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(54) **Carrier**

Trägerelement

Fourreau de transport

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## Description

**[0001]** The present invention relates to a carrier, and more particularly to a carrier of the type used for carrying beverage containers, particularly open containers such as beer and wine glasses.

**[0002]** A carrier of this type is disclosed in WO 01 66 435.

**[0003]** Cardboard trays having a boxed construction with holes in a top surface for receipt of beverage containers are used in fast food outlets and coffee shops. In use, a beverage-containing cup, usually complete with a lid, is inserted through an aperture in a top surface and into the body of the container, such that the bottom of the cup sits upon the bottom surface of the boxed structure, with the top surface of the carrier acting against the sides of the cup to provide support thereto. Such carriers are designed to be stored flat and expanded to an assembled state by pushing the respective flat-packed sides of the carrier together. Carriers of this kind of design may also be provided with a centrally located handle.

**[0004]** Pulp tray carriers, analogous to cardboard egg cartons and in which a beverage container is held around its base are also known. These kind of containers are commonly used for 'take-away' orders from coffee shops and cafés. They too suffer many of the disadvantages mentioned above. Removal of cups wedged into this kind of carrier is often difficult and can result in spillage of the beverage.

**[0005]** At large sporting or musical events there are often short periods between breaks in performances in which demand for drinks is very high. This can result in bars being overwhelmed and many customers either not being served, or missing parts of the event once demand tails off and the scheduled break periods end. Pre-pouring and stacking drinks partially solves this problem, although the drinks are generally stacked on conventional trays and still must be transferred to the customer one at a time. It is therefore desirable to produce a stackable drinks carrier which allows drinks to be pre-poured, which enables a number of drinks to be simultaneously served, and which leads to a reduction in the time required for service at a bar.

**[0006]** It is also desirable, to produce a drinks carrier compatible with Multi-Head Dispense Units (MDUs) which are frequently utilised in high demand environments.

**[0007]** MDUs typically comprise up to 12 dispensing heads and pourers capable of delivering a dozen pints of beer in around 30 seconds. In order for such systems to be effective, loading and unloading of the glasses or plastic beakers immediately adjacent the dispensing heads must be swift. However, such environments are inherently wet as drink is spilt as a consequence of the rapid dispense of large volumes of drink. Therefore, drinks carriers as described above are not suitable for use in such environments. With such a system it is also desirable to unload multiple drinks from the dispensing

unit and serve a customer in a single step to optimise speed of service.

**[0008]** Therefore, there exists a need for a carrier capable of use for simultaneously carrying a number of filled open beverage containers, preferably with a single hand, in which the structural integrity of the carrier is not compromised by wetting. There also exists a need to provide a carrier suitable for stacking. It is further desirable to produce a carrier that is MDU compatible.

**[0009]** In its broadest sense, the present invention provides a carrier for beverage containers, according to claim 1.

**[0010]** The carrier further comprises a handle-latching portion to engage latching the first and second handle portions. Preferably, the handle-latching element comprises a flap located at an extreme end of the carrier blank. Preferably, the handle-latching element is complementary in shape to the elongate slots of the first and second handle portions.

**[0011]** Suitably, the sidewalls are further provided with holes positioned such that, in use, an uppermost portion of a beverage container accommodated within the carrier passes through a portion of the sidewall. The sidewalls are provided with a hole for each beverage container.

**[0012]** Alternatively, the sidewalls comprise an upper and lower portion, divided by a fold-line positioned substantially adjacent the uppermost edge of a beverage container when accommodated within the carrier.

**[0013]** Optionally, the container-receiving portions each comprise a plurality of deformable flaps.

**[0014]** Optionally, container-retaining barriers are provided at open ends of the carrier in an assembled configuration.

**[0015]** Preferably, the carrier is collapsible for storage and/or transportation.

**[0016]** The present invention also comprises a blank for a carrier as described above.

**[0017]** The above and other aspects of the present invention will now be described in further detail, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a plan view of a blank of a first embodiment of a carrier in accordance with the present invention;

Figure 2 is a perspective side view from a first end of a carrier formed from the blank of Figure 1;

Figure 3 is a perspective side view from a second end of two stacked carriers formed from blanks of Figure 1;

Figure 4 is a plan view of a blank of a second embodiment of a carrier in accordance with the present invention;

Figure 5 is a perspective side view along from a first



end of a carrier formed from the blank of Figure 4;

Figure 6 is a perspective side view from a first end of two stacked carriers formed from blanks of Figure 4; and

Figure 7 is a plan view of a blank of a third embodiment of a carrier in accordance with the present invention.

**[0018]** With reference to Figures 1 to 3, a single piece blank 10 is shown, from which a completed 2 x 2 carrier 11 (for carrying four beverages in a two-by-two arrangement) may be formed through folding. The carrier blank 10 comprises a single elongate piece of a material and includes regions corresponding to a handle portion 12, a handle locking element in the form of a flap 13, sidewalls 14 and a base 15.

