception d'article (9) de la deuxième rangée (R2) sont décalés par rapport aux éléments de réception d'article (9) de la première rangée (R1) et de la troisième rangée (R3). 45
7. Dispositif de transport (5) selon la revendication 6, dans lequel les éléments de réception d'article (9) de la deuxième rangée (R2) sont en retrait par rapport aux éléments de réception d'article (9) de la première rangée (R1) et de la troisième rangée (R3), 50
8. Dispositif de transport (5) selon la revendication 1, dans lequel les éléments de réception d'article (9) de la deuxième rangée (R2) sont décalés par rapport aux éléments de réception d'article (9) de la première rangée (R1, R3). 55
9. Dispositif de transport (5) selon la revendication 8, dans lequel les éléments de réception d'article (9) de la deuxième rangée (R2) sont en retrait par rapport aux éléments de réception d'article (9) de la première rangée (R1, R3), de telle façon qu'un centre (A) respectif de chaque élément de réception d'article (9) de la deuxième rangée (R2) est disposé généralement à mi-chemin entre deux éléments de réception d'article (9) de la première rangée (R1, R3). 60
10. Dispositif de transport (5) selon la revendication 1, dans lequel l'élément de retenue (11, 211, 611) comprend un moyen de retenue de coin (74) destiné à retenir au moins partiellement un article (C) disposé à côté du panneau latéral (22, 30, 222, 230) et d'une extrémité (6, 8) du dispositif de transport (5). 65
11. Dispositif de transport (5) selon la revendication 10, dans lequel l'élément de retenue (11, 211, 611) comprend un panneau de retenue (76) relié de façon pliable à l'un au moins parmi le panneau latéral (22, 30, 222, 230) et le panneau inférieur (26, 34, 226, 234, 426, 434), un premier panneau de soufflet (80) relié de façon pliable au panneau de retenue (76), et un deuxième panneau de soufflet (84) relié de façon pliable au premier panneau de soufflet (80) et au panneau inférieur (26, 34, 226, 234, 426, 434), le panneau de retenue (76) s'étendant au moins partiellement sur l'extrémité (6, 8) du dispositif de transport (5). 70
12. Dispositif de transport (5) selon la revendication 11, dans lequel le premier panneau de soufflet (80) et le deuxième panneau de soufflet (84) sont au moins partiellement en contact face à face l'un avec l'autre et destinés à être disposés au moins partiellement entre le panneau inférieur (26, 34, 226, 234, 426, 434) et un article (C) de la pluralité d'articles (C). 75
13. Dispositif de transport (5) selon la revendication 1, dans lequel l'élément de retenue (11, 211, 611) comprend deux pattes de retenue (64, 264) reliées de façon pliable à l'un au moins parmi le panneau latéral 80

(22, 30, 222, 230) et le panneau inférieur (26, 34, 226, 234, 426, 434) à côté d'une ouverture de coin (66) .

14. Découpe (3, 203, 403, 603) permettant de former un dispositif de transport (5) destiné à contenir une pluralité d'articles (C), la découpe (3, 203, 403, 603) comprenant :

une pluralité de panneaux (20, 22, 26, 30, 34, 222, 226, 230, 234, 434) comprenant au moins un panneau supérieur (20), un panneau latéral (22, 30, 222, 230) et un panneau inférieur (26, 34, 226, 234, 426, 434) ;

une pluralité d'éléments de réception d'article (9) disposés au moins dans le panneau supérieur (20) dans au moins une première rangée (R1, R3) et une deuxième rangée (R2), chaque élément de réception d'article (9) parmi la pluralité d'éléments de réception d'article (9) étant destiné à recevoir au moins partiellement un article (C) respectif de la pluralité d'articles (C) lorsque le dispositif de transport (5) est assemblé à partir de la découpe (3, 203, 403, 603) ; et un élément de retenue (11, 211, 611) s'étendant dans l'un au moins parmi le panneau latéral (22, 30, 222, 230) et le panneau inférieur (26, 34, 226, 234, 426, 434), l'élément de retenue (11, 211, 611) étant destiné à retenir au moins partiellement au moins un article (C) au moins partiellement reçu dans l'un respectif des éléments de réception d'article (9) dans la première rangée (R1, R3) lorsque le dispositif de transport (5) est assemblé à partir de la découpe (3, 203, 403, 603),

caractérisée en ce que la première rangée (R1, R3) comprend au moins un élément de réception d'article (9) de plus que la deuxième rangée (R2).

15. Découpe (3, 203, 403, 603) selon la revendication 14, dans laquelle la première rangée (R1, R3) est disposée à côté du panneau latéral (22, 30, 222, 230) et la deuxième rangée (R2) est espacée du panneau latéral (22, 30, 222, 230) par la première rangée (R1, R3).

16. Découpe (3, 203, 403, 603) selon la revendication 14, dans laquelle les éléments de réception d'article (9) parmi la pluralité d'éléments de réception d'article (9) sont disposés dans la première rangée (R1), la deuxième rangée (R2) et une troisième rangée (R3), la troisième rangée (R3) comprenant au moins un élément de réception d'article (9) de plus que la deuxième rangée (R2).

17. Découpe (3, 203, 403, 603) selon la revendication 16, dans laquelle le panneau latéral (22, 30, 222,

230) est un premier panneau latéral (22, 222), la pluralité de panneaux (20, 22, 26, 30, 34, 222, 226, 230, 234, 434) comprend en outre un deuxième panneau latéral (30, 230) disposé sur un côté opposé du panneau supérieur (20) par rapport au premier panneau latéral (22, 222), la première rangée (R1) est disposée à côté du premier panneau latéral (22, 222), la troisième rangée (R3) est disposée à côté du deuxième panneau latéral (30, 230), et la deuxième rangée (R2) est espacée du premier panneau latéral (22, 222) et du deuxième panneau latéral (30, 230) par la première rangée (R1) et la troisième rangée (R3) respectives.

