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(54) Transit packaging

(57) The present invention relates to a transit packaging for storage and shipping of packaged goods articles. More specifically, the present invention is directed to a secondary packaging particularly suitable for temporarily packaging discrete packaged goods articles, and which is also suitable for displaying said packaged goods articles.

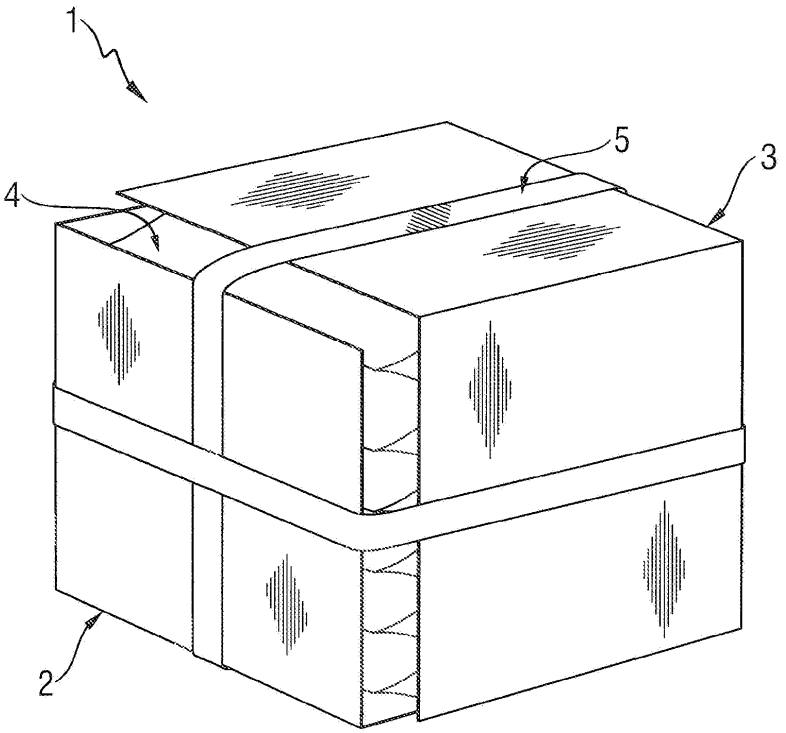

Fig. 1

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Description

TECHNICAL FIELD

[0001] The present invention relates to a transit packaging for storage and shipping of packaged goods articles. More specifically, the present invention is directed to a secondary packaging particularly suitable for temporarily packaging discrete packaged goods articles, and which is also suitable for displaying said packaged goods articles.

BACKGROUND OF THE INVENTION

[0002] Transit packaging for containing, storing and transporting packaged goods articles is commonly known in the art. Commonly used transit packaging consists in substantially rectangular outercases typically made of corrugated paperboard. In that context, cardboard packaging has been extensively used for the transportation and display of packaged goods. These secondary packages shall be able to flow through the distribution channels undamaged. However, the current packaging practice relies in large part on the structural strength and rigidity of the exterior carton per se, with consequent damage to the integrity of the transit packaging, under the stresses resulting from the static and dynamic forces of transportation. Actually, the available, intrinsic strengths of the package contents are not utilized with that of the package per se to provide a robust integrated package unit. This failure to optimize package strength led to the use of cardboard outercases of undue strength, rigidity and complexity, with correspondingly high profile cardboard and glue content. It has now become of major importance to all manufacturing companies to reduce packaging material, not only for cost but also for ecological reasons. Examples of packaging that partially address these drawbacks have been provided with for example in US-A-3,817,018, US 2007/0108090, US 2006/0207905 or US 5,607,056 which disclose packaging systems having reduced cardboard content and which exploit the intrinsic strength of the package content. The described packaging solutions however suffer from a rather complex manufacturing and are adapted for use with substantially rigid packaged goods articles such as bottles, tinned cans or carton boxes. Also, the described packages may lead to damages to the integrity of the contained packaged items. To our knowledge, similar transit packages have not yet been described for goods articles individually packaged in semi-rigid or flexible containers such as bags or pouches.