**[0019]** Handle locking element 13 is formed at a first end of the elongate blank 10 and is attached, opposite a fold-line 20, to a first adjoint connects to a base portion 15 through fold-line 21. Base portion 15 in turn adjoins a second sidewall 14', through fold-line 22. Towards a second end of blank 10 is a pair of handle portions 12'. The arrangement of handle portions 12 and 12' is such that in an assembled configuration for carrying, as shown in Figure 2, handle portion 12 overlaps the handle portion 12' which lies closest to the second end of the blank. Fold-lines 20, 21 and 22 are substantially parallel. Optionally, but not essentially, intermediate fold-lines 121 and 122 (dot-dash lines) may also be provided.

**[0020]** This arrangement allows the handle locking element flap 13 to be folded back through the handle portion 12 to lock the carrier and provide a comfortable handle grip through which a user may place their hand for holding the carrier 11. It will be recognised by the skilled person that flap 13 may alternatively be formed on the second end of blank 10 or formed with the first handle portion 12, wherein only a part of the handle portion 12 is cut out and the straight side of the handle portion 12 nearest the first end of the blank is a fold-line (not shown). An advantage of this handle arrangement is that it also allows a filled carrier to be stacked on top of a like-filled carrier, as seen in Figure 3, such that the user can simply pick the carrier 11 up without the need for pre-assembling the handle. In use, there is sufficient distance between the fold-lines 21, 22 of base 15 and the handle portions 12, 12' that a person's fingers can slip between the handle portions 12, 12' and lift the carrier in a single step.

**[0021]** The base 15 also comprises a plurality of circular cut-out regions 23 for receipt of respective beverage containers 25. In the embodiment of Figures 1 to 3, a two by two arrangement is shown although alternative arrangements, such as 2 x 3, 1 x 2, 1 x 3, 1 x 4 and 2 x 4 and so on, will readily be apparent to the skilled person.

**[0022]** Additionally, sidewalls 14 each further comprise cut-out portions 24 of generally triangular shape, through

which an upper portion of each beverage container 25 held in the carrier 11 will pass in use, as illustrated in Figure 2. It will be recognised that alternative shaped cut-outs will also be suitable. This arrangement reduces the inwardly pulling effect of sidewalls 14 upon the upper portion of containers 25, which occurs when the carrier is in use, and prevents the upper portions of containers 25 from being forced together in a manner which may lead to unnecessary spillage of drinks contained therein. The cut-outs 24 also support a beverage container 25 so inserted around the area of its rim and prevent adjacently placed containers 25 from knocking against each other when the carrier is in use.

**[0023]** Blank 10 may also include separator flaps (not shown) formed in the base portion 15, to reduce cross-contamination of different adjacently-located drinks. The separator flaps may be formed as extensions of respective cut-out regions 23, which will be retained along a fold-line in the base of the carrier, to form a barrier between adjacent beverage containers.

**[0024]** The carrier 11 requires no gluing and is formed from a single piece blank. Preferably formed from card material having excellent wet tear strength, the simplicity of the carrier design allows rapid and cheap production by conventional methods and produces a carrier which can be stored flat and assembled in minimum time.

**[0025]** In the operative configuration, as seen in Figures 2 and 3, the carrier 11 is capable of receiving and accommodating a number of beverage containers, and can be carried in a single hand. Carriers according to this invention allow a customer comfortably and safely to carry a large number of drinks, whilst minimising the risk of spillage. Additionally, due to the high specification of the material from which the carriers are preferably constructed, the carriers can be reused a number of times without the risk of the carrier failing, even if the carrier has been exposed to liquids.

**[0026]** Referring now to Figures 4 to 6, there is shown a second embodiment of the present invention for a 1 x 4 drinks carrier 30. The carrier 30 is constructed as above with handle portions 31, handle locking element 32, sidewalls 33, a base 34, fold-lines 35 and 40, and cut-out sections 41, and further comprises intermediate fold-lines 42 such that sidewalls 33 are formed from upper and lower sidewall portions 43 and 44 respectively. In this alternative embodiment cut-outs (24 of Figures 1 to 3) are not provided as intermediate fold-lines 42 act to reduce the inwardly directing force exerted upon beverage containers 25 which results when the carrier is in use. An advantage of this particular carrier configuration is that the carrier is compatible with Multi-Head Dispense Units (MDUs) and so provides a convenient and suitable loading/unloading, storage, and carrying means for use with such systems.

**[0027]** Figure 7 illustrates a blank of a third embodiment of the present invention in the form of a 1 x 2 drinks carrier having the features as described above in relation to the embodiment illustrated in Figures 4 to 6.



