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(54) **TOP GRIPPING ARTICLE CARRIER**

ARTIKELTRÄGER MIT KOPFGREIFER

PORTE-ARTICLE A PRISE PAR LE HAUT

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(56) References cited:

FR-A- 2 098 585	US-A- 2 330 699
US-A- 3 528 697	US-A- 3 640 563
US-A- 3 834 750	US-A- 4 401 212
US-A- 5 320 216	

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Description

[0001] This invention relates to an article carrier of the so called top gripping type which is particularly, although not exclusively, suitable for holding together a plurality of bottles at the neck portions of the bottles in two or more rows.

[0002] Top gripping carriers for bottles are well known. For example, U.S. Patent No. 2, 823,063 discloses a top engaging carrier having an internal double ply reinforcing partition. One of the partition-forming panels has a glue flap that extends from the bottom wall and is attached to the top wall of the carrier.

[0003] U.S. Patent No. 4,318,476 discloses a top-engaging carrier having a so called billboard panel depending from one of the side walls. The billboard panel is normally used for carrying sales information and/or for advertising. In blank form, the carrier has its billboard panel at one end of the blank.

[0004] U.S. Patent No. 5,135,104 discloses a top engaging carrier having a billboard panel and an upstanding reinforcing structure formed from a pair of mutually hinged panels. When the carrier is in blank form, the hinged panels are located between a pair of wall-forming panels.

[0005] US 3,640,563 discloses an article carrier as defined in the preamble of claim 1 and a blank for forming an article carrier as defined in the preamble of claim 6.

[0006] US 3,612,266 illustrates a carrier for supporting two rows of articles comprising means to secure the panels to the articles. The carrier comprises side panels and overlapping top panels which are locked above the article crowns.

[0007] Accordingly, so called billboard panels per se or partitions per se are known in the art as is shown in the above references. However, none of the references alone or in combination suggest forming a partition from a pair of hinged panels for the purpose of providing a top engaging carrier with a partition together with a billboard panel.

[0008] One aspect of the invention provides an article carrier according to claim 1.

[0009] According to an optional feature of this aspect of the invention, said partition structure may further comprises a third panel element foldably joined to an upper edge of one of said first and second panel elements, said third panel element being secured to said upper wall.

[0010] According to another optional feature of this aspect of the invention, one of said wall-forming panel portions may have an outer side edge disposed along said one side wall, said one wall-forming panel being provided with a glue flap foldably joined thereto along said outer side edge, said glue flap being secured to said one side wall whereby said one wall-forming panel is connected to said one side wall.

[0011] According to a further optional feature of this

aspect of the invention, a billboard panel may be joined to a lower edge of said one side wall.

[0012] According to yet a further optional feature of this aspect of the invention, each of said upper and lower walls may have a plurality of article-receiving apertures, said apertures in said upper wall being disposed in register respectively with said apertures in said lower wall.

[0013] Another aspect of the invention provides a blank for forming an article carrier of a tubular structure suitable for holding together a plurality of articles such as bottles, said blank comprising: a series of foldably interconnected wall panels for forming said tubular structure, said series of said wall panels including a pair of end panels located at the opposite ends of said blank and a billboard panel formed from an end portion of said blank, wherein one of said wall panels comprising a pair of wall-forming panel portions and a pair of foldably joined panel elements disposed between said wall-forming panel portions to form a partition structure for dividing an internal space of said tubular structure, said panel elements being foldably joined respectively to said wall-forming panel portions, said series of said wall panels comprising a pair of upper and lower wall panels and a pair of side wall panels disposed in the sequence of one of said side wall panels, said upper wall panel, the other side wall panel and said lower wall panel; said one side panel comprising said one end panel and said lower wall panel comprising said one wall panel which has said wall-forming portions and said panel elements characterised in that one of said wall-forming panel portions is foldably joined to said other side wall panel, the other wall-forming panel portion provides a free edge of said lower wall panels, and a glue flap is foldably joined to said other wall-forming panel portion along said free edge of said lower wall panel.