18. Découpe (3, 203, 403, 603) selon la revendication 16, dans laquelle :

le panneau latéral (22, 30, 222, 230) est un premier panneau latéral (22, 222), le panneau inférieur (26, 34, 226, 234, 426, 434) est un premier panneau inférieur (26, 226, 426), l'élément de retenue (11, 211, 611) est un premier élément de retenue (11, 211, 611) ;

la pluralité de panneaux (20, 22, 26, 30, 34, 222, 226, 230, 234, 434) comprend en outre un deuxième panneau latéral (30, 230) et un deuxième panneau inférieur (34, 234, 434), et un deuxième élément de retenue (11, 211, 611) s'étend dans l'un au moins parmi le deuxième panneau latéral (30, 230) et le deuxième panneau inférieur (34, 234, 434) ; et

le deuxième élément de retenue (11, 211, 611) est destiné à retenir au moins partiellement au moins un article (C) au moins partiellement reçu dans l'un respectif des éléments de réception d'article (9) dans la troisième rangée (R3) lorsque le dispositif de transport (5) est assemblé à partir de la découpe (3, 203, 403, 603).

19. Découpe (3, 203, 403, 603) selon la revendication 16, dans laquelle les éléments de réception d'article (9) de la deuxième rangée (R2) sont décalés par rapport aux éléments de réception d'article (9) de la première rangée (R1) et de la troisième rangée (R3), les éléments de réception d'article (9) de la deuxième rangée (R2) sont en retrait par rapport aux éléments de réception d'article (9) de la première rangée (R1) et de la troisième rangée (R3), de telle façon qu'un centre (A) respectif de chaque élément de réception d'article (9) de la deuxième rangée (R2) est disposé généralement à mi-chemin entre deux des éléments de réception d'article (9) dans la première rangée (R1) et entre deux des éléments de réception d'article (9) de la troisième rangée (R3).

20. Découpe (3, 203, 403, 603) selon la revendication 14, dans laquelle les éléments de réception d'article (9) de la deuxième rangée (R2) sont décalés par

rapport aux éléments de réception d'article (9) de la première rangée (R1, R3), les éléments de réception d'article (9) de la deuxième rangée (R2) sont en retrait par rapport aux éléments de réception d'article (9) de la première rangée (R1, R3), de telle façon qu'un centre (A) respectif de chaque élément de réception d'article (9) de la deuxième rangée (R2) est disposé généralement à mi-chemin entre deux des éléments de réception d'article (9) dans la première rangée (R1, R3).

21. Découpe (3, 203, 403, 603) selon la revendication 14, dans laquelle les éléments de retenue (11, 211, 611) comprennent un moyen de retenue de coin (74) destiné à retenir au moins partiellement un article (C) disposé à côté du panneau latéral (22, 30, 222, 230) et d'une extrémité (6, 8) du dispositif de transport (5) lorsque le dispositif de transport (5) est assemblé à partir de la découpe (3, 203, 403, 603), l'élément de retenue (11, 211, 611) comprend un panneau de retenue (76) relié de façon pliable à l'un au moins parmi le panneau latéral (22, 30, 222, 230) et le panneau inférieur (26, 34, 226, 234, 426, 434), un premier panneau de soufflet (80) relié de façon pliable au panneau de retenue (76), et un deuxième panneau de soufflet (84) relié de façon pliable au premier panneau de soufflet (80) et au panneau inférieur (26, 34, 226, 234, 426, 434).

22. Découpe (3, 203, 403, 603) selon la revendication 14, dans laquelle l'élément de retenue (11, 211, 611) comprend deux pattes de retenue (64, 264) reliées de façon pliable à l'un au moins parmi le panneau latéral (22, 30, 222, 230) et le panneau inférieur (26, 34, 226, 234, 426, 434) à côté d'une ouverture de coin (66).

23. Procédé pour la formation du dispositif de transport selon la revendication 1, le procédé comprenant :

l'obtention d'une pluralité d'articles (C) et d'une découpe (3, 203, 403, 603) comprenant la pluralité de panneaux (20, 22, 26, 30, 34, 222, 226, 230, 234, 434) et la pluralité d'éléments de réception d'article (9) disposés au moins dans le panneau supérieur (20) ;

la disposition des articles (C) de la pluralité d'articles (C) dans au moins une première rangée (R1, R3) et la deuxième rangée (R2), la première rangée (R1, R3) comprenant au moins un article (C) de plus que la deuxième rangée (R2) ; et la formation du dispositif de transport (5) à partir de la découpe (3, 203, 403, 603) en positionnant le panneau supérieur (20) par rapport aux articles (C) de la pluralité d'articles (C) de manière à ce que chaque élément de réception d'article (9) de la pluralité d'éléments de réception d'article (9) reçoive au moins partiellement une par-

tie supérieure (N) d'un article (C) respectif de la pluralité d'articles (C) et la disposition de la pluralité de panneaux (20, 22, 26, 30, 34, 222, 226, 230, 234, 434) au moins partiellement autour de la pluralité d'articles (C), le dispositif de transport (5) comportant des extrémités (6, 8) substantiellement ouvertes.

24. Procédé selon la revendication 23, dans lequel la disposition des articles (C) comprend en outre le positionnement des articles (C) dans la deuxième rangée (R2) pour les imbriquer avec les articles (C) dans la première rangée (R1, R3).

25. Procédé selon la revendication 23, dans lequel la disposition des articles (C) comprend en outre la disposition des articles (C) dans une troisième rangée (R3) et le positionnement des articles (C) dans la deuxième rangée (R2) pour les imbriquer avec les articles (C) dans la première rangée (R1) et la troisième rangée (R3).

26. Procédé selon la revendication 23, dans lequel la disposition de la pluralité de panneaux (20, 22, 26, 30, 34, 222, 226, 230, 234, 434) comprend le pliage du panneau latéral (22, 30, 222, 230) par rapport au panneau supérieur (20) pour le positionner à côté des articles (C) dans la première rangée (R1, R3), les articles (C) dans la deuxième rangée (R2) étant espacés du panneau latéral (22, 30, 222, 230) par la première rangée (R1, R3).