**[0028]** The carrier is suitably formed from a corrugated board material, suitably card or a plastics equivalent. Preferably, the material has excellent wet and tear strength properties having improved water resistance with low Cobb values, as determined by the Cobb test (ISO535) for establishing water absorptiveness of paper-based materials. It is desirable to use materials having Cobb values of between 30 and 70 g/m<sup>2</sup>, more preferably 45-55 g/m<sup>2</sup>, examples materials having such properties being Carrier Kote®, Frövi Carry®.

**[0029]** In preferred embodiments a card material of between 250 and 600 g/m<sup>2</sup>, more preferably between 300 and 400 g/m<sup>2</sup> is used.

**[0030]** As may be seen, therefore, the present invention provides numerous advantages. It may be assembled easily and inexpensively, and is capable of accommodating beverage containers of a range of different sizes and shapes. It may also be formed with a single die, using conventional manufacturing equipment.

## Claims

1. A carrier (11) for beverage containers, wherein the carrier (11) is formed from a unitary blank (10) and comprises:

a base portion (15) comprising a plurality of circular cut-out regions (23) for receipt, in use, of respective beverage containers (25);

a first handle portion formed with a first sidewall (14), which extends downwardly to the base portion (15) wherein the base portion is provided at an opposite side thereof with an upwardly extending second sidewall (14) which comprises a second handle portion at an end thereof; **characterized in that**

the first handle portion comprises two elongate slots (12') and the second handle portion comprises a single elongate slot (12) overlappable with an elongate slot (12') of the first handle portion.

2. A carrier as claimed in Claim 1 further comprising a handle-latching portion (13) to engage latchingly the first and second handle portions.
3. A carrier as claimed in Claim 2 in which the handle-latching portion (13) comprises a flap located at an extreme end of the carrier blank (10).
4. A carrier as claimed in Claim 2 or Claim 3 in which the handle-latching portion (13) is complementary in shape to the elongate slots (12,12') of the first and second handle portions.
5. A carrier as claimed in any one of claims 1 to 4 in which the sidewalls (14) further comprise at least

one hole (24) positioned such that, in use, an uppermost portion of a beverage container accommodated within the carrier passes through a portion of the at least one hole (24).

6. A carrier as claimed in Claim 5 in which the sidewalls comprise a hole for each beverage container.
7. A carrier as claimed in any one of claims 1 to 4 in which the sidewalls comprise an upper (43) and lower (44) portion, divided by a fold line (42) positioned substantially adjacent an uppermost edge of a beverage container when accommodated within the carrier.
8. A carrier as claimed in any one of claims 1 to 7 in which the circular cut-out regions (23) each comprise a plurality of deformable flaps.
9. A carrier as claimed in any one of claims 1 to 8 in which container-retaining barriers are provided at open ends of the carrier in an assembled configuration.
10. A carrier as claimed in any one of claims 1 to 9 in which the carrier is collapsible for storage and/or transportation.
11. A carrier as claimed in any one of claims 1 to 10 wherein the carrier is formed from a card or board material.
12. A carrier as claimed in Claim 11 wherein the card or board material has a Cobb value of from 30 to 70 g/m<sup>2</sup>, preferably from 45 to 55 g/m<sup>2</sup>,
13. A blank for a carrier as claimed in any one of claims 1 to 12.

## Patentansprüche

1. Träger (11) für Getränkebehälter, wobei der Träger (11) aus einem einteiligen Zuschnitt (10) gebildet ist und aufweist:

ein Basisteil (15) mit mehreren kreisförmigen Ausschnittsbereichen (23), um bei Benutzung jeweilige Getränkebehälter (25) aufzunehmen, einen an einer ersten Seitenwand (14) ausgebildeten ersten Griffteil, der abwärts in Richtung zu dem Basisteil (15) verläuft, wobei der Basisteil an einer gegenüberliegenden Seite mit einer nach oben verlaufenden zweiten Seitenwand (14) versehen ist, die an einem Endbereich einen zweiten Griffteil aufweist;

**dadurch gekennzeichnet, dass**

der erste Griffteil zwei längliche Schlitzte (12')



aufweist und der zweite Griffteil einen einzelnen länglichen Schlitz (12) aufweist, der mit einem länglichen Schlitz (12') des ersten Griffteils in Überlappung bringbar ist.