Figure 1 is a plan view of paper board blank from which an article carrier according to the invention is made; and

Figure 2 is a schematic vertical cross-section of the article carrier showing it applied to a plurality of bottles.

[0014] Referring to the drawings, an article carrier 10 of the top gripping type is formed from a blank 12 of paper board or similar foldable sheet material, the blank comprising a series of panels hinged one to the next along transverse fold lines. Thus, the blank comprises a billboard panel 14, a first side wall panel 16, a top wall panel 18, and a second side wall panel 20, a first wall-forming panel portion 22, a composite partition structure S which comprises panel elements S1, S2, and S3, a second wall-forming panel portion 24 and a glue flap 26 hinged one to the next along transverse fold lines 28, 30, 32, 34, 36, 38, 40, 42 and 44 respectively. This particular article carrier is intended to be applied to a group

of four bottles arranged in two rows of two bottles each as depicted in figure 2 by references B1 and B2, respectively. Thus, the top wall panel 18 includes an array of so called sun-burst apertures A1-A4 in which the upper neck portions of the bottles are to be received. As is known, such sun-burst apertures each include an annular array of tabs "t" which engage beneath the rim of the crown cork or other top fastener of the bottle to secure the neck of the bottle in the carrier.

[0015] Each of the base panels 22 and 24 include a pair of apertures A5; A6 and A7; A8, respectively which, when the carrier is put into its set up condition as shown in figure 2, are brought into register with respective pairs of the apertures in the top wall panel 18. In order to facilitate carrying the loaded carrier the top wall panel 18 includes a finger hole H and the panel element S1 also includes a finger hole H1.

[0016] In order to form the carrier from the blank shown in Figure 1, the glue flap 26 is adhered to the lower portion of side wall panel 16 adjacent the billboard panel 14 and the partition structure S is set up so that the panel element S1 is upstanding parallel to the glue flap 26, the side wall 16 and the panel element S3. The panel element S2 is foldably joined to the uppermost edge 38 of the panel element S1 and is folded through approximately 90 about fold line 38 and secured to the underside of the top panel 18. The panel element S3, which is foldably joined along interrupted fold line 40 to the panel element S1 on either side of the panel element S2 is folded downwardly through approximately 180 into face to face contacting relationship with the lower portion of the panel element S1. Hence when the panel elements of the partition structure are set up, the two wall-forming panel portions 22 and 24 shown in Figure 1 of the drawings, are brought together whereby the internal partition structure S is disposed between them.

[0017] When the carrier is in its set up condition as shown in Figure 2, the billboard panel 14 is able to depend downwardly against the shoulders of one pair of bottles to provide a panel on which sales and/or advertising material can be displayed to view. The internal partition structure, which is of multi-ply form, is thus formed from material disposed intermediately between the ends of the blank but is strong enough to brace the carrier for use.

[0018] The carrier is able to fold into a flat collapsed condition for transport and supply in a direction to the left of the observer as viewed in Figure 2 of the drawings.

Claims

1. An article carrier for holding together a plurality of articles such as bottles, said carrier comprising: opposed upper and lower walls (18; 22, 24) interconnected by a pair of spaced side walls (16, 20) so as to form a tubular structure; a billboard panel (14) depending from an end portion of said carrier and

an internal partition structure (S) interposed between said side walls characterised in that said lower wall includes a pair of wall-forming panel portions (22, 24) connected respectively to said side walls (20, 16) and disposed adjacent to each other, in that said partition structure (S) comprises first and second interconnected panel elements (S3, S1) foldably joined respectively to said wall-forming panel portions (22, 24), in that said internal partition structure (S) is extending between said upper and lower walls, said partition structure being formed from material disposed and connecting between said wall-forming panel portions and in that said panel elements (S1, S3) are disposed in flat face contacting relationship with each other and provide an upstanding part of said partition structure when carrier is in a set up condition.

