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(54) **BRACED TUBULAR CARTON AND BLANK THEREFOR**

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CARTON TUBULAIRE

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Description

[0001] The invention relates to a carton produced for packaging one or more articles, for example, bottles. More particularly, the invention relates to a carton of the top gripping type which attaches to the tops of the articles thereby securing the articles together in one unit.

[0002] It is known to provide top gripping cartons which comprise so called "sunburst" apertures each having a series of circumferentially arranged tabs which enable a bottle top to pass through the respective aperture which tabs engage the underside of the bottle cap or the flange of the bottle neck to prevent the removal of the bottle from the aperture. One example is shown in US 3 387 879 A in which there is illustrated a top gripping carrier with a plurality of apertures in the top panel and corresponding apertures in the base walls for receiving articles. Tabs are hingedly connected to edges of the top panel apertures to engage the underside of a bottle cap to prevent removal of the bottle. A problem arises when such sunburst type apertures are used for articles with long necks, for example champagne bottles. In this example, the location where the tab engages a bottle top is high up on the bottle neck, which creates a package in which the bottles are unstable. Further, the tabs are weakened by the unstable nature of the bottles within the carton so reducing its effectiveness.

[0003] A further problem is that a top gripping carton needs to be of sufficient strength to support the bottles. A rigid structure would address this problem but produces its own difficulties. In particular, the top panel and or base panel of known carriers do not provide requisite rigidity and sufficient strength to support such articles.

Summary of the Invention

[0004] The present invention seeks to overcome or at least mitigate the problems associated with the prior art. One solution proposed by the present invention is to form a tubular structure for engaging the top portions of articles. Additional support is provided to assure the rigidity of the tubular structure by a bracing flap extending between first and second hinged panels of the structure. Therefore, the carton can be of a structural strength sufficient to hold long-necked bottles without having its material increased in thickness.

[0005] One aspect of the invention provides a carton for accommodating one or more articles, comprising first and second panels, said first panel having at least one aperture for receiving an article, said at least one aperture being defined at least in part by at least one foldable tab hinged to said first panel, said at least one foldable tab being folded upwardly to have a distal end thereof engage the underside of a radially protruding part of an article in said at least one aperture, wherein said second panel has a bracing flap hinged thereto and is folded to a bracing position where said bracing flap extends between said first and second panels to restrict movement

of said first and second panels relative to each other and in that said at least one foldable tab comprises means for engaging a portion of said bracing flap in the bracing position. Preferably, the bracing flap engaging means may comprise a lower portion of the at least one foldable tab.

[0006] According to an optional feature of this aspect of the invention the bracing flap engaging means may comprise means for defining a slot in the first panel in response to upward folding of the at least one foldable tab.

[0007] Optionally, the slot-defining means may comprise a slit formed along a proximal end of the at least one foldable tab. Preferably, the slit may be substantially "V" shaped. More preferably, the slit is arched.

[0008] According to another optional feature of this aspect of the invention the slot-defining means may further comprise a pair of divergent fold lines along which the at least one foldable tab is hinged to the first panel, the divergent fold lines being interconnected at adjacent ends thereof by the slit.

[0009] According to another optional feature of this aspect of the invention the first and second panels may be directly hinged together.

[0010] According to a further optional feature of this aspect of the invention an edge of the bracing flap may abut the first panel to brace the first and second panels in an angular relationship.

[0011] According to yet another optional feature of this aspect of the invention the at least one aperture may be defined at least in part by a pair of foldable tabs struck from the first panel, each of the foldable tabs being disposed in substantially opposed positions.

[0012] According to another optional feature of this aspect of the invention the carton may be a wraparound carton.

[0013] According to a still further optional feature of this aspect of the invention the carton may be a top gripping type carton.

[0014] A second aspect of the invention provides a unitary blank for forming a carton which comprises a plurality of panels for forming a tubular structure including first and second panels, said first panel having at least one aperture for receiving an article, said at least one aperture having at least one foldable tab disposed therearound and hinged to said first panel to stand out of a general plane of said first panel, said second panel having bracing flap struck therefrom, said bracing flap being displaceable out of a plane of said second panel so that said bracing flap abuts both said first panel and a portion of said at least one foldable tab once a carton is set up.

[0015] Preferably, the at least one foldable tab may be hinged to the first panel along a pair of divergent fold lines interconnected at adjacent ends thereof by a slit, which slit defines a free edge of the portion of the at least one foldable tab.

[0016] In one embodiment, the slit may be substantially "V" shaped. Alternatively, the slit may be arched.

[0017] According to an optional feature of the second aspect of the invention the first and second panels may be directly hinged together.

[0018] According to another optional feature of the second aspect of the invention the at least one aperture may be defined at least in part by a pair of foldable tabs struck from the first panel, the foldable tabs being disposed in substantially opposed positions.

[0019] Embodiments of the invention will now be described, by way of example, with reference to the accompanying drawings in which:

FIGURE 1 is a plan view of an unfolded single paperboard blank from which a carton according to one aspect of the invention is formed;

FIGURES 2 and 3 illustrate a carton in part erected condition formed from a carton blank substantially as shown in Figure 1; and

FIGURES 4 and 5 show the carton formed from the part erected carton shown in Figures 2 and 3.

[0020] Referring now to Figure 1, there is shown a carton blank for forming a top gripping type carton made from paperboard or similar foldable sheet material. It is envisaged that a wraparound carton could alternatively be made without departing from the scope of this invention. The blank 10 comprises a side panel 12, a handle panel 14, a second handle panel 16, a support panel 18, a top panel 20, a second side panel 22, base panel 24 and an inner support panel 26 hingably connected one to the next along fold lines 28, 30, 32, 34, 36, 38 and 40 respectively.