[0003] It is therefore an objective of the present invention to provide a transit package suitable for containing, storing and transporting packaged goods articles, which is easy to manufacture and operate, while providing efficient protection for the contained items.

[0004] It has now been found that the above objective can be met by providing a package assembly according to the present invention.

[0005] Advantageously, the package assembly according to the present invention optimizes packaging material and storage volume. A further advantage associated with the package assembly according to the present invention is that it may be quickly and easily disassembled after shipment so as to render the contained packaged goods articles ready-to-display. It is still another benefit of the present invention that the package assembly preserves the aesthetic appearance of the transported packaged goods articles.

[0006] Other advantages and more specific properties of the package assembly according to the present invention will be clear after reading the following description of the invention in combination with the attached drawings.

SUMMARY OF THE INVENTION

[0007] The present invention relates to a package assembly **1** comprising:

(a) a carrying member **2**;
(b) a covering member **3**;
(c) a multiplicity of packaged goods articles **4** arranged on the carrying member **2** in mutually organized relation; and
(d) at least one binding means **5** for securing the packaged goods articles **4** in integrated relation with the carrying member **2** and the covering member **3** to form a structural unit;
wherein said carrying member **2** comprises three distinct panels **6,** said covering member **3** comprises three distinct panels **6,** and where any one individual panel of said three distinct panels **6** of said carrying member **2** is substantially identical in shape and dimension to the corresponding panel on said covering member **3.**

[0008] In another embodiment, the present invention is directed to kit for a package assembly **1** containing a multiplicity of packaged goods articles **4** comprising:

(a) a first blank **11** for forming a carrying member **2**;
(b) a second blank **12** for forming a covering member **3**;
(c) at least one binding means **5** for securing the packaged goods articles **4** in integrated relation with the carrying member]**2** and the covering member **3** to form a structural unit;
(d) a multiplicity of packaged goods articles **4**;

wherein said carrying member **2** comprises three distinct panels **6,** said covering member **3** comprises three distinct panels **6,** and where any one individual panel of said three distinct panels **6** of said carrying member **2** is substantially identical in shape and dimension to the corresponding panel on said covering member **3.**

[0009] In still another embodiment, the present invention relates to method of assembling a multiplicity of packaged goods articles **4** comprising the steps of:

(a) providing a first blank **11** for forming a carrying member **2;**
(b) providing a second blank **12** for forming a covering member **3;**
(c) providing a multiplicity of packaged goods articles **4** arranged on the carrying member **2** in mutually organized relation;
(d) providing at least one binding means **5** for securing the packaged goods articles **4** in integrated relation with the carrying member **2** and the covering member **3** to form a structural unit;
(e) forming said first blank **11** into the carrying member **2;**
(f) forming said second blank **12** into the covering member **3;**
(g) arranging said multiplicity of packaged goods articles **4** on the carrying member **2** in mutually organized relation;
(h) placing the covering member **3** onto the multiplicity of packaged goods articles **4** arranged into the carrying member **2;**
(i) securing the packaged goods articles **4** in integrated relation with the carrying member **2** and the covering member **3** by using the at least one binding means **5** so as to form a structural unit.

[0010] The present invention further encompasses a process of displaying a multiplicity of packaged goods articles **4,** wherein the process comprises the steps of:

(a) providing a package assembly **1** as described above;
(b) un-securing the packaged goods articles **4** in integrated relation with the carrying member **2** and the covering member **3** by de-activating the at least one binding means **5;** and
(c) removing the covering member **3** from the multiplicity of packaged goods articles **4** arranged into the carrying member **2.**