2. An article carrier according to claim 1, wherein said partition structure (S) further comprises a third panel element (S2) foldably joined to an upper edge of one of said first and second panel elements (S1, S3), said third panel element (S2) being secured to said upper wall (18).
3. An article carrier according to claim 1 or claim 2, wherein one of said wall-forming panel portions (24) has an outer side edge disposed along said one side wall (16), said one wall-forming panel (24) being provided with a glue flap (26) foldably joined thereto along said outer side edge, said glue flap (26) being secured to said one side wall (16) whereby said one wall-forming panel portion (24) is connected to said one side wall (16).
4. An article carrier according to any of claims 1 to 3 wherein a billboard panel (14) is joined to a lower edge of said one side wall (16).
5. An article carrier according to any of claims 1 to 4, wherein each of said upper and lower walls (18; 22, 24) has a plurality of article-receiving apertures (A1-A4, A5-A8), said apertures (A1-A4) in said upper wall being disposed in register respectively with said apertures (A5-A8) in said lower wall.
6. A blank for forming an article carrier of a tubular structure suitable for holding together a plurality of articles such as bottles, said blank comprising: a series of foldably interconnected wall panels (16, 18, 20, 22, 24) for forming said tubular structure, said series of said wall panels including a pair of end panels (16, 24) located at the opposite ends of said blank and a billboard panel formed from an end portion of said blank, wherein one of said wall panels comprising a pair of wall-forming panel portions (22, 24) and a pair of foldably joined panel elements (S1, S3) disposed between said wall-forming

panel portions to form a partition structure for dividing an internal space of said tubular structure, said panel elements (S1, S3) being foldably joined respectively to said wall-forming panel portions (24, 22), said series of said wall panels comprising a pair of upper and lower wall panels (18, 22, 24) and a pair of side wall panels (20, 16) disposed in the sequence of one of said side wall panels, said upper wall panel, the other side wall panel and said lower wall panel; said one side panel comprising said one end panel and said lower wall panel comprising said one wall panel which has said wall-forming portions and said panel elements characterised in that one of said wall-forming panel portions (22) is foldably joined to said other side wall panel (20), the other wall-forming panel portion (24) provides a free edge of said lower wall panels, and a glue flap (26) is foldably joined to said other wall-forming panel (24) portion along said free edge of said lower wall panel.