2. Träger nach Anspruch 1, ferner mit einen Griffverriegelungsteil (13) zum Verriegelungseingriff mit den ersten und zweiten Griffteilen.
3. Träger nach Anspruch 2, bei dem der Griffverriegelungsteil (13) eine Lasche aufweist, die an einem der äußersten Enden des Trägerzuschnitts (10) angeordnet ist.
4. Träger nach Anspruch 2 oder Anspruch 3, bei dem der Griffverriegelungsteil (13) in seiner Form den länglichen Schlitz (12, 12') der ersten und zweiten Griffteile komplementär ist.
5. Träger nach einem der Ansprüche 1 bis 4, bei dem die Seitenwände (14) ferner mindestens ein Loch (24) aufweisen, das derart positioniert ist, dass bei Benutzung ein im obersten Bereich gelegener Teil eines in dem Träger untergebrachten Getränkebehälters durch einen Teil des mindestens ein Lochs (24) hindurchtritt.
6. Träger nach Anspruch 5, bei dem die Seitenwände für jeden Getränkebehälter ein Loch aufweisen.
7. Träger nach einem der Ansprüche 1 bis 4, bei dem die Seitenwände einen oberen (43) und einen unteren (44) Teil aufweisen, die durch eine Faltlinie (42) getrennt sind, welche im wesentlichen nahe einem im obersten Bereich gelegenen Rand eines Getränkebehälters positioniert ist, wenn dieser in dem Träger angeordnet ist.
8. Träger nach einem der Ansprüche 1 bis 7, bei dem die kreisförmigen Ausschnittsbereiche (23) jeweils mehrere verformbare Laschen aufweisen.
9. Träger nach einem der Ansprüche 1 bis 8, bei dem in der zusammengefügte Konfiguration Behälterrückhaltebarrieren an den offenen Enden des Trägers angeordnet sind.
10. Träger nach einem der Ansprüche 1 bis 9, wobei der Träger zur Lagerung und/oder zum Transport kollabierbar ist.
11. Träger nach einem der Ansprüche 1 bis 10, wobei der Träger aus Karton- oder Plattenmaterial ausgebildet ist.
12. Träger nach Anspruch 11, bei dem das Karton- oder Plattenmaterial einen Cobb-Wert von 30 bis 70 g/m<sup>2</sup>, vorzugsweise von 45 bis 55 g/m<sup>2</sup> hat.

13. Zuschnitt für einen Träger nach einem der Ansprüche 1 bis 12.

## 5 Revendications

1. Fourreau de transport (11) destiné à des conteneurs de boisson, lequel fourreau de transport (11) est formé à partir d'une ébauche unitaire (10) et comporte :

une partie de base (15) comprenant une pluralité de zones découpées circulaires (23) servant à recevoir, lors de l'utilisation, des conteneurs de boisson respectifs (25) ;

une première partie de poignée formée par une première paroi latérale (14), laquelle s'étend vers le bas vers la partie de base (15) dans lequel la partie de base est pourvue, au niveau de l'un de ses côtés opposés, d'une seconde paroi latérale s'étendant vers le haut (14) laquelle comporte une seconde partie de poignée au niveau de son extrémité ;

### caractérisé en ce que

la première partie de poignée comprend deux fentes de forme allongée (12') et la seconde partie de poignée comprend une seule fente de forme allongée (12) pouvant être superposée à une fente de forme allongée (12') de la première partie de poignée.

2. Fourreau de transport selon la revendication 1 comprenant, de plus, une partie de verrouillage de poignée (13) pour s'engager de façon à les bloquer avec les première et seconde parties de poignée.
3. Fourreau de transport selon la revendication 2 dans lequel la partie de verrouillage de poignée (13) comporte un volet situé au niveau d'une extrémité finale de l'ébauche de fourreau de transport (10).
4. Fourreau de transport selon la revendication 2 ou la revendication 3 dans lequel la partie de verrouillage de poignée (13) présente une configuration complémentaire à celle des fentes de forme allongée (12, 12') des première et seconde parties de poignée.
5. Fourreau de transport selon l'une quelconque des revendications 1 à 4 dans lequel les parois latérales (14) comportent, de plus, au moins un trou (24) positionné de telle sorte que, lors de l'utilisation, une partie située le plus en hauteur d'un conteneur de boisson logé à l'intérieur du fourreau de transport passe à travers une partie du, au moins un, trou (24).
6. Fourreau de transport selon la revendication 5 dans lequel les parois latérales comportent un trou destiné à chaque conteneur de boisson.



7. Fourreau de transport selon l'une quelconque des revendications 1 à 4 dans lequel les parois latérales comprennent une partie supérieure (43) et une partie inférieure (44), séparée par une ligne de pliage (42) positionnée de façon essentiellement adjacente à un bord le plus haut d'un conteneur de boisson lorsque ce dernier est placé à l'intérieur du fourreau de transport. 5
8. Fourreau de transport selon l'une quelconque des revendications 1 à 7 dans lequel les zones de découpe circulaires (23) comportent, chacune, une pluralité de volets déformables. 10
9. Fourreau de transport selon l'une quelconque des revendications 1 à 8 dans lequel des barrières de retenue des conteneurs sont prévues au niveau des extrémités ouvertes du fourreau de transport dans une configuration assemblée. 15  
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10. Fourreau de transport selon l'une quelconque des revendications 1 à 9 dans lequel le fourreau de transport peut être aplati en vue d'un stockage et/ou d'un transport. 25
11. Fourreau de transport selon l'une quelconque des revendications 1 à 10 dans lequel le fourreau de transport est formé à partir d'un matériau de papier-carton ou d'un matériau de carton. 30
12. Fourreau de transport selon la revendication 11 dans lequel le matériau de papier-carton ou le matériau de carton présente une valeur Cobb allant de 30 à 70 g/m<sup>2</sup>, de préférence de 45 à 55 g/m<sup>2</sup>. 35
13. Ebauche destinée à un fourreau de transport selon l'une quelconque des revendications 1 à 12. 40