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] The following figures represent preferred embodiments of the present invention;
[0012] **FIG.1** is a top perspective view representing a package assembly **1** according to the present invention, wherein said package assembly **1** comprises a carrying member **2,** a covering member **3,** a multiplicity of packaged goods articles **4,** and a binding means **5.**
[0013] **FIG.2** is a top perspective view of a carrying member **2** displaying a multiplicity of packaged goods articles **4** extending in a substantially horizontal manner.
[0014] **FIG.3** is a top perspective view of a carrying member **2** displaying a multiplicity of packaged goods articles **4** extending in a substantially vertical manner and secured together with a retaining means **18.**
[0015] **FIG.4** is a top perspective view of a packaged goods article **4** according to one preferred embodiment of the present invention.
[0016] **FIG.5** is a top perspective view of a carrying member **2,** and a covering member **3** according to the invention.
[0017] **FIG.6** is a top view of a blank first **11** for forming a carrying member **2,** and a second blank **12** for forming a covering member **3;**

DETAILED DESCRIPTION OF THE INVENTION

[0018] For the purposes of promoting and understanding the principles of the present invention, reference will be made to the embodiment illustrated in the drawings and specific language will be used to describe the same. While this invention is susceptible of embodiments in many different forms, this specification and the accompanying drawings discloses specific forms as examples of the invention. However, the invention is not intended to be limited to the embodiment so described.

Defmitions

[0019] By "hod-type configuration" it is meant herein that when said three distinct panels **6** are folded in the required manner, the resulting carrying member **2** or covering member **3** will substantially take the form of a hod, as depicted e.g. in **FIG.5.**
[0020] By "substantially identical in shape and dimension" in relation to individual panels of said three distinct panels **6,** it is meant herein that the length and the width of an individual panel of said three distinct panels **6** of said carrying member **2** is substantially identical to the length and width of the corresponding panel of said three distinct panels **6** of corresponding covering member **3** and is independent of any other additional elements such as cutouts, holes, perforations, tabs, flaps or handles.
[0021] In a first embodiment, the present invention is directed to a package assembly **1** comprising:

(a) a carrying member **2;**
(b) a covering member **3;**
(c) a multiplicity of packaged goods articles **4** arranged on said carrying member **2** in mutually organized relation; and
(d) at least one binding means **5** for securing said packaged goods articles **4** in integrated relation with said carrying member **2** and said covering member **3** to form a structural unit;

wherein said carrying member **2** comprises three distinct panels **6,** said covering member **3** comprises three distinct panels **6,** and where any one individual panel of said three distinct panels **6** of said carrying member **2** is substantially identical in shape and dimension to the corre-

sponding panel on said covering member **3.** In another embodiment, the carrying member **2** and the covering member **3** are substantially identical in shape and dimension and are provided with three distinct panels **6.**

CARRYING MEMBER 2

[0022] According to the present invention, the package assembly **1** comprises a carrying member **2** provided with three distinct panels **6.** Accordingly, the carrying member **2** preferably comprises a base panel **13** and two side panels **14,** as represented in **FIG.5.** As represented in **FIG.6,** the carrying member **2** is typically formed by folding and operating in the required manner a first blank **11** integrally comprising said three distinct panels **6.** Any one individual panel of said three distinct panels **6** of a first blank **11,** said first blank **11** being used to form the carrying member **2,** should be substantially similar in shape and dimension to the corresponding panel of said three distinct panels **6** of a second blank **12,** in which said second blank **12** is used to form covering member **3.** The manufacture of said carrying member **2** from said first blank **11** will typically involve operations selected from the group of folding upon pre-determined hinge lines, gluing, stapling, tucking-in, and combinations thereof. Those skilled in the art of packaging will easily recognize how to form a carrying member **2** according to the present invention from said first blank **11.** In another embodiment, the carrying member **2** and the covering member **3** are substantially identical in shape and dimension and are provided with three distinct panels **6.**

The first blank **11** for use herein may be formed from any material well known in the art of packaging. Suitable materials for use herein comprise but are not limited to cardboard, paperboard, carton, bleached kraft, newsboard, chipboard, corrugated board, foldable plastic and any other flexible material well known by those skilled in the art of packaging. Preferably, the first blank **11** for use herein is made from cardboard or paperboard, more preferably from cardboard, and most preferably from corrugated cardboard.