Patentansprüche

1. Gegenstandsträger zum Zusammenhalten einer Mehrzahl von Gegenständen, solchen wie Flaschen, wobei der Träger umfaßt: gegenüberliegende obere und untere Wände (18; 22, 24), die miteinander mittels eines Paares beabstandeter Seitenwände (16, 20) verbunden sind um so eine röhrenförmige Struktur auszubilden, eine Tannenbaum-Wandfläche (14), die von einem Endabschnitt des Trägers sowie einer inneren Trennstruktur (S), die zwischen den Seitenwänden angeordnet ist, abhängt, dadurch gekennzeichnet, daß die untere Wand ein Paar Wand-ausbildender Wandflächenabschnitte (22, 24), die jeweils mit den Seitenwänden (20, 16) verbunden sind und aneinander angrenzend angeordnet sind, sowie dadurch, daß die Trennstruktur (S) erste und zweite miteinander verbundene Wandflächenelemente (S3, S1) umfaßt; die jeweils faltbar mit den Wandbildenden Wandflächenabschnitten (22, 24) verbunden sind und dadurch daß die innere Trennstruktur (S) sich zwischen den oberen und unteren Wänden erstreckt, wobei die Trennstruktur aus Material ausgebildet ist, das zwischen den Wand-ausbildenden Wandflächenabschnitten angeordnet ist und zwischen den Wand-ausbildenden Wandflächenabschnitten verbindet, und dadurch, daß die Wandflächenelemente (S1, S3) in einer flachen flächenberührenden Beziehung zueinander angeordnet sind und einen aufrechten Teil der Trennstruktur bereitstellen, wenn sich der Träger in seinem aufgerichteten Zustand befindet.
2. Gegenstandsträger nach Anspruch 1, in welchem die Trennstruktur (S) weiter ein drittes Wandflächenelement (S2) umfaßt, das faltbar mit einer oberen Kante einer der ersten und zweiten Wandflächenelemente (S1, S3) verbunden ist, wobei das dritte Wandflächenelement (S2) an der oberen Wand (18) befestigt ist.
3. Gegenstandsträger nach Anspruch 1 oder 2, in welchem einer der Wand-ausbildenden Wandflächenabschnitte (24) eine äußere Seitenkante aufweist, die entlang einer Seitenwand (16) angeordnet ist, wobei die eine Wand-ausbildende Wandfläche (24) mit einer Klebelasche (26) versehen ist, die hieran entlang der äußeren Seitenkante faltbar verbunden ist, wobei die Klebelasche (26) mit der einen Seitenwand (16) verbunden ist, wodurch der eine Wand-ausbildende Wandflächenabschnitt (24) mit der einen Seitenwand (16) verbunden wird.
4. Gegenstandsträger nach einem der Ansprüche 1 bis 3, in welchem eine Tannenbaum-Wandfläche (14) mit der unteren Kante der einen Seitenwand (16) verbunden ist.
5. Gegenstandsträger nach einem der Ansprüche 1 bis 4, in welchem jede der oberen und unteren Wände (18; 22, 24) eine Vielzahl von Gegenstands-aufnehmenden Öffnungen (A1-A4, A5-A8) aufweist, wobei die Öffnungen (A1-A4) in der oberen Wand paßgenau im Verhältnis mit den Öffnungen (A5-A8) in der unteren Wand angeordnet sind.
6. Zuschnitt zur Ausbildung eines Gegenstandsträgers einer röhrenförmigen Struktur, die geeignet ist, eine Mehrzahl von Gegenständen, solchen wie Flaschen, zusammenhalten, wobei der Zuschnitt umfaßt: eine Reihe faltbar miteinander verbundener Wandflächen (16, 18, 20, 22, 24) zur Ausbildung der röhrenförmigen Struktur, wobei die Reihe der Wandflächen ein Paar von Endwandflächen (16, 24) einschließt, die an gegenüberliegenden Enden des Zuschnitts liegen sowie eine Tannenbaum-Wandfläche, die aus einem Endabschnitt des Zuschnitts ausgebildet ist, wobei eine der Wandflächen ein Paar von Wand-ausbildenden Wandflächenabschnitten (22, 24) umfaßt sowie ein Paar faltbar verbundener Wandflächenelemente (S1, S3), die zwischen den Wandausbildenden Wandflächenabschnitten angeordnet sind, um eine Trennstruktur auszubilden, und zwar zum Aufteilen des Innenraums der röhrenförmigen Struktur, wobei die Wandflächenelemente (S1, S3) jeweils faltbar mit den Wand-ausbildenden Wandflächenabschnitten (24, 22) verbunden sind, wobei die Reihe der Wandflächen ein Paar von oberen und unteren Wandflächen (18, 22, 24) umfaßt sowie ein Paar Seitenwandflächen (20, 16), die in Aufeinanderfolge auf eine der Seitenwandflächen, der oberen Wandfläche, der anderen Seitenwandfläche

und der unteren Wandfläche angeordnet sind; wobei eine Seitenwandfläche die eine Endwandfläche umfaßt und die untere Wandfläche die eine Wandfläche umfaßt, die die Wand-ausbildenden Abschnitte sowie die Wandflächenelemente aufweist, dadurch gekennzeichnet, daß einer der Wand-ausbildenden Wandflächenabschnitte (22) faltbar mit der anderen Seitenwandfläche (20) verbunden ist und der andere Wand-ausbildende Wandflächenabschnitt (24) eine freie Kante der unteren Wandflächen bereitstellt, sowie eine Klebe- lasche (26), die faltbar mit dem anderen Wand-aus- bildenden Wandflächenabschnitt (24) entlang der freien Kante der unteren Wandfläche verbunden ist.