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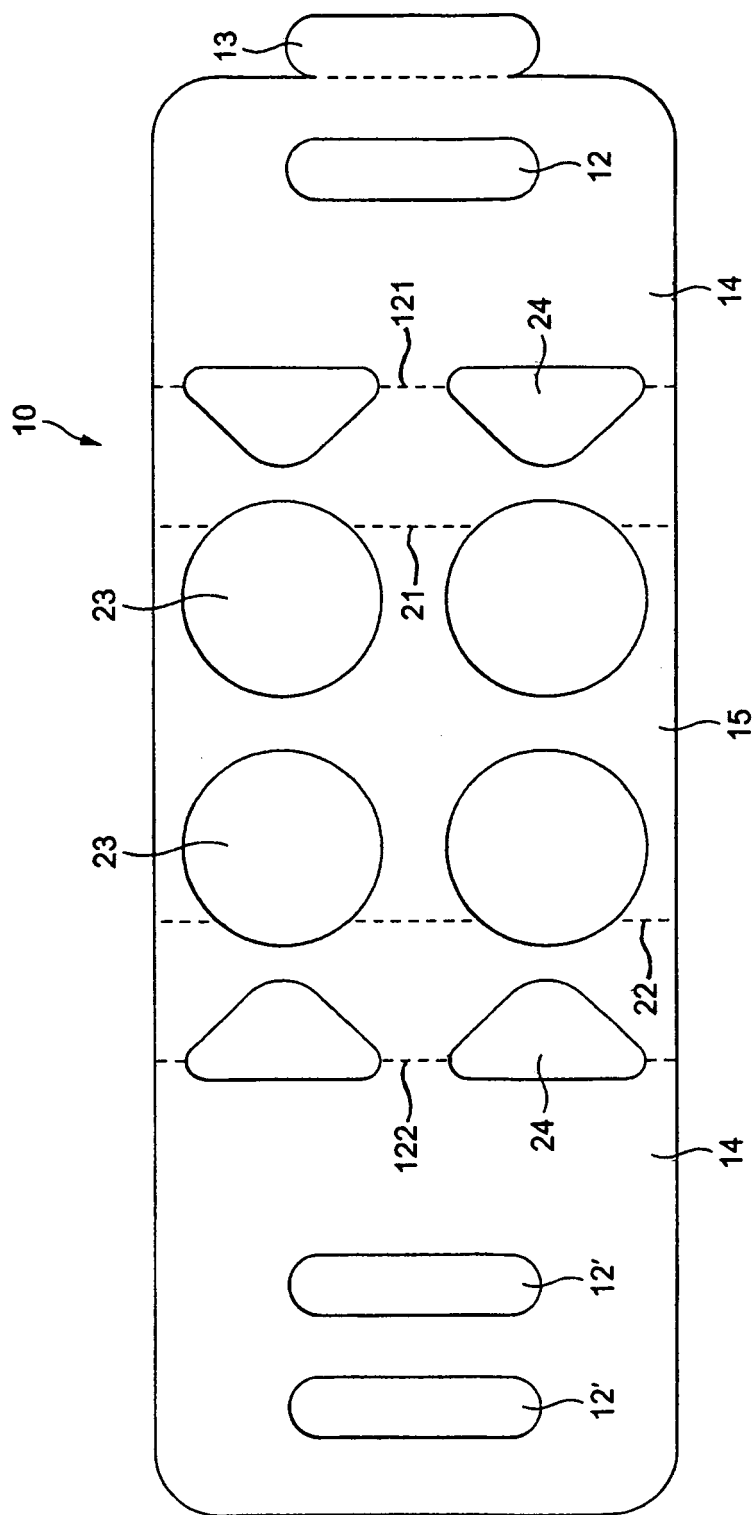