[0023] Suitable first blank **11** may have any suitable configuration, form or dimension for accommodating the multiplicity of packaged goods articles **4** intended to be transported. Suitable first blank **11** for forming the carrying member **2** according to the invention will easily be recognized by those skilled in the art. In a preferred embodiment, said three distinct panels **6** have a shape selected from the group of substantially rectangular, substantially square, substantially triangular, and combinations thereof. According to an even more preferred embodiment, said three distinct panels **6** have a substantially square shape, although the present invention is not so limited. Even more preferably, said three distinct panels **6** are substantially identical in shape and dimension. According to still a preferred embodiment, said three distinct panels **6** extend at a substantially right angle from each other.

In another embodiment, any one of said individual panels of said three distinct panels **6** can independently comprise one or more additional elements, such as tabs, flaps, holes, indentations, cutouts, perforations or handles.

[0024] Referring to **FIG.5,** a carrying member **2** according to a preferred embodiment of the invention is represented, wherein said carrying member **2** is shown in a "hod-type" configuration. Said carrying member **2** comprises a base panel **13** and two side panels **14.** According to the preferred execution depicted in **FIG.5,** the three distinct panels **6** consecutively have two hinges **7** in common with each other.

Referring now to **FIG.6,** a first blank **11** for forming a carrying member **2** according to a preferred execution of the present invention, is illustrated in an unfolded form. Said first blank **11** may advantageously be provided with fold lines **15** suitably located on said first blank **11** and represented in the attached figures in dotted lines. Suitable location, configuration, shape and dimension for said fold lines **15** will be easily recognized by those skilled in the art of packaging. Said pre-determined fold lines **15** may be applied to the first blank **11** using any suitable means well known in the art of packaging. Suitable means include but are not limited to folding machines. Alternatively, said pre-determined hinge **7** may be formed manually. In still another preferred execution of the invention, said first blank **11** may be further provided with additional locking tabs **16,** which are intended to facilitate the erection of said first blank **11** into said carrying member **2.** Alternatively, first blank **11** for use in the present invention may be provided with other suitable means for facilitating and securing the erection of said first blank **11** into said carrying member **2.** Such means include, but are not limited to, hook, pin, nail, pressure button, zip-type locking system, Velcro® type fastening means, and combinations thereof.

[0025] According to one embodiment of the present invention, said carrying member **2** is made from such a material and is provided in such a way that said carrying member **2** may be conveniently disposed after usage. In accordance to a more preferred embodiment, said carrying member **2** is made from such a material and is provided in such a configuration that the latter may be reused for repeated cycles.

[0026] In an alternative embodiment of the present invention, said carrying member **2** is provided with indicia **17,** preferably selected from the group of tradename, brandname, manufacturing company name, subnomen, slogan, flavour characteristics, colour, texturing, logo, instructions, and combinations thereof. More preferably, said indicia **17** are present onto the surface of said carrying member **2** which is visible to an outside observer. Even more preferably, said indicia **17** are applied to the external surface of said side panels **14.**

COVERING MEMBER 3

[0027] According to the present invention, the package assembly **1** comprises a covering member **3** which comprises three distinct panels **6,** and where any one of said individual panels of said three distinct panels **6** of said covering member **3** is substantially identical in shape and dimension to the corresponding panel on said carrying member **2.** In a one embodiment, the carrying member **2** and the covering member **3** are substantially identical in shape and dimension and are provided with three distinct panels **6.**

[0028] Preferably, said covering member **3** preferably comprises a base panel **13** and two side panels **14,** as represented in **FIG.5.** Typically, the covering member **3** is formed by folding and operating, in the required manner, a second blank **12** integrally comprising said three distinct panels **6,** as represented in **FIG.6** Other features as described above relating to the carrying member **2** are fully applicable to said covering member **3.**

[0029] By providing a covering member **3** comprising three distinct panels **6,** where any one of said individual panels of said three distinct panels **6** of said covering member **3** is substantially identical in shape and dimension to the corresponding panel on said carrying member **2,** global logistics and inventory operations such as assembling, wrapping, binding, palletization, transportation, storage, displaying at all points of the supply chain are greatly facilitated.