27. Procédé selon la revendication 23, dans lequel le panneau inférieur (26, 34, 226, 234, 426, 434) est relié de façon pliable au panneau latéral (22, 30, 222, 230), et la formation du dispositif de transport (5) comprend en outre le positionnement du panneau latéral (22, 30, 222, 230) et du panneau inférieur (26, 34, 226, 234, 426, 434) de manière à ce que l'élément de retenue (11, 211, 611) retienne au moins partiellement au moins un article (C) dans la première rangée (R1, R3).

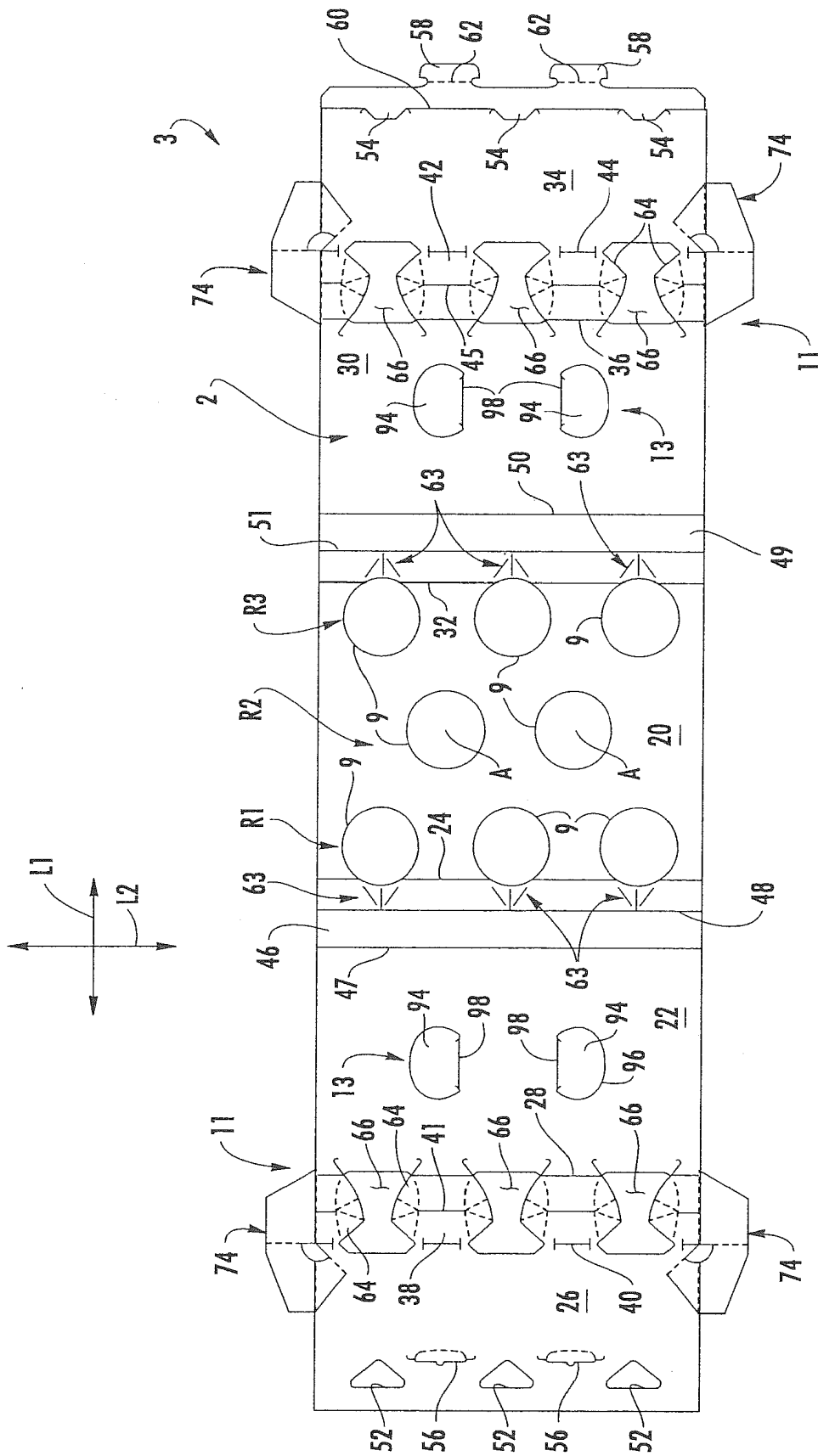
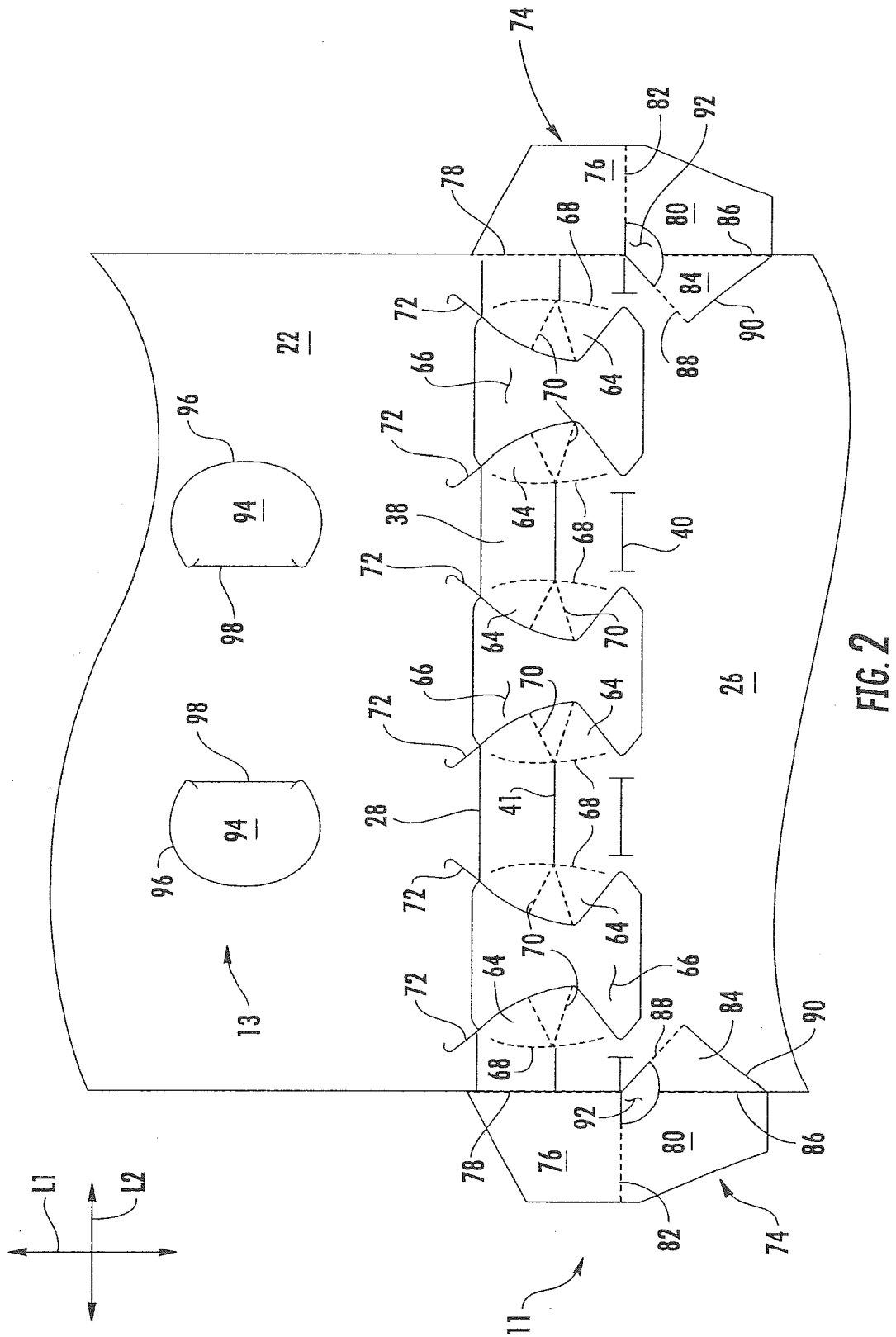