Revendications

1. Support d'articles destiné à maintenir ensemble plusieurs articles tels que des bouteilles, ledit support comprenant: des parois supérieure et inférieure opposées (18; 22, 24) reliées entre elles par une paire de parois latérales (16, 20), distantes l'une de l'autre, de façon à former une structure tubulaire, un panneau d'étiquetage (14) pendant d'une partie d'extrémité dudit support et une structure de cloisonnement intérieure (S) interposée entre lesdites parois latérales, caractérisé en ce que ladite paroi inférieure comporte une paire de parties de panneau de formation d'une paroi (22, 24) reliées respectivement auxdites parois latérales (20, 16) et disposées à proximité directe l'une de l'autre, en ce que ladite structure de cloisonnement (S) comprend des premier et deuxième éléments de panneau (S3, S1) reliés l'un à l'autre et respectivement joints, tout en pouvant être pliés, auxdites parties de panneau de formation d'une paroi (22, 24), en ce que ladite structure de cloisonnement intérieure (S) s'étend entre lesdites parois supérieure et inférieure, ladite structure de cloisonnement étant formée en un matériau disposé entre et reliant l'une à l'autre lesdites parties de panneau de formation d'une paroi, et en ce que lesdits éléments de panneau (S1, S3) sont disposés dans une relation mutuelle de contact face contre face et définissent, lorsque le support est dans l'état monté, une partie verticale de ladite structure de cloisonnement.
2. Support d'articles selon la revendication 1, dans lequel ladite structure de cloisonnement (S) comprend, en outre, un troisième élément de panneau (S2) joint, tout en pouvant être plié, à un bord supérieur de l'un desdits premier et deuxième éléments de panneau (S1, S3), ledit troisième élément de panneau (S2) étant fixé à ladite paroi supérieure (18).
3. Support d'articles selon la revendication 1 ou la

revendication 2, dans lequel l'une (24) desdites parties de panneau de formation d'une paroi présente un bord latéral extérieur disposé le long d'une première paroi latérale (16), ce panneau de formation d'une paroi (24) étant muni d'un rabat à coller (26) joint audit panneau, tout en pouvant être plié, le long dudit bord latéral extérieur, ledit rabat à coller (26) étant fixé à ladite première paroi latérale (16), grâce à quoi ladite partie de panneau de formation d'une paroi (24) est reliée à ladite première paroi latérale (16).

4. Support d'articles selon l'une quelconque des revendications 1 à 3, dans lequel un panneau d'étiquetage (14) est joint à un bord inférieur de ladite première paroi latérale (16).
5. Support d'articles selon l'une quelconque des revendications 1 à 4, dans lequel chacune desdites parois supérieure et inférieure (18; 22, 24) comporte plusieurs ouvertures de réception d'article (A1 à A4, A5 à A8), lesdites ouvertures (A1 à A4) situées dans ladite paroi supérieure étant disposées en alignement, respectivement, avec lesdites ouvertures (A5 à A8) situées dans ladite paroi inférieure.
6. Flan pour la formation d'un support d'articles ayant une structure tubulaire adaptée pour maintenir ensemble plusieurs articles tels que des bouteilles, ledit flan comprenant: une série de panneaux de paroi (16, 18, 20, 22, 24) reliés entre eux de façon à pouvoir être pliés pour former ladite structure tubulaire, ladite série desdits panneaux de paroi comportant une paire de panneaux d'extrémité (16, 24) situés aux extrémités opposées dudit flan et un panneau d'étiquetage formé depuis une partie d'extrémité dudit flan, l'un desdits panneaux de paroi comprenant alors une paire de parties de panneau de formation d'une paroi (22, 24) et une paire d'éléments de panneau (S1, S3) joints de façon à pouvoir être pliés et disposés entre lesdites parties de panneau de formation d'une paroi afin de former une structure de cloisonnement destinée à diviser un espace interne de ladite structure tubulaire, lesdits éléments de panneau (S1, S3) étant respectivement joints, tout en pouvant être pliés, auxdites parties de panneau de formation d'une paroi (24, 22), ladite série desdits panneaux de paroi comprenant une paire de panneaux de parois supérieure et inférieure (18, 22, 24) et une paire de panneaux de paroi latérale (20, 16) disposés de telle sorte qu'un premier panneau de paroi latérale, ledit panneau de paroi supérieure, l'autre panneau de paroi latérale et ledit panneau de paroi inférieure se suivent dans cet ordre; ledit premier panneau latéral comprenant l'un desdits panneaux d'extrémité et ledit panneau