FIG. 1



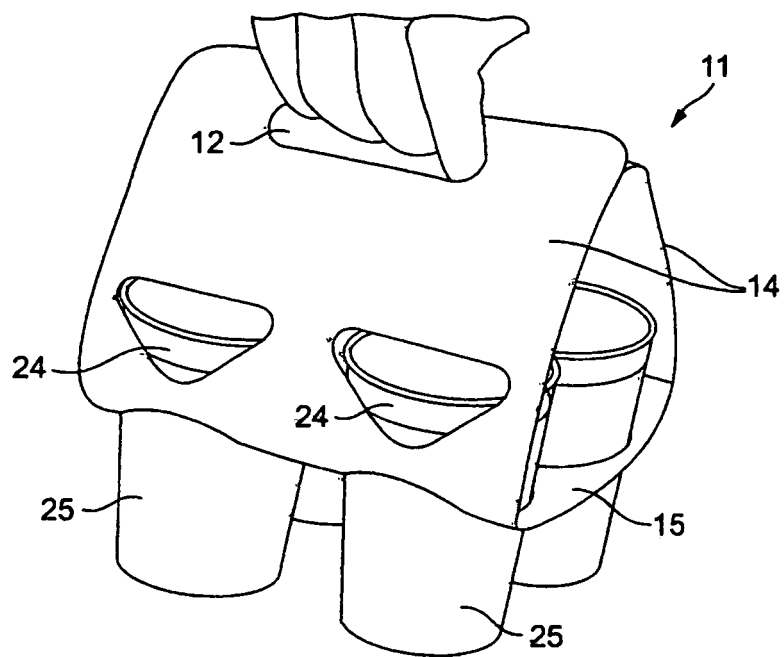


FIG. 2

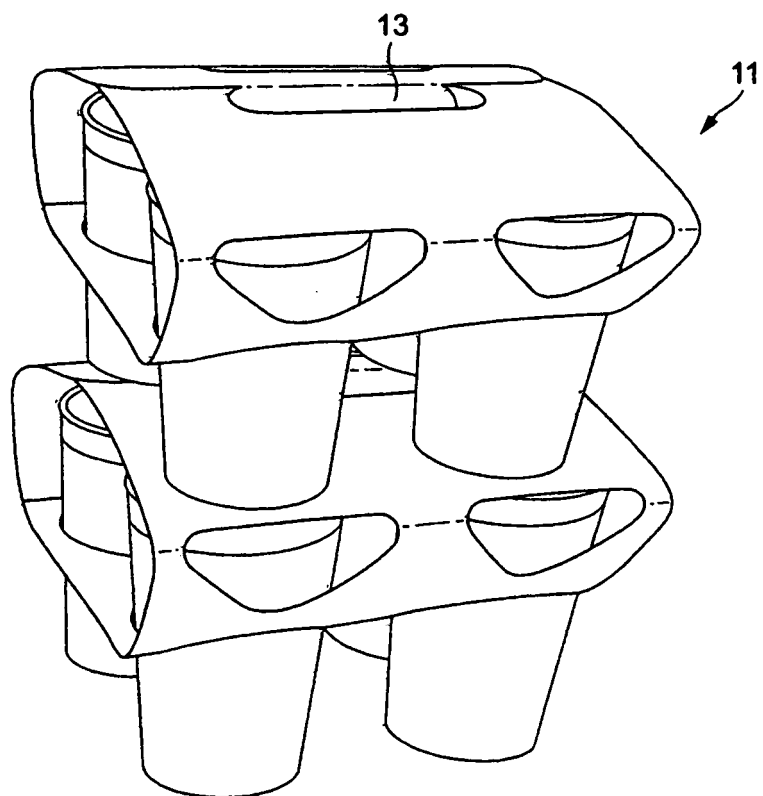


FIG. 3



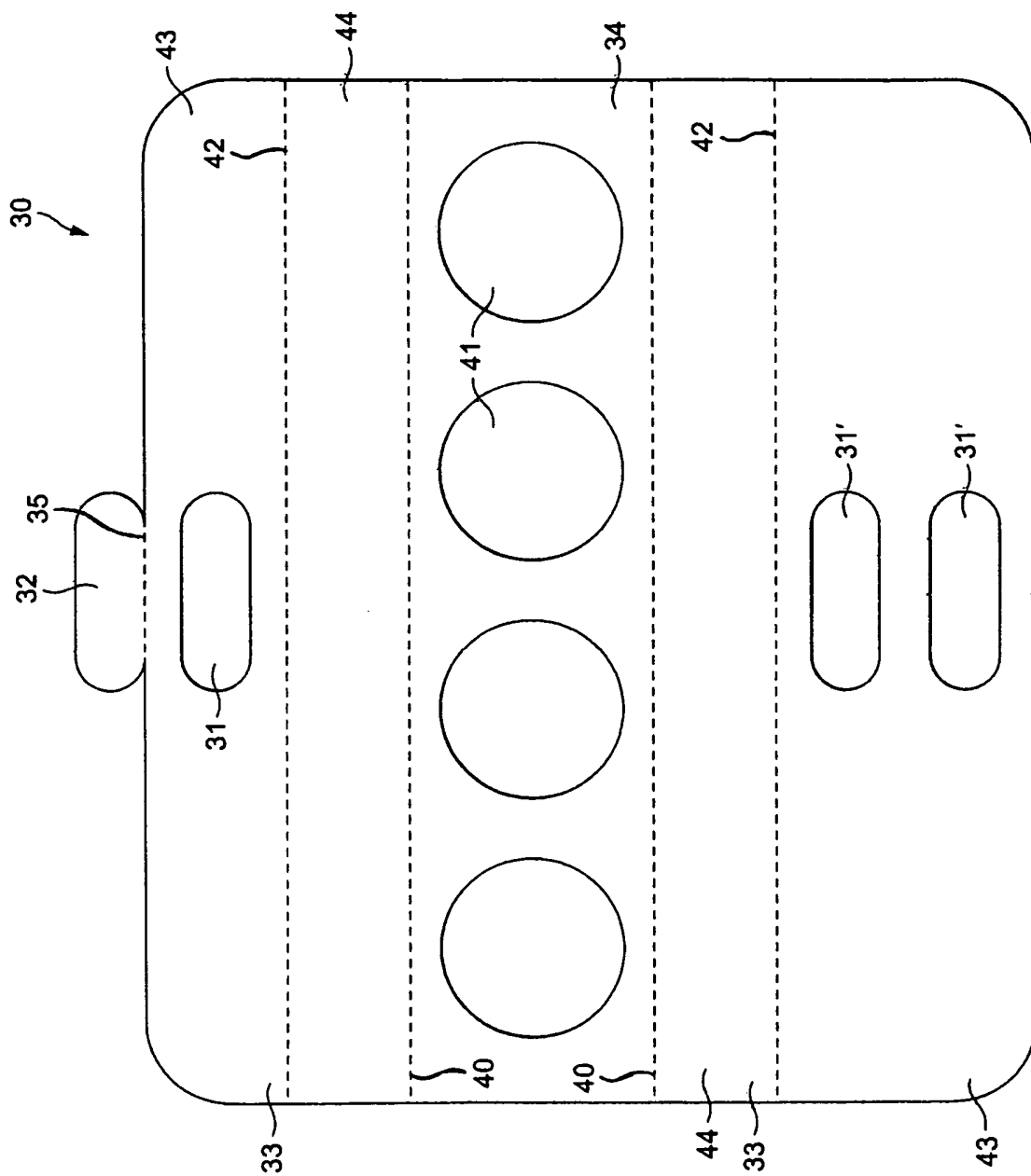