FIG. 1



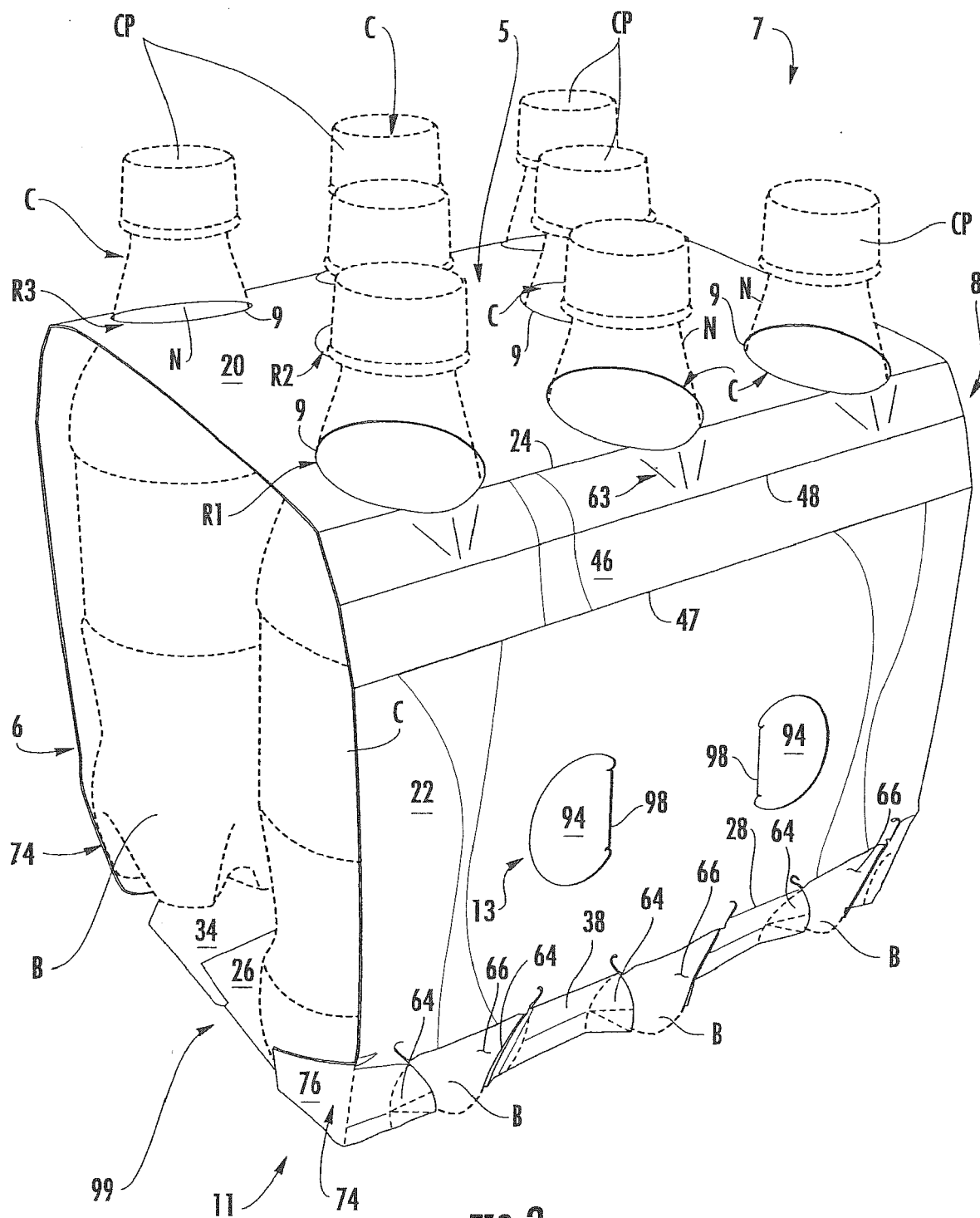


FIG. 3