de paroi inférieure comprenant ledit panneau de paroi qui comporte lesdites parties de formation d'une paroi et lesdits éléments de panneau, caractérisé en ce que l'une (22) desdites parties de panneau de formation d'une paroi est jointe, tout en pouvant être pliée, audit autre panneau de paroi latérale (20), l'autre partie de panneau de formation d'une paroi (24) définit un bord libre dudit panneau de paroi inférieure et un rabat à coller (26) est joint, tout en pouvant être plié, à ladite autre partie de panneau de formation d'une paroi (24), le long dudit bord libre dudit panneau de paroi inférieure.

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FIG. 1

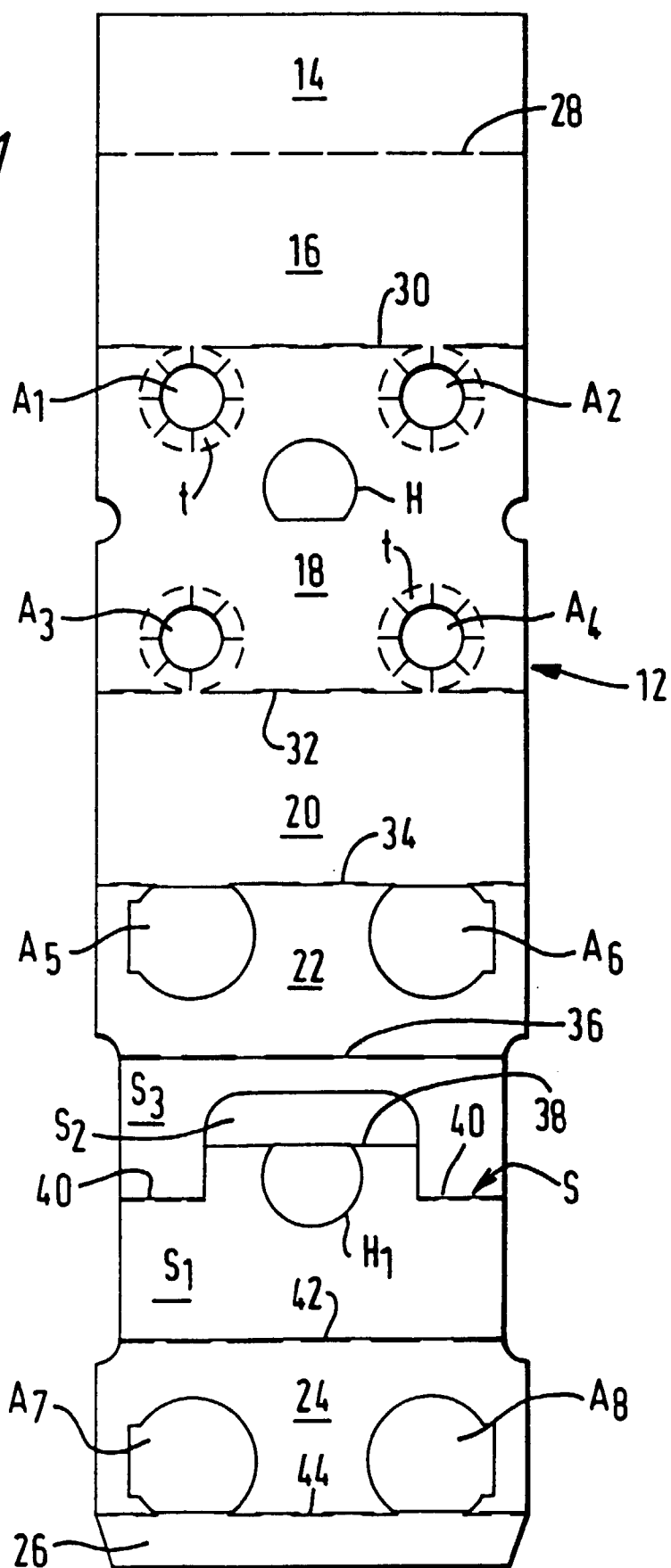


FIG. 2