[0021] In this embodiment, a glue flap 42 extends from the end edge of inner support panel 26 and is hingably connected thereto along interrupted fold line 44. Optionally, an aperture 46 is struck from a central portion of inner support panel 26 and the glue flap 42. In use, the aperture 46 makes folding of the carton an easier operation. As shown in Figure 1, a first bracing flap 48 being substantially triangular in shape is formed from an outer end portion of the inner support panel 26. In the blank form of FIG. 1, the upper edge 150 of bracing flap 48 is collinear with fold line 44. First bracing flap 48 is hingably connected to the inner support panel 26 along a fold line 50 disposed in an angular relationship with fold line 44. In this embodiment, a second bracing flap 52 (also substantially triangular in shape) is formed from the opposed outer end portion of the inner support panel 26. The upper edge 152 of second bracing flap 52 is collinear with fold line 44. Likewise, the second bracing flap 52 is hingably connected to the inner support panel 26 along fold line 54 disposed in an angular relationship with fold line 44. It is envisaged that the bracing flaps 48, 52 can be formed in different shapes, for example rectangular, and alternatively can be struck from other panels, for example the base panel 24 or side panel 22,

without departing from the scope of invention.

[0022] A pair of apertures 56, 57 are struck from base panel 24 in a spaced relationship. Each aperture 56, 57 is shaped to engage a neck portion of an article when the carton is in a set up condition. In this embodiment, the apertures 56 and 57 are circular.

[0023] Referring again to Figure 1, a pair of apertures 58, 59 are formed in top panel 20 in corresponding positions to the apertures 56, 57 respectively formed in base panel 24 whereby when the carton is in a set up condition, the apertures 58, 59 in top panel 20 are in vertical registry with the apertures 56, 57 in the base panel 24. In this embodiment, the apertures 58, 59 formed in the top panel 20, each include at least one and preferably a pair of article gripping tabs positioned on opposed sides of the respective apertures 58, 59. Turning to the detailed configuration of one pair of article gripping tabs 60, 62 of aperture 58, the first foldable (article gripping) tab 60 is struck from and hingably connected to top panel 20 at its proximal end by a pair of divergent fold lines 64, 66. Fold line 64 extends to an edge of aperture 58 and fold line 66 intersects fold line 36 and cut line 80, hereinafter described. Divergent fold lines 64, 66 are interconnected at their adjacent ends by a slit 68 extending along the proximal end of the tab 60. The slit 68 is preferably arched or "V" shaped. The distal end of tab 60 extends into aperture 58, to define an article engaging edge 70.

[0024] Likewise, the second foldable (article gripping) tab 62 positioned on the opposing side of aperture 58 is struck from and hingably connected to top panel 20 at its proximal end by a pair of divergent fold lines 70, 72. Fold line 70 extends to an edge of aperture 58 and fold line 72 intersects fold line 36 and cut line 82, hereinafter described. Divergent fold lines 70, 72 are interconnected at their adjacent ends by a slit 74, the slit 74 preferably being arched or "V" shaped. The distal end of tab 62 extends into aperture 58, to define an article engaging edge 76. In this embodiment, the article engaging edges 70, 76 are arcuate, but other profiles can be used according to the shape of the article.

[0025] A further preferred feature is shown in Figure 1: a third tab 78 extends from side panel 22 into aperture 58. Tab 78 is substantially trapezoidal in shape being defined along its side edges by cut lines 80, 82. The upper edge 84 of third tab 78 is adapted to engage a portion of an article.

[0026] Likewise, aperture 59 is also formed with a pair of oppositely disposed tabs 61, 63 and a third tab 79 extending from side panel 22, each of these tabs is identical in construction and orientation to the respective tabs 60, 62, 78 formed in aperture 58 and are not therefore described in any greater detail.

[0027] Optionally, a pair of handle support panels 90, 92 are provided along opposed end edges of first and second handle panels 14, 16 being hingably connected thereto along fold lines 94, 96. In this embodiment, apertures 91, 93 are struck from the handle panels 14, 16

and handle support panels 90, 92 respectively at the intersection of fold lines 94, 30 and 96, 30 respectively. The apertures 91, 93 are shaped to provide curved corner portions of the handle panels 14, 16 and to assist in folding the handle support panels 90, 92. To form a handle, hand aperture 98 is struck from handle panel 16 and support panel 18 thereby interrupting fold line 32. A tab 100 extends into aperture 98 being hingably connected to handle panel 16 along fold line 102. Likewise, a corresponding hand aperture 104 is formed from handle panel 14 and side panel 12 thereby interrupting fold line 28. A tab 106 extends into aperture 104 being hingably connected to handle panel 14 along fold line 108.

[0028] A second embodiment is illustrated in Figure 2 which is substantially identical to the embodiment illustrated in Figure 1 and therefore only the differences of the second embodiment are hereinafter described. A transverse fold line 120 is formed in the top panel 122 extending between opposed end edges of top panel 122 and which, in this embodiment, bisects the slits 124 of each tab 126 and apertures 128, 129.

[0029] Turning to the construction of the carton from a carton blank as illustrated in Figure 1, the blank 10 requires a series of sequential folding and gluing operations which is preferably performed in a straight line machine so that the carton is not required to be rotated or inverted to complete its construction. The folding process is not limited to that described below and can be altered according to particular manufacturing requirements. Thus, handle support panels 90, 92 are folded inwardly about fold lines 94, 96 and into a face-to-face contacting relationship with handle panels 14, 16. Base panel 24, inner support panel 26 and glue flap 42 are then folded about fold line 38 to be in a face-to-face contacting relationship with second side panel 22, top panel 20 and support panel 18 respectively and glue flap 42 and support panel 18 are secured together by glue or other means known in the art. Thereafter, side panel 12 and handle panel 14 are folded about fold line 30 into a face-to-face contacting relationship with handle panel 16 and inner support panel 26 and are secured respectively to the panels 16 and 26 by glue or other means known in the art. Thus, the carton is in a flat collapsed condition, similar to the carton illustrated in Figure 2.

[0030] Thereafter, the carton can be applied to an array of bottles (or supplied in a flat collapsed condition ready for loading). In order to complete the carton in the form similar to the carton shown in Figures 4 and 5, the opposed side panels 12, 22, top panel 20 and base panel 24 are moved apart from their face contacting arrangement by folding the aforesaid panels along fold lines 34, 36, 38 and 40 to form a substantially rectangular tubular configuration, shown in Figure 3. The carton is then ready to receive two articles, for example bottles B which are loaded by relative vertical movement between the bottles B and carton, preferably, during forward feed movement well known in the art, by which the bottles enter their respective apertures 56, 57 in the

base panel 24. Thereafter, the bottles pass through the apertures 58, 59 in the top panel 20, thereby displacing the foldable tabs 60, 62; 61, 63 out of their general plane about fold lines 64, 66; 70, 72 to move an upper portion 130 of each tab upwardly and a corresponding lower portion 132 downwardly into the carton. The lower portion 132 of each foldable tab 60, 61, 62, 63 is defined by the respective slit 68, 74. Because of the downwardly moved lower portion 132, a slot 140 (shown in Figures 4 and 5) is defined in the top panel 20 in response to upward folding movement of each foldable tab, which will be described later in more detail.