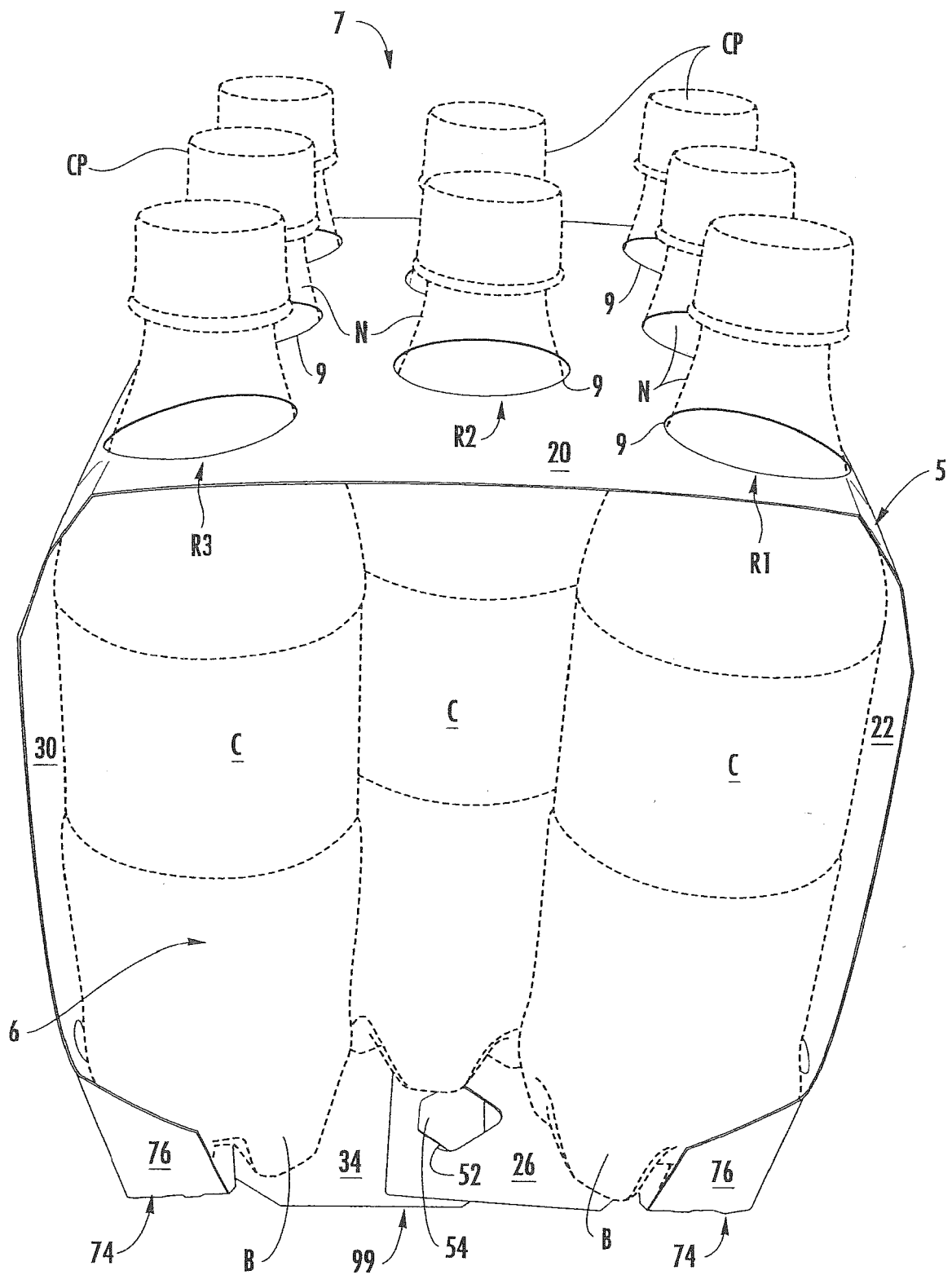


FIG. 4

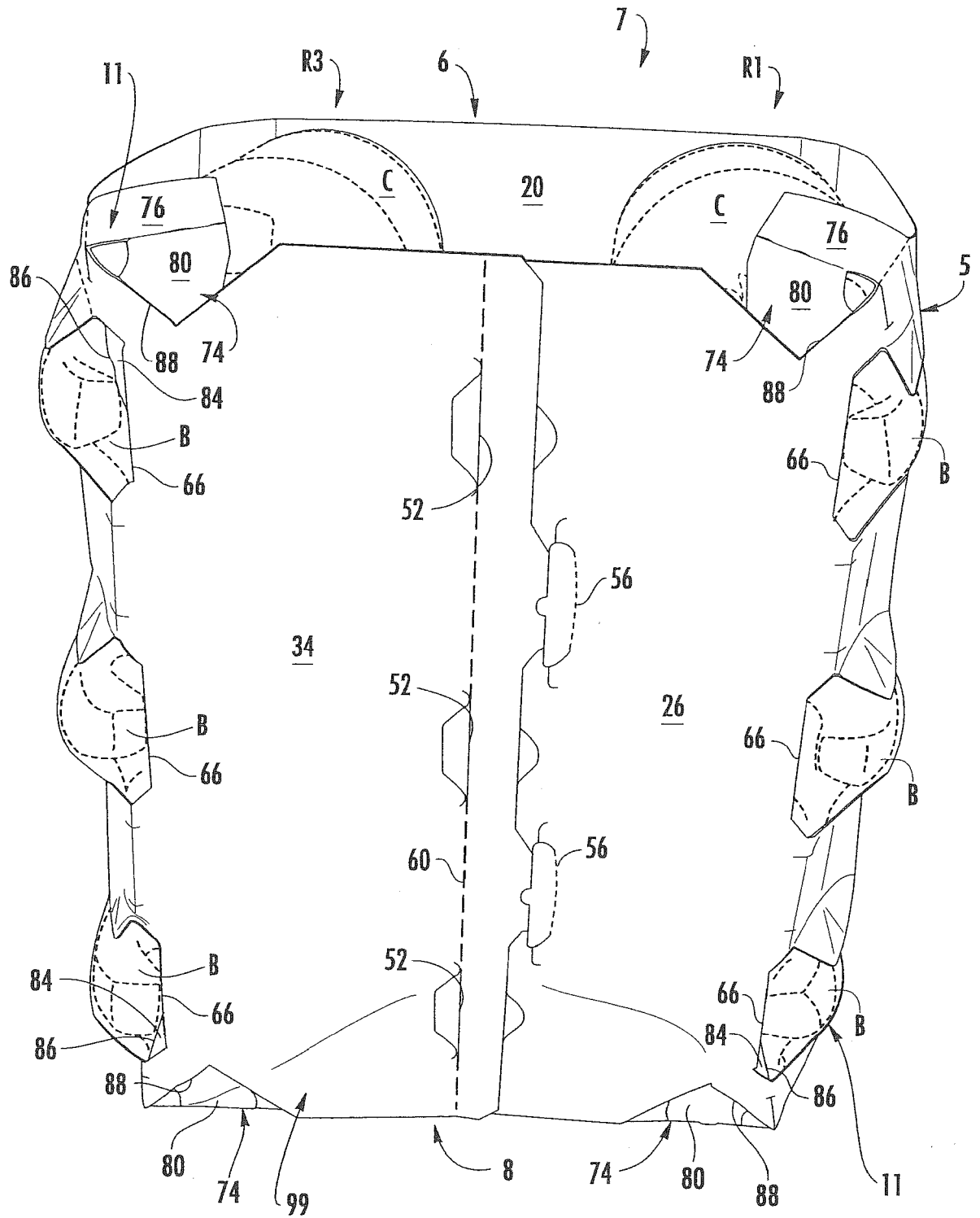