FIG. 4



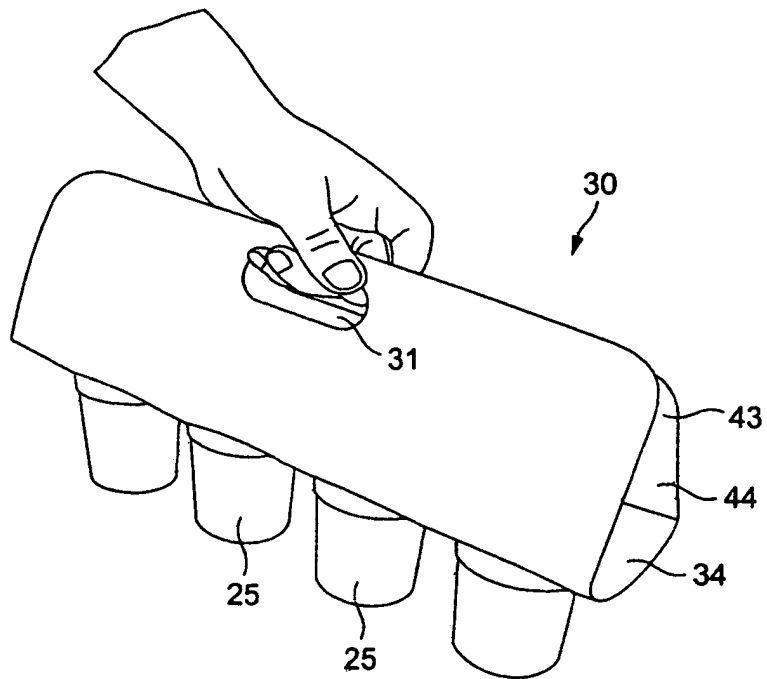


FIG. 5

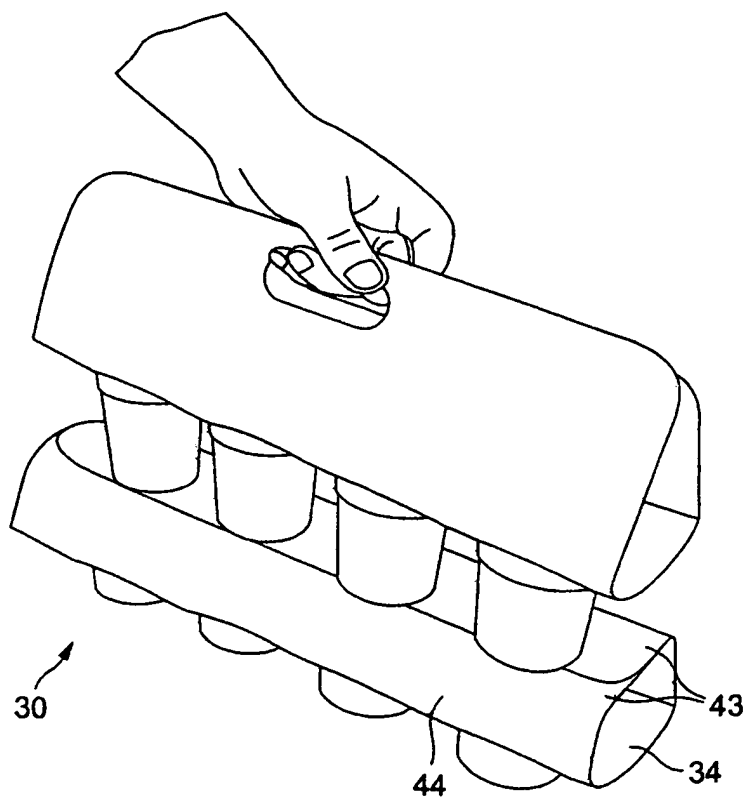


FIG. 6