PACKAGED GOODS ARTICLES

[0030] According to the present invention, the package assembly **1** further comprises a multiplicity of packaged goods articles **4.** A wide variety of goods articles, such as consumable goods, are sold to consumers in packaged form on a mass production basis. Any such packaged goods articles may be used in the context of the present invention. Exemplary conventional packaging formats include, but are not limited to, flexible bags, semi-flexible bags, rigid bags, pouches, carton or plastic boxes, canisters, bottles, tubes, and combinations thereof. For particular applications, the packaging is selected in accordance with the product being contained and/or consumer preferences. Preferably, packaged goods articles **4** for use in the present invention are selected from the group of flexible bags, semi-flexible bags, and combinations thereof.

[0031] For particular applications, the packaging format is selected in accordance with the product being contained and/or consumer preferences. In the context of the present invention, goods articles for use herein may take any form commonly known in the field of consumable goods. Exemplary forms include, but are not limited to, granule, powder, agglomerate, solid, paste, gel, cream, liquid, paper products, absorbent articles, and combinations thereof. Preferably, said goods articles take a form selected from the group of granules, powder, agglomerates, and combinations thereof. More preferably, said goods articles take the form of granules. Even more preferably, said goods articles are selected from laundry granules.

BINDING MEANS 5

[0032] The package assembly **1** according to the present invention further comprises at least one binding means **5.** By "binding means", it is herewith intended to designate any means capable of securing said packaged goods articles **4** in integrated relation with said carrying member **2** and said covering member **3** to form a structural unit. Any such binding means **5** suitable for use in the context of the present invention will be easily recognized by those skilled in the art of packaging. Typically, binding means **5** for use in the present invention will provide appropriate elastic tensile force which in turn will allow said packaged goods articles **4,** said carrying member **2** and said covering member **3** to be compressed together and integrated into a substantially rigid structural unit. Examples of suitable binding means **5** for use herein include, but are not limited to, straps; self-adhering straps; adhesive tapes; elastic banding of tape; elastic banding provided with fastening means selected from hook, pin, nail, pressure button, zip-type locking system, Velcro® type system, and combinations thereof; shrink wrap; and combinations thereof. Typical material for forming said binding means **5** include, but are not limited to plastic, woven fabric, wood, rope fibers, paper, nylon, metal, wire, heat and chemically shrinkable materials, and combinations thereof. According to a preferred execution of the invention, said binding means **5** is selected from the group of straps, preferably from plastic strapping. Accordingly, in the context of the present invention, it is preferred to use so-called tensioned binding means **5** which permit said packaged goods articles **4,** said carrying member **2** and said covering member **3** to be secured in a compressing relation. The use of binding means **5** possessing suitable elasticity facilitates both manual and machine deconstruction/reconstruction of the package assembly **1** according to the present invention.

[0033] Binding means **5** for use in the present invention may be applied using any techniques commonly know in the art of packaging. According to a preferred execution, said binding means **5** may be advantageously applied using commonly known strapping machines. According to an alternative execution whereby self-adhering tapes are used, such tapes may be manually applied using commonly known taping devices.

[0034] In the context of the present invention, binding means **5** may be applied according to any configuration commonly known to those skilled in the art of packaging. As a way of example, said at least one binding means **5** may be applied horizontally, vertically, diagonally, or combinations thereof. Preferably, said binding means **5** is applied in a crossed fashion, which allows for preven-

tion of skewing of the packaged goods articles **4,** under load conditions. According to a preferred execution, the package assembly **1** of the present invention comprises two binding means **5,** preferably in the form of plastic straps. According to an even more preferred embodiment, the two binding means **5** are applied in a cross-type configuration as represented in **FIG.1,** wherein two inter-crossed binding means **5** are used to compress together said carrying member **2** and said covering member **3** into an integrated structural unit.