FIG. 5

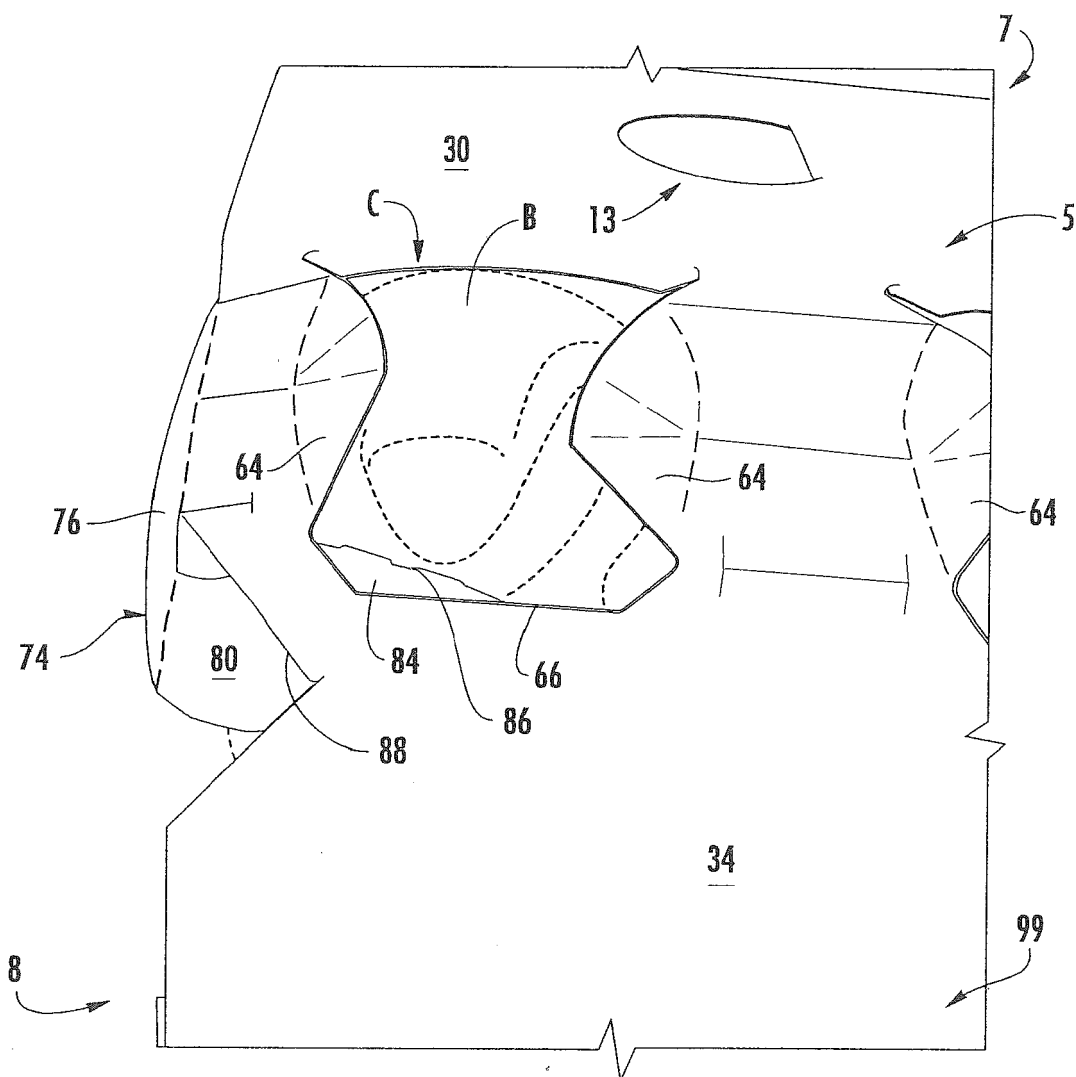


FIG. 6