[0031] As shown in Figure 4 and 5, the first and second bracing flaps 48, 52 (only one flap shown in Figures 4 and 5) hinged to the inner support panel 26 are folded about fold lines 50, 54 respectively and into an angular relationship with the inner support panel 26. Each bracing flap 48, 52 is folded into abutment with lower portions 132 of the respective outermost tab 60, 63 adjacent the end of the tubular structure 134: the lower portions 132 acting as stoppers to restrict movement of the respective bracing flaps 48, 52.

[0032] As illustrated in the embodiment shown in Figures 2 to 5, the invention may include a further preferred feature: the slit 124 defining an edge 138 of the top panel 122, which edge 138 intersects the free edges of the lower portions 132. Top panel 122 forms a shallow "V" shape by folding it about transverse fold line 120, thereby to define a slot 140 between edge 138 and lower portion 132 which receives and engages the upper edge 150, 152 of the respective bracing flap 48, 52 to restrict its hinged movement.

[0033] It will be appreciated by those skilled in the art that the foldable (article engaging) tabs 60, 63 can be held in place by the abutment of the bracing flaps 48, 52 with a respective lower tab portion 132. Further or alternatively, the upper edges of either or both bracing flaps 48, 52 abut the top panel 20 to restrict relative movement of the side panel 12 (or inner support panel 26) and top panel 20, thereby to maintain the carton in a tubular shape. Additionally or alternatively, the presence of the bottles in the carton maintains the apertures 58, 59 of the top panel in registry with corresponding apertures 56, 57 of the base panel to maintain the integrity of the tubular structure 134.

[0034] In use, handle tabs 100, 106 are folded inwardly along fold lines 102, 108 respectively to create a hand aperture to receive a user's finger to enable the carton to be carried and to provide additional support for the handle H.

[0035] Referring again to the drawings, and in particular Figure 5, there is shown a carton for accommodating a plurality of articles, for example bottles, which carton is tubular in structure and comprises a first (or top) panel 20 having a plurality of apertures 58, 59, each of which has at least one foldable tab 60, 62; 61, 63 hinged to the first panel 20 and having upper and lower portions 130 and 132 of which the lower portion 132 projects into

the tubular structure 134 and the upper portion 130 projects upwardly to engage the underside of a radially protruding part of an article B present in the associated aperture 58, 59, and a second panel 12/26 comprising a hinged bracing flap 52 adapted to restrict movement of the first panel 20 relative to the second panel 12/26 and wherein the bracing flap 52 abuts the lower portion 132 of the foldable tab 60 to restrict hinging movement of the bracing flap 52.

[0036] The present invention and its preferred embodiments relate to an article carrier that is shaped to provide satisfactory strength to hold bottles securely but with a degree of flexibility so that load transferred to the handle is absorbed by the carrier. The shape of the blank minimizes the amount of paperboard required and the carrier is applied to an array of bottles by hand or automatic machinery. It is anticipated that the invention can be applied to a variety of carriers, for example wrap-around cartons, and is not limited to those of the top gripping sort hereinabove described. Further or alternatively, the carton may be adapted to carry three or more articles without departing from the scope of the invention.

Claims

1. A carton for accommodating one or more articles, comprising first and second panels (20, 12/26). said first panel (20) having at least one aperture (58, 59) for receiving an article, said at least one aperture (58, 59) being defined at least in part by at least one foldable tab (60, 63) hinged to said first panel (20), said at least one foldable tab (60, 63) being folded upwardly to have a distal end thereof engage the underside of a radially protruding part of an article in said at least one aperture (58, 59), **characterised in that** said second panel (12/26) has a bracing flap (48, 52) hinged thereto and is folded to a bracing position where said bracing flap extends between said first and second panels (20, 12/26) to restrict movement of said first and second panels relative to each other and **in that** said at least one foldable tab (60, 63) comprises means for engaging a portion of said bracing flap (48, 52) in the bracing position.
2. The carton according to claim 1 wherein the bracing flap engaging means comprises a lower portion (132) of said at least one foldable tab (60, 63).
3. The carton as claimed in claim 1 wherein the bracing flap engaging means comprises means for defining a slot (140) in said first panel (20) in response to upward folding of said at least one foldable tab (60, 63).
4. The carton according to claim 3, wherein said slot-defining means comprises a slit (68, 74) formed

along a proximal end of said at least one foldable tab (60, 63).

5. The carton according to claim 4 wherein said slit (68, 74) is substantially "V" shaped.
6. The carton according to claim 4 wherein said slit (68, 74) is arched.
7. The carton according to any of claims 3 to 7 wherein said slot-defining means further comprises a pair of divergent fold lines (64, 66; 70, 72) along which said at least one foldable tab (60, 63) is hinged to said first panel (20), said divergent fold lines being interconnected at adjacent ends thereof by said slit (68, 74).
8. The carton according to any preceding claim wherein said first and second panels (20, 12/26) are directly hinged together.
9. The carton as claimed in any preceding claim wherein an edge of said bracing flap (48, 52) abuts said first panel (20) to brace said first and second panels (20, 12/26) in an angular relationship.
10. The carton as claimed in any preceding claim wherein said at least one aperture (58, 59) is defined at least in part by a pair of foldable tabs (60, 62) struck from said first panel (20), said foldable tabs being disposed in substantially opposed positions.
11. The carton as claimed in any of claims 1 to 10 wherein said carton is a wraparound carton.
12. The carton as claimed in any of claims 1 to 10 wherein said carton is a top gripping type carton.
13. A unitary blank for forming a carton which comprises a plurality of panels for forming a tubular structure (134) including first and second panels (20, 12/26), said first panel (20) having at least one aperture (58, 59) for receiving an article, said at least one aperture having at least one foldable tab (60, 63) disposed therearound and hinged to said first panel to stand out of a general plane of said first panel **characterised in that** said second panel (12/26) having bracing flap (48, 52) struck therefrom, said bracing flap being displaceable out of a plane of said second panel so that said bracing flap abuts both said first panel (20) and a portion of said at least one foldable tab (60, 63) once a carton is set up.
14. The blank as claimed in claim 13 wherein said at least one foldable tab (60, 63) is hinged to said first panel (20) along a pair of divergent fold lines (64,

66; 70, 72) interconnected at adjacent ends thereof by a slit (68, 74), which slit defines a free edge of said portion of said at least one foldable tab (60, 63).