In another embodiment, said binding means **5** could be interlaced with or bound, using techniques commonly known in the art of packaging, to one or more said individual panel(s) of said three distinct panels **6,** of both or one of said carrying member **2** and said covering member **3.**

[0035] According to one embodiment of the present invention, said binding means **5** is made from such a material and is provided in such a configuration that said binding means **5** may be conveniently and easily dismantled after usage. Preferably, said binding means **5** may be easily cut-off with suitable cutting devices.

[0036] In a preferred execution, the binding means **5** for use in the present invention may be used to carry indicia **17** as above-described. Preferably, suitable indicia **17** are selected from the group of tradename, brandname, manufacturing company name, subnomen, slogan, flavour characteristics, variant characteristics, colour, texturing, logo, instructions, and combinations thereof. In a preferred embodiment, said binding means **5** is used to display advertising messages or product identification. More preferably, said indicia **17** are present onto the surface of said binding means **5** which is visible to an outside observer. In an alternative embodiment of the invention, said binding means **5** may be configured and positioned in such a way that it may beneficially be used as a handle for the overall package assembly **1.**

[0037] In the context of the present invention, it has been surprisingly discovered that package assembly **1** provide a transit package suitable for containing, storing and transporting packaged goods articles, which is easy to manufacture and operate, while providing efficient protection for the contained items.

[0038] As the package assembly **1** of the present invention is based upon the principle of combining the structure and rigidity of the packaged goods articles **4** with the structure of the package per se (which comprises the carrying member **2** and the covering member **3**), using at least one binding means **5** for securing said packaged goods articles **4** in integrated relation with said carrying member **2** and said covering member **3** to form a structural unit, it is permitted to use a significantly reduced packaging material. The package assembly **1** according to the present invention shall preferably be seen as a structural unit having enhanced load bearing and load sharing capability.

The use of reduced surface of packaging materials, and of discontinuous package surfaces is particularly helpful in providing improved package ventilation, in the changing of packaged product temperature, with associated savings in plant and operating costs.

Incidentally, and according to the present invention, the package assembly **1** presents minimized material overlap, preferably substantially no packaging material overlap. Moreover, the package assembly **1** of the present invention is scalable from very small to very large products and is perfectly suitable for palletization, transportation, storage and display at all points of the supply chain.

[0039] Further benefits associated with the package assembly **1** of the present invention are: simplicity of manufacturing; improved flexibility and capability of accommodating load variability; faster shelf transfer due to reduced de-packaging requirements; reduction in material return shipment or discard; enhanced re-use of packaging; facilitation and simplification of product handling from pallet to shelf; improved accessibility of and removal of packaged products out from the secondary packaging; significant manpower reduction.

[0040] The simplicity of manufacturing the packaging assembly **1** of the present invention combined with the overall reduction in packaging materials and the improved handling and transfer of packaged goods articles **5** translate into a significant reduction of the overall costs for the shipment and transit of packaged goods articles **5.** Additionally, the packaging assembly **1** of the present invention permits preserving the aesthetic aspect of the packaged goods articles **4.** More specifically, the shipped packaged goods articles **4** are received at the point of delivery with substantially no wrinkles.

[0041] According to another embodiment of the present invention, the packaging assembly **1** may further comprise a retaining means **18** the purpose of which is to secure the packaged goods articles **4** together so as to ensure better overall stability and optimized volume occupation of said packaged goods articles **4** in the package assembly **1** of the present invention. Suitable retaining means **18** for use herein include, but are not limited to, straps; self-adhering straps; adhesive tapes; elastic banding of tape; elastic banding provided with fastening means selected from hook, pin, nail, pressure button, zip-type locking system, Velcro® type system, and combinations thereof; shrink wrap; and combinations thereof.