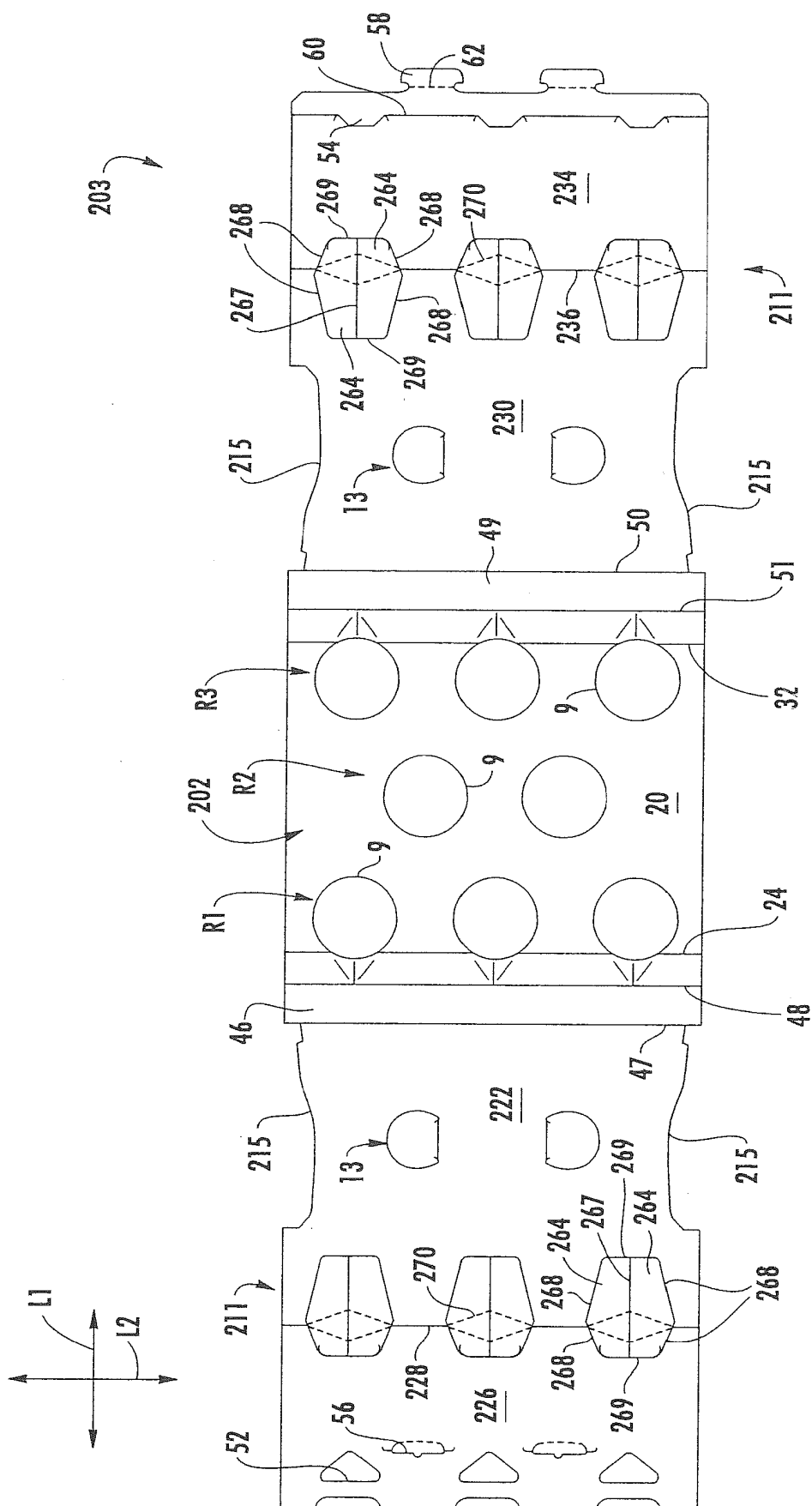
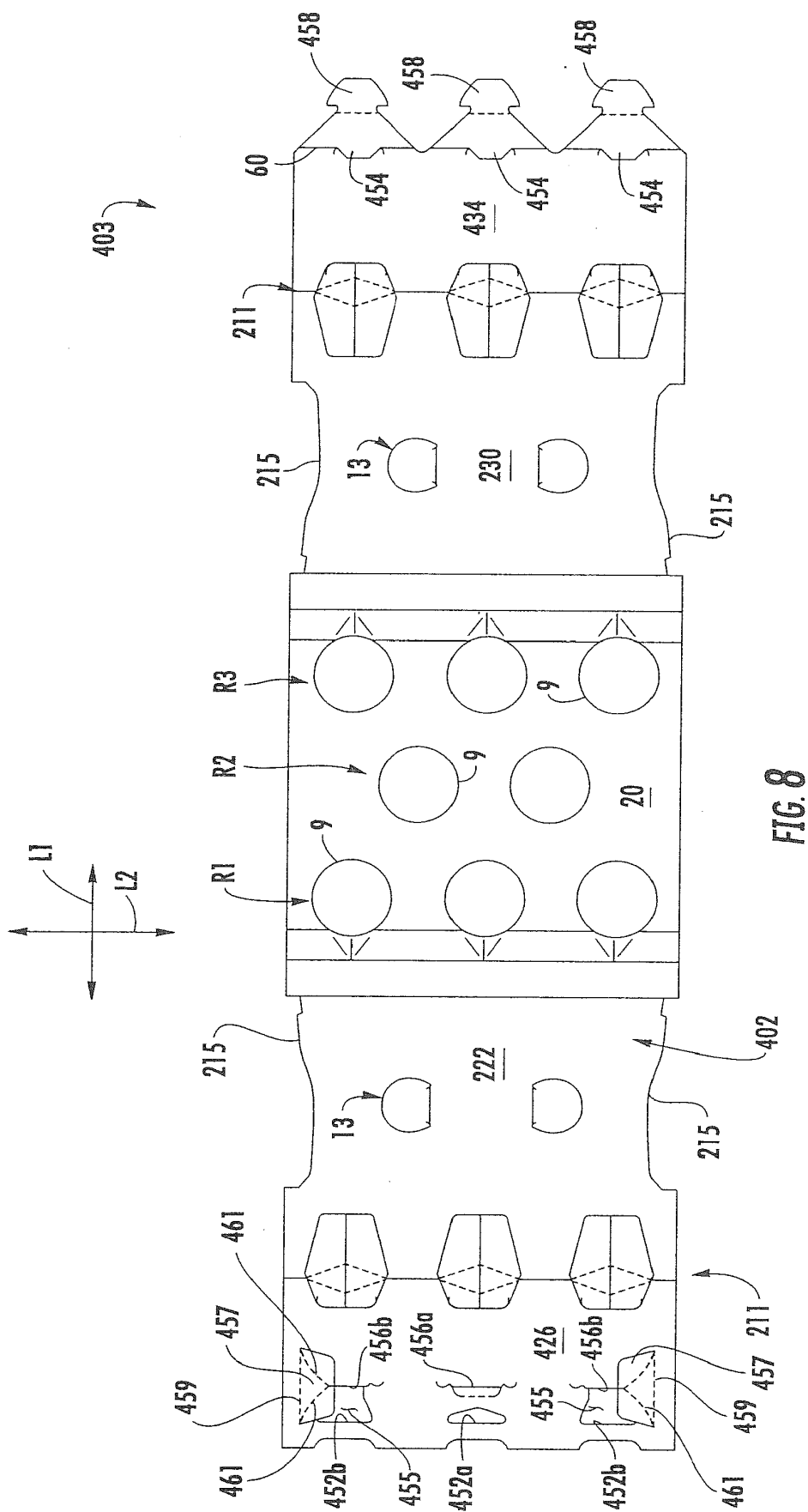