15. A blank as claimed in claim 14 wherein said slit (68, 74) is substantially "V" shaped.
16. A blank as claimed in claim 14 wherein said slit (68, 74) is arched.
17. A blank according to claims 13 to 16 wherein said first and second panels (20, 12/26) are directly hinged together.
18. A blank according to claims 13 to 17 wherein said at least one aperture (58, 59) is defined at least in part by a pair of foldable tabs (60, 62) struck from said first panel (20), said foldable tabs being disposed in substantially opposed positions.

Patentansprüche

1. Schachtel zum Unterbringen eines oder mehrerer Gegenstände, umfassend eine erste und zweite Wandfläche (20, 12/26), wobei die erste Wandfläche (20) wenigstens eine Öffnung (58, 59) zum Aufnehmen eines Gegenstands aufweist, wobei die wenigstens eine Öffnung (58, 59) wenigstens zum Teil durch wenigstens eine faltbare Lasche (60, 63) definiert ist, die mit der ersten Wandfläche (20) gelenkig verbunden ist, wobei die wenigstens eine faltbare Lasche (60, 63) nach oben gefaltet wird, so dass ein distales Ende davon die Unterseite eines radial vorstehenden Teils eines Gegenstands in der wenigstens einen Öffnung (58, 59) in Eingriff nimmt, **dadurch gekennzeichnet, dass** die zweite Wandfläche (12/26) eine Verstrebungsklappe (48, 52) aufweist, die damit gelenkig verbunden ist und die zu einer Verstreburgsposition gefaltet wird, wobei sich die Verstreburgsklappe zwischen der ersten und zweiten Wandfläche (20, 12/26) erstreckt, um die Bewegung der ersten und zweiten Wandfläche relativ zueinander einzuschränken, und dadurch, dass die wenigstens eine faltbare Lasche (60, 63) Mittel umfasst, um einen Abschnitt der Verstreburgsklappe (48, 52) in der Verstreburgsposition in Eingriff zu nehmen.
2. Schachtel nach Anspruch 1, wobei die die Verstreburgsklappe in Eingriff nehmenden Mittel einen unteren Abschnitt (132) der wenigstens einen faltbaren Lasche (60, 63) umfassen.
3. Schachtel nach Anspruch 1, wobei die die Verstreburgsklappe in Eingriff nehmenden Mittel Mittel zum Definieren eines Schlitzes (140) in der ersten Wandfläche (20) in Reaktion auf das nach oben Fal-

ten der wenigstens einen faltbaren Lasche (60, 63) umfassen.

4. Schachtel nach Anspruch 3, wobei die Schlitz-definierenden Mittel einen Schlitz (68, 74) umfassen, der entlang eines proximalen Endes der wenigstens einen faltbaren Lasche (60, 63) ausgebildet ist.
5. Schachtel nach Anspruch 4, wobei der Schlitz (68, 74) im Wesentlichen "V"-förmig ist.
6. Schachtel nach Anspruch 4, wobei der Schlitz (68, 74) bogenförmig ist.
7. Schachtel nach einem der Ansprüche 3 bis 7, wobei die Schlitz-definierenden Mittel ferner ein Paar auseinander gehender Falllinien (64, 66; 70, 72) umfassen, entlang denen die wenigstens eine Lasche (60, 63) gelenkig mit der ersten Wandfläche (20) verbunden ist, wobei die auseinander gehenden Falllinien an angrenzenden Enden davon durch den Schlitz (68, 74) miteinander verbunden sind.
8. Schachtel nach einem der vorstehenden Ansprüche, wobei die erste und zweite Wandfläche (20, 12/26) miteinander direkt gelenkig verbunden sind.
9. Schachtel nach einem der vorstehenden Ansprüche, wobei eine Kante der Verstreburgsklappe (48, 52) an die erste Wandfläche (20) anstößt, um die erste und zweite Wandfläche (20, 12/26) in einer winkligen Beziehung zu verstreben.
10. Schachtel nach einem der vorstehenden Ansprüche, wobei die wenigstens eine Öffnung (58, 59) wenigstens zum Teil durch ein Paar faltbarer Laschen (60, 62) definiert ist, die aus der ersten Wandfläche (20) ausgestanzt sind, wobei die faltbaren Laschen in im Wesentlichen gegenüberliegenden Positionen angeordnet sind.
11. Schachtel nach einem der Ansprüche 1 bis 10, wobei die Schachtel eine Schachtel des Umwickeltyps ist.
12. Schachtel nach einem der Ansprüche 1 bis 10, wobei die Schachtel eine Schachtel des Oberteil-greifenden Typs ist.
13. Einstückiger Zuschnitt zum Ausbilden einer Schachtel, der eine Vielzahl von Wandflächen zum Ausbilden einer röhrenförmigen Struktur (134) umfasst, einschließend eine erste und zweite Wandfläche (20, 12/26), wobei die erste Wandfläche (20) wenigstens eine Öffnung (58, 59) zum Aufnehmen eines Gegenstands aufweist, wobei die wenigstens eine Öffnung wenigstens eine faltbare Lasche (60,

63) aufweist, die um diese herum angeordnet und mit der ersten Wandfläche gelenkig verbunden ist, um aus einer allgemeinen Ebene der ersten Wandfläche herauszuragen, **dadurch gekennzeichnet, dass** die zweite Wandfläche (12/26) eine daraus ausgestanzte Verstrebungsklappe (48, 52) aufweist, wobei die Verstrebungsklappe aus einer Ebene der zweiten Wandfläche derart verschoben werden kann, dass die Verstrebungsklappe an sowohl die erste Wandfläche (20) als auch an einen Abschnitt der wenigstens einen faltbaren Lasche (60, 63) anstößt, sobald eine Schachtel aufgerichtet ist.