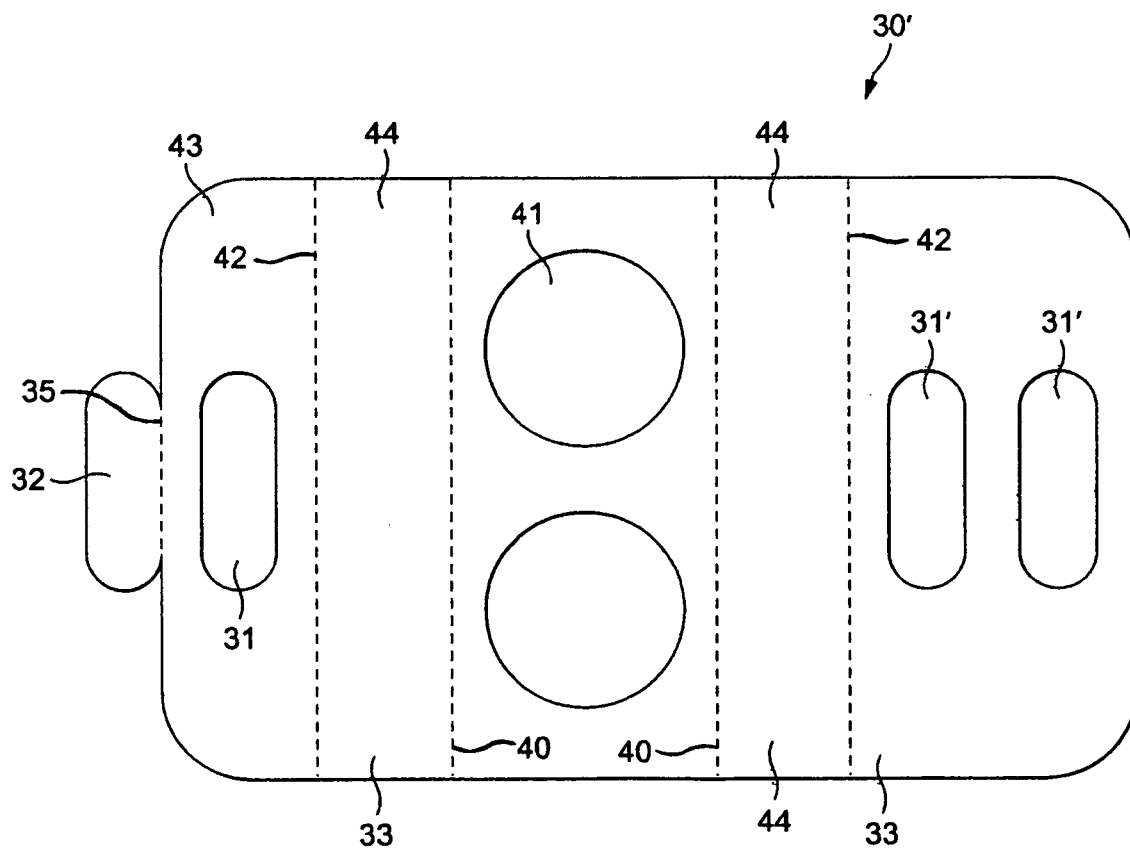


FIG. 7



**REFERENCES CITED IN THE DESCRIPTION**

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