FIG. 7



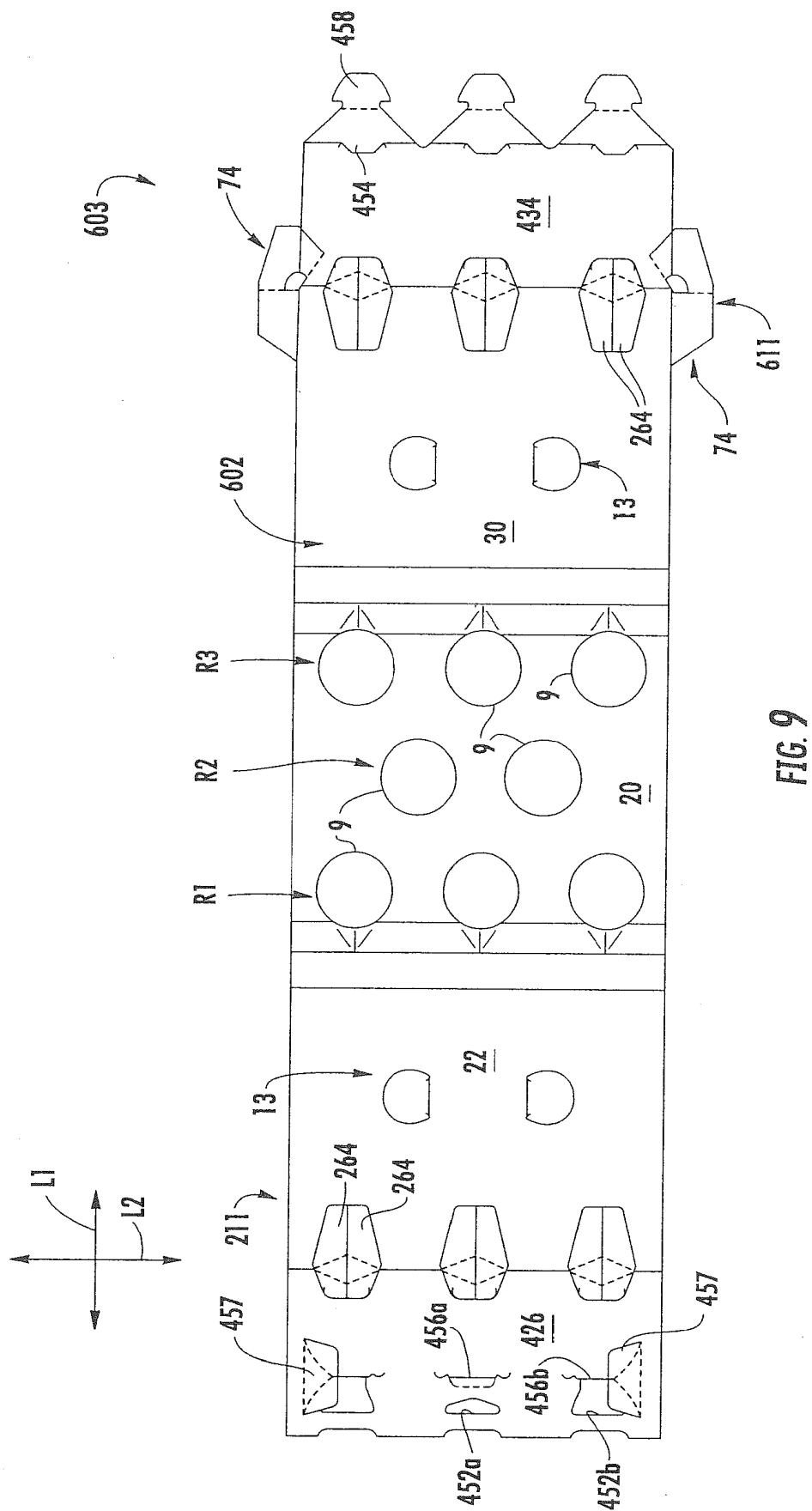


FIG. 9

REFERENCES CITED IN THE DESCRIPTION

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