14. Zuschnitt nach Anspruch 13, wobei die wenigstens eine faltbare Lasche (60, 63) mit der ersten Wandfläche (20) entlang eines Paares auseinander gehender Falllinien (64, 66; 70, 72) gelenkig verbunden ist, die an angrenzenden Enden davon durch einen Schlitz (68, 74) miteinander verbunden sind, wobei der Schlitz eine freie Kante des Abschnitts der wenigstens einen faltbaren Lasche (60, 63) definiert.
15. Zuschnitt nach Anspruch 14, wobei der Schlitz (68, 74) im Wesentlichen "V"-förmig ist.
16. Zuschnitt nach Anspruch 14, wobei der Schlitz (68, 74) bogenförmig ist.
17. Zuschnitt nach einem der Ansprüche 13 bis 16, wobei die erste und zweite Wandfläche (20, 12/26) miteinander direkt gelenkig verbunden sind.
18. Zuschnitt nach einem der Ansprüche 13 bis 17, wobei die wenigstens eine Öffnung (58, 59) wenigstens zum Teil durch ein Paar faltbarer Laschen (60, 62) definiert ist, die aus der ersten Wandfläche (20) ausgestanzt sind, wobei die faltbaren Laschen in im Wesentlichen gegenüberliegenden Positionen angeordnet sind.

Revendications

1. Carton destiné à recevoir un ou plusieurs articles, comprenant un premier et un second panneaux (20, 12/26), ledit premier panneau (20) comportant au moins une ouverture (58, 59) destinée à recevoir un article, ladite au moins une ouverture (58, 59) étant définie au moins en partie par au moins une languette pliable (60, 63) articulée avec ledit premier panneau 20, ladite au moins une languette pliable (60, 63) étant pliée vers le haut de façon à amener une extrémité distale de celle-ci à venir contre le dessous d'une partie radialement saillante d'un article présent dans ladite au moins une ouverture (58, 59), **caractérisé en ce que** ledit second pan-

neau (12/26) comporte un rabat de renforcement (48, 52) articulé avec celui-ci et est plié dans une position de renforcement dans laquelle ledit rabat de renforcement s'étend entre lesdits premier et second panneaux (20, 12/26) pour limiter le mouvement desdits premier et second panneaux l'un par rapport à l'autre, et **en ce que** ladite au moins une languette pliable (60, 63) comporte un moyen destiné à venir contre une partie dudit rabat de renforcement (48, 52) dans la position de renforcement.

2. carton selon la revendication 1, dans lequel le moyen d'engagement contre le rabat de renforcement comporte une partie inférieure (132) de ladite au moins une languette pliable (60, 63).
3. Carton selon la revendication 1, dans lequel le moyen d'engagement contre le rabat de renforcement comporte un moyen pour définir une fente (140) dans ledit premier panneau (20) en réponse au pliage de ladite au moins une languette pliable (60, 63) vers le haut.
4. Carton selon la revendication 3, dans lequel ledit moyen définissant une fente comporte une entaille (68, 74) formée le long d'une extrémité proximale de ladite au moins une languette pliable (60, 63).
5. Carton selon la revendication 4, dans lequel ladite entaille (68, 74) est sensiblement en V.
6. Carton selon la revendication 4, dans lequel ladite entaille (68, 74) est arquée.
7. Carton selon l'une quelconque des revendications 3 à 7, dans lequel ledit moyen définissant une fente comporte en outre une paire de lignes de pliage divergentes (64, 66 ; 70, 72) le long desquelles ladite au moins une languette pliable (60, 63) est articulée avec ledit premier panneau (20), lesdites lignes de pliage divergentes étant reliées l'une à l'autre, en leurs extrémités adjacentes, par ladite entaille (68, 74).
8. Carton selon l'une quelconque des revendications précédentes, dans lequel lesdits premier et second panneaux (20, 12/26) sont directement articulés l'un avec l'autre.
9. Carton selon l'une quelconque des revendications précédentes, dans lequel un bord dudit rabat de renforcement (48, 52) bute contre ledit premier panneau (20) pour renforcer lesdits premier et second panneaux (20, 12/26) de manière oblique.
10. Carton selon l'une quelconque des revendications précédentes, dans lequel ladite au moins une ouverture (58, 59) est définie au moins en partie par

une paire de languettes pliables (60, 62) détachées dudit premier panneau (20), lesdites languettes pliables étant disposées dans des positions sensiblement opposées.

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11. Carton selon l'une quelconque des revendications 1 à 10, ledit carton étant un carton enveloppant.

12. Carton selon l'une quelconque des revendications 1 à 10, ledit carton étant un carton du type à serrage dans le haut. 10

13. Ebauche d'une seule pièce servant à former un carton qui comprend une pluralité de panneaux pour former une structure tubulaire (134) comportant un premier et un second panneaux (20, 12/26), ledit premier panneau (20) possédant au moins une ouverture (58, 59) destinée à recevoir un article, ladite au moins une ouverture possédant au moins une languette pliable (60, 63) disposée autour de celle-ci et articulée avec ledit premier panneau pour se tenir hors d'un plan général dudit premier panneau, **caractérisée en ce que** ledit second panneau (12/26) comporte un rabat de renforcement (48, 52) se détachant de celui-ci, ledit rabat de renforcement pouvant être sorti d'un plan dudit second panneau de façon que ledit rabat de renforcement bute contre ledit premier panneau (20) et une partie de ladite au moins une languette pliable (60, 63) une fois qu'un carton est déployé. 15 20 25 30

14. Ebauche selon la revendication 13, dans laquelle ladite au moins une languette pliable (60, 63) est articulée avec ledit premier panneau (20) le long d'une paire de lignes de pliage divergentes (64, 66 ; 70, 72) reliées l'une à l'autre, en des extrémités adjacentes de celles-ci, par une entaille (68, 74) qui définit un bord libre de ladite partie de ladite au moins une languette pliable (60, 63). 35 40