KIT FOR A PACKAGE ASSEMBLY 1

[0042] According to another embodiment of the present invention, it is provided a kit for a package assembly **1** containing a multiplicity of packaged goods articles **4** comprising:

(a) a first blank **11** for forming a carrying member **2**;
(b) a second blank **12** for forming a covering member **3**;
(c) at least one binding means **5** for securing said packaged goods articles **4** in integrated relation with

said carrying member **2** and said covering member **3** to form a structural unit;
(d) a multiplicity of packaged goods articles **4**

wherein said carrying member **2** comprises three distinct panels **6,** said covering member **3** comprises three distinct panels **6,** and where any one individual panel of said three distinct panels **6** of said carrying member **2** is substantially identical in shape and dimension to the corresponding panel on said covering member **3.** In another embodiment, the carrying member **2** and the covering member **3** are substantially identical in shape and dimension and are provided with three distinct panels **6.** According to a further embodiment of the present invention, the kit may further comprise a retaining means **18** as above-described.

METHOD OF ASSEMBLING PACKAGED GOODS ARTICLES 4

[0043] According to still another embodiment, the present invention is directed to a method of assembling a multiplicity of packaged goods articles **4** comprising the steps of:

(a) providing a first blank **11** for forming a carrying member **2;**

(a) providing a second blank **12** for forming a covering member **3;**
(b) providing a multiplicity of packaged goods articles **4** arranged on said carrying member **2** in mutually organized relation;
(c) providing at least one binding means **5** for securing said packaged goods articles **4** in integrated relation with said carrying member **2** and said covering member **3** to form a structural unit;
(d) forming said first blank **11** into said carrying member **2;**
(e) forming said second blank **12** into said covering member **3;**
(f) arranging said multiplicity of packaged goods articles **4** on said carrying member **2** in mutually organized relation;
(g) placing said covering member **3** onto said multiplicity of packaged goods articles **4** arranged into said carrying member **2;**
(h) securing said packaged goods articles **4** in integrated relation with said carrying member **2** and said covering member **3** by using said at least one binding means **5** so as to form a structural unit. As above-indicated, said carrying member **2** and said covering member **3** may be quickly, easily and intuitively erected from the corresponding flat first blank **11** and flat second blank **12,** without exercising any excessive skills. Optionally, instructions for erecting said carrying member **2** and said covering member **3** may be printed on or otherwise provided with directly onto said flat first blank **11** or said flat second blank **12** to assist the operator.

[0044] According to a preferred embodiment wherein said packaged goods articles **4** take the form of flexible bags, as represented in **FIG.4,** the above step consisting in arranging said multiplicity of packaged goods articles **4** on said carrying member **2** in mutually organized relation is preferably operated by stacking said packaged goods articles **4** on the carrying member **2** in a substantially horizontal manner with respect to said carrying member **2.** In accordance with this preferred embodiment, said flexible bags typically define opposite side regions **8** extending between the opposing major faces, wherein said major faces comprise a front panel **9** and a back panel **10.** In the context of the method of assembling a multiplicity of packaged goods articles **4,** the step of arranging said packaged goods articles **4** preferably consists in stacking said packaged goods articles **4** in a major face-to-major face fashion with the corresponding packaged goods articles **4** resting on one of their major faces, preferably on their back panel **10.**

[0045] In the context of the present invention, it has been surprisingly discovered that the method of assembling packaged goods articles **4** according to the invention not only provides efficient protection for the contained articles, but also permits optimum volume occupation while also preserving the aesthetic aspect of the packaged goods articles **4.** In particular, the specific step of arranging said packaged goods articles **4** on the carrying member **2** in a substantially horizontal manner with respect to said carrying member **2,** allows said major faces to remain unaffected during the overall shipping operation. More specifically, and according to the method of the present invention, the shipped packaged goods articles **4** are received at the point of delivery with substantially no wrinkles. Without being bound by theory, it is believed that the specific step of arranging said packaged goods articles **4** on said carrying member **2** in a substantially horizontal manner with respect to said carrying member **2,** leads to a vertical compression effect which in turn creates a sort of ironing effect on the major faces of the corresponding packaged goods articles **4.** Incidentally, the step of arranging said packaged goods articles **4** on said carrying member **2** in a substantially horizontal manner with respect to said carrying member **2,** leads to a more homogeneous distribution of the goods articles which in turn permits a better volume occupation of said packaged goods articles **4** in the overall package assembly **1** of the present invention.