15. Ebauche selon la revendication 14, dans laquelle ladite entaille (68, 74) est sensiblement en V.

16. Ebauche selon la revendication 14, dans laquelle ladite entaille (68, 74) est arquée. 45

17. Ebauche selon les revendications 13 à 16, dans laquelle lesdits premier et second panneaux (20, 12/26) sont directement articulés l'un à l'autre. 50

18. Ebauche selon les revendications 13 à 17, dans lesquelles ladite au moins une ouverture (58, 59) est définie au moins en partie par une paire de languettes pliables (60, 62) détachées dudit premier panneau (20), lesdites languettes pliables étant disposées dans des positions sensiblement opposées. 55

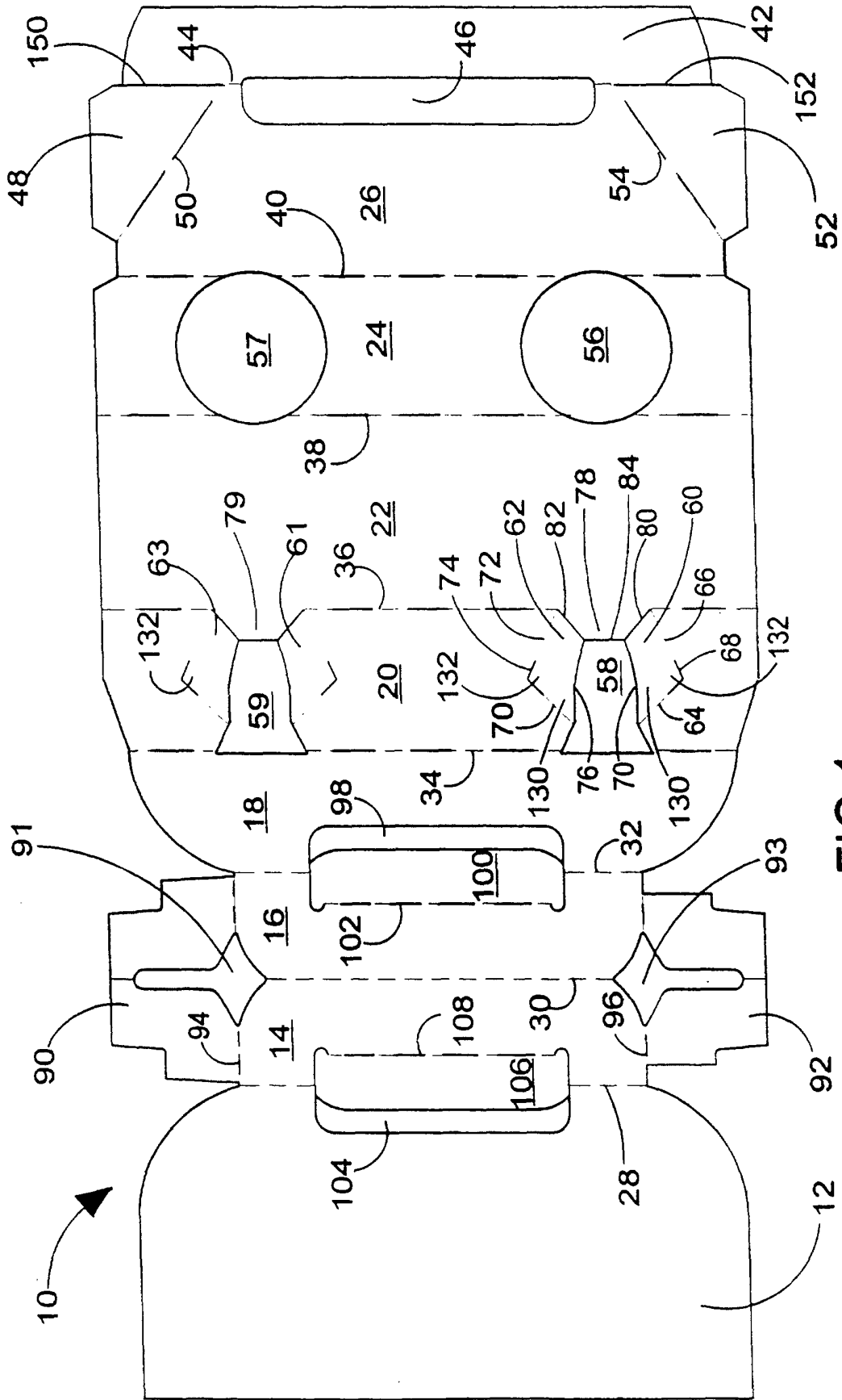


FIG. 1

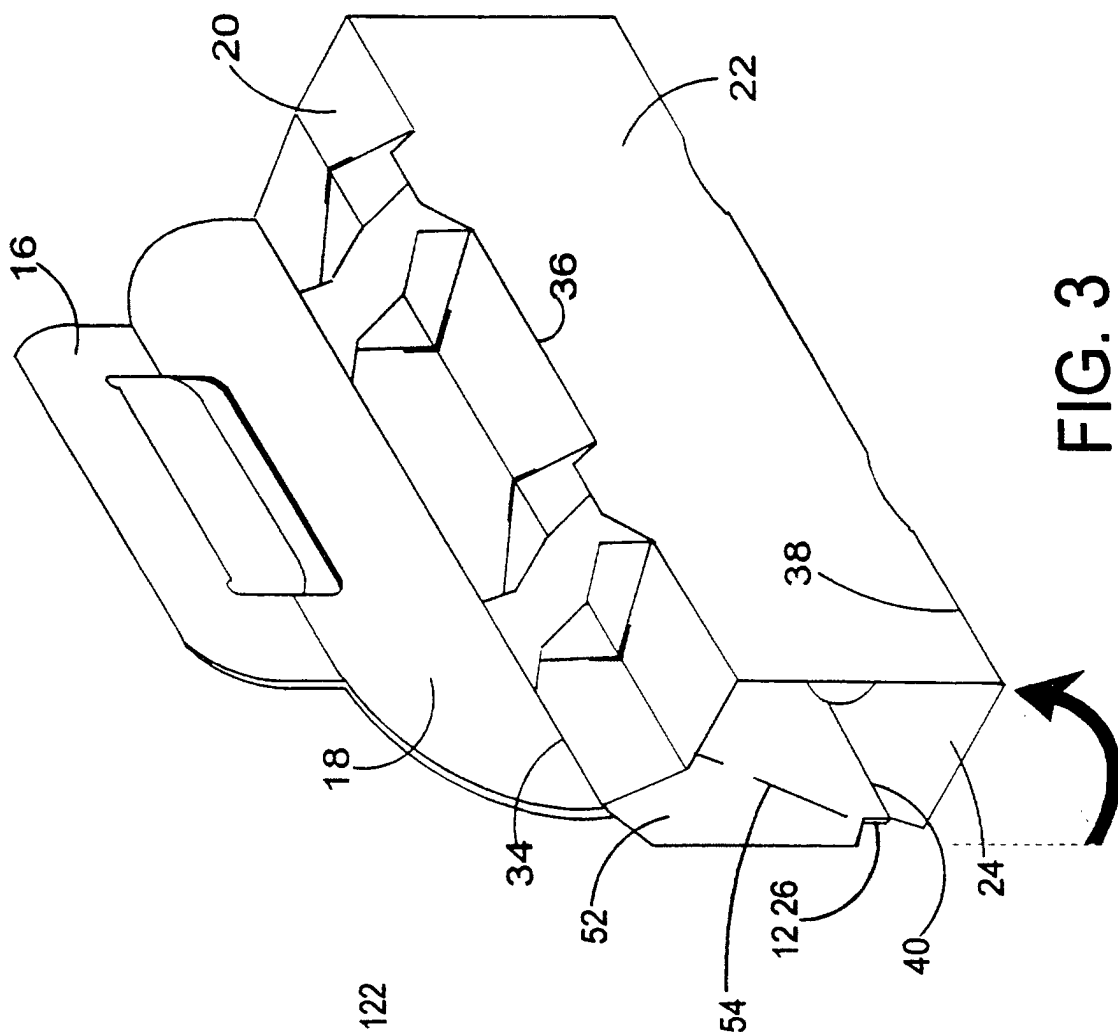


FIG. 3

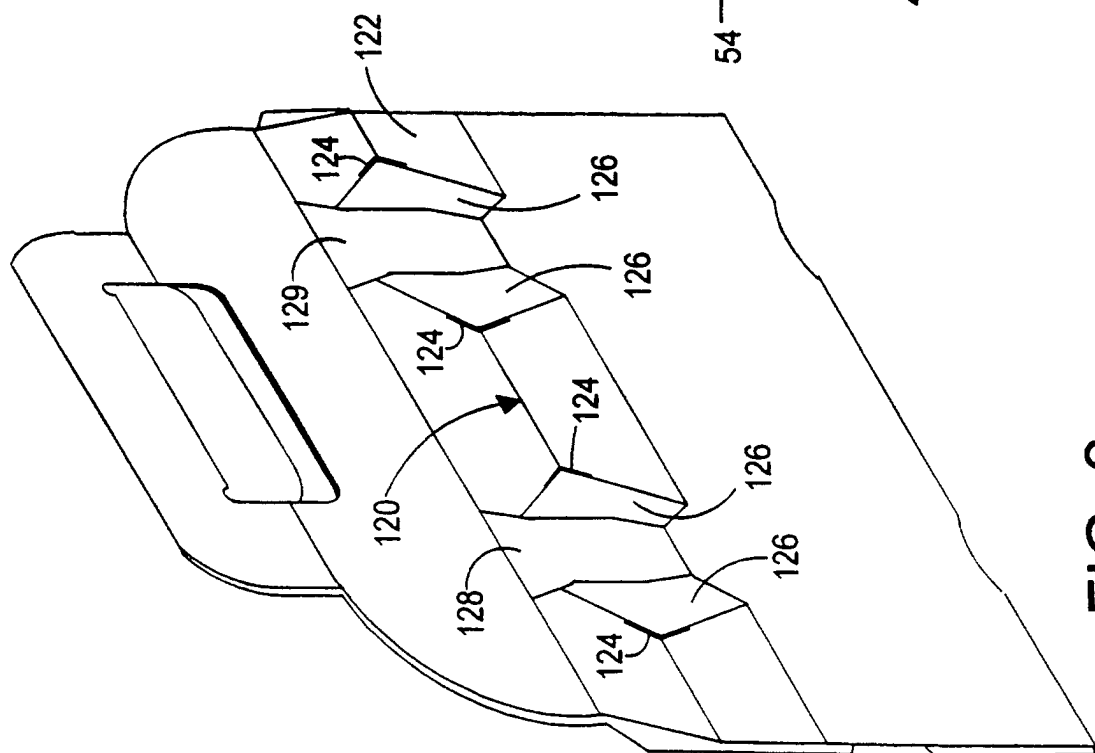


FIG. 2

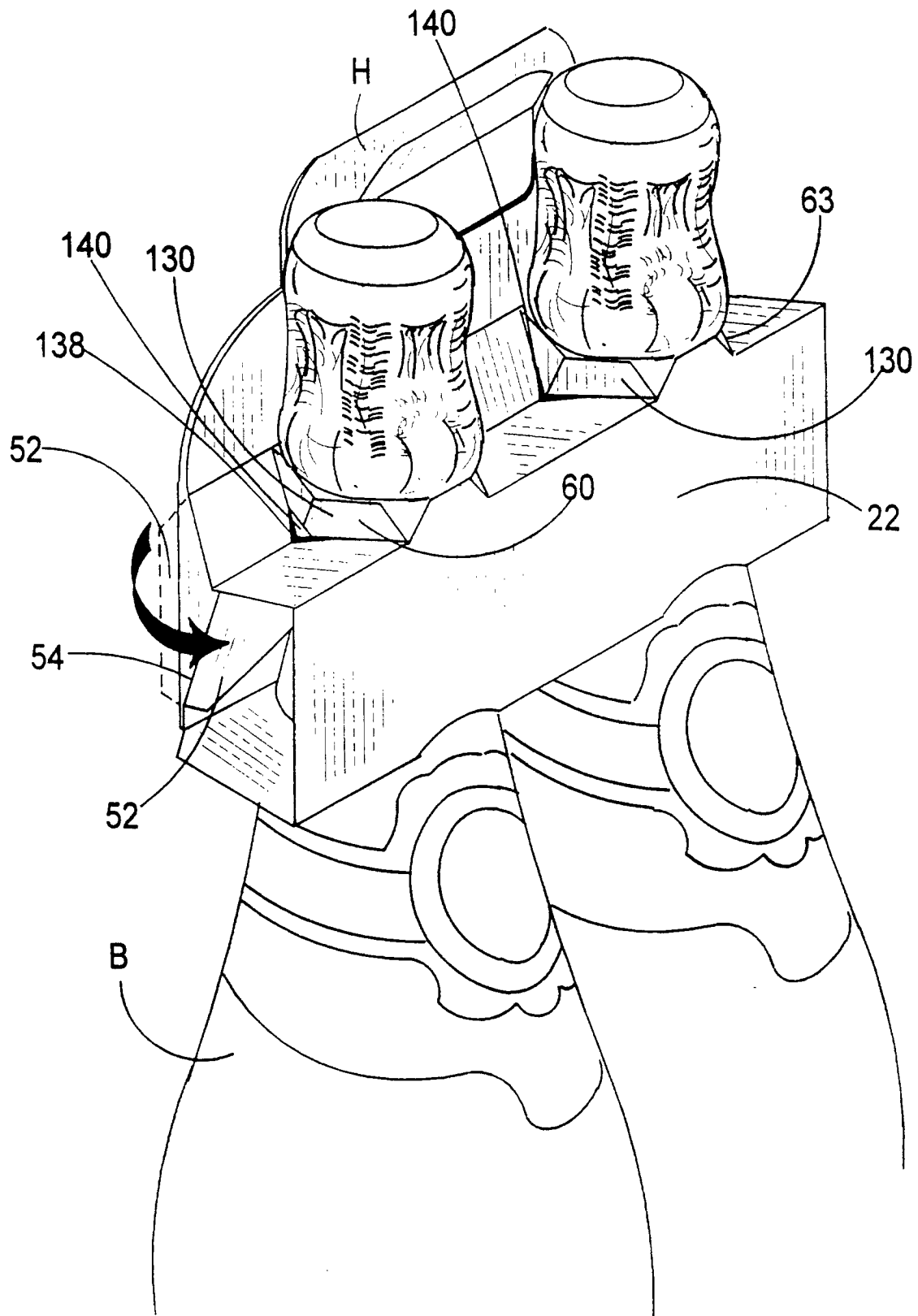


FIG. 4

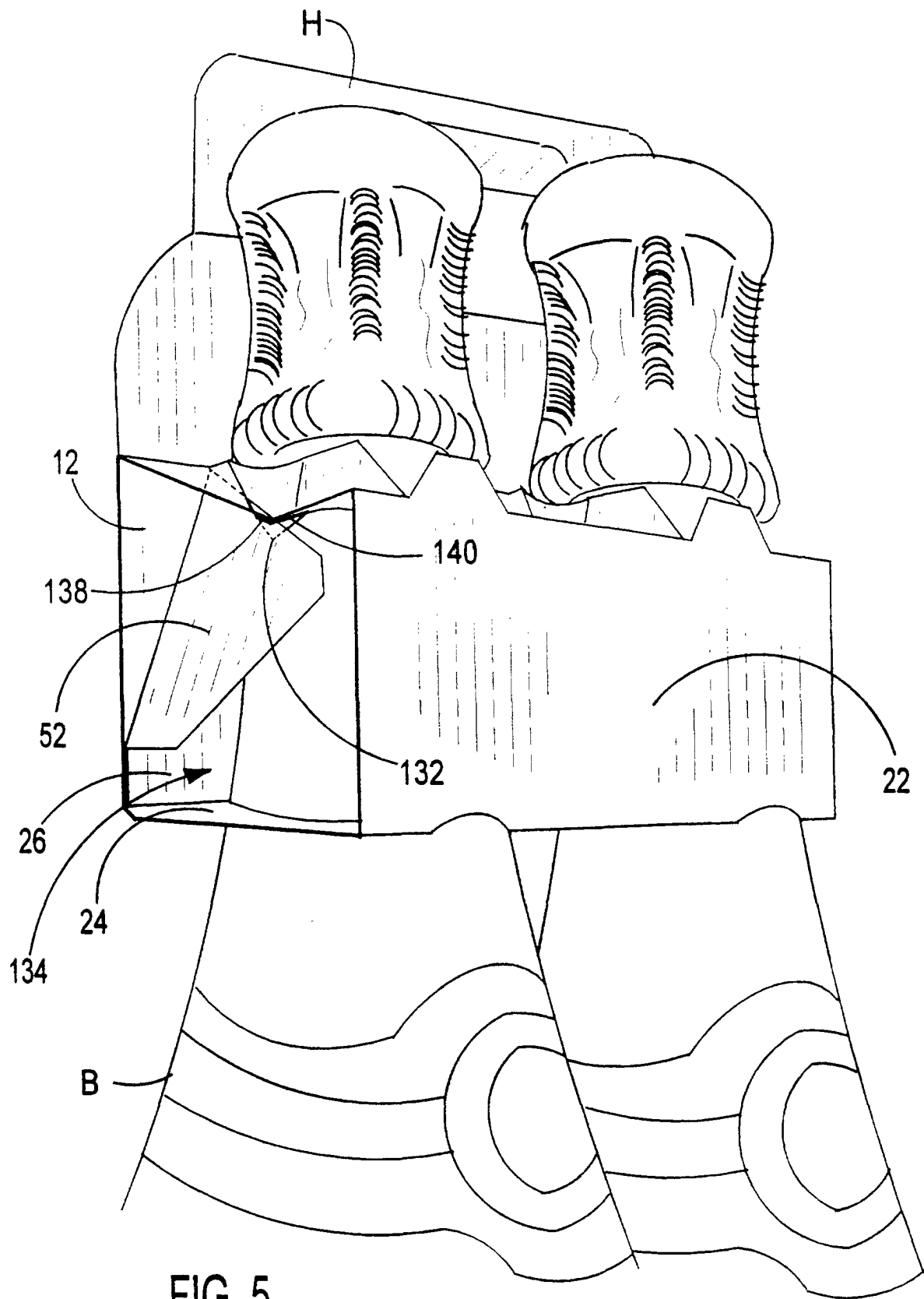


FIG. 5