[0046] In another embodiment of the present invention, the method of assembling a multiplicity of packaged goods articles **4** further comprises the additional step of securing said packaged goods articles **4** with a suitable retaining means **17** as above-described. Preferably, said additional step is operated right before or alternatively right after the step of arranging said multiplicity of packaged goods articles **4** on said carrying member **2** in mu-

tually organized relation. More preferably, said additional step is operated right before the step of arranging said multiplicity of packaged goods articles **4** on said carrying member **2** in mutually organized relation.

PROCESS OF DISPLAYING PACKAGED GOODS ARTICLES 4

[0047] According to still a further embodiment of the present invention, it is provided a process of displaying a multiplicity of packaged goods articles **4,** wherein the process comprises the steps of:

(a) providing a package assembly **1** as above described;
(b) un-securing the packaged goods articles **4** in integrated relation with the carrying member **2** and the covering member **3** by de-activating the at least one binding means **5;** and
(c) removing the covering member **3** from the multiplicity of packaged goods articles **4** arranged into the carrying member **2.** As above-mentioned, the package assembly **1** according to the present invention may be quickly and easily disassembled after shipping operation so as to render the contained packaged goods articles ready-to-display. This is permitted when merely applying the process as above described. Accordingly, the package assembly **1** of the present invention also serves favorably for display purposes of individual packaged goods articles **4,** by the simple action of de-activating the at least one binding means **5** and removing the covering member **3.** Typically at a retail location a retailer would formerly have to slash the regular case and place packaged goods individually on the shelf, while with the process of displaying of the present invention, the entire package assembly **1** (with binding means **5** de-activated and the covering member **3** removed) may be preferably placed directly on the shelf.

[0048] In a preferred embodiment of the present invention, said packaged goods articles **4** are displayed upstanding (i.e. in a vertical fashion). This is particularly preferred according to the preferred embodiment of the invention whereby the multiplicity of packaged goods articles **4** are arranged on the carrying member **2** in a mutually organized relation and in a substantially horizontal manner with respect to the carrying member **2.** In accordance with this preferred embodiment, it is ensured that the major faces of the packaged goods articles **4** are substantially preserved from damages resulting from transportation (e.g. wrinkle-free). As a result, when said packaged goods articles **4** are operated from a substantially horizontal position towards being displayed upstanding, it is ensured that the integrality of the major faces of said packaged goods articles **4** are substantially wrinkle-free and therefore this allows maximizing usage of the major faces as surface for communicating information to consumers. This is believed to be a major improvement over transportation with regular outer cases whereby the transported packaged goods articles are typically provided with wrinkles and deep folds, especially the top of the major faces when the packaged goods articles rest in a vertical fashion, and generally require some manipulations to re-shape the transported items. In a preferred embodiment, the package assembly **1** according to the present invention minimizes and preferably obviates the step of manually re-shaping the packaged goods articles after transportation, and before arranging said packaged goods articles **4** on the shelves.

[0049] Incidentally, and due to the particular configuration of the package assembly **1** of the invention, the product handling from package to shelf, or from package to consumer is greatly facilitated. The process of displaying a multiplicity of packaged goods articles **4** of the invention enables the package content to be bulk-transferred to the shelf in the carrying member **2,** in a readily viewable and hand-accessible condition, without further unpackaging. This obviates the current practice of carton slashing with a box cutter. As for the consumer, he/she may easily access and take the packaged goods articles **4** out from the carrying member.

[0050] Depending upon the specific binding means **5,** suitable means for operating the step of un-securing the packaged goods articles **4** by de-activating the at least one binding means **5,** will readily be apparent to those skilled in the art of packaging. Preferably, the step of un-securing the packaged goods articles **4** in integrated relation with the carrying member **2** and the covering member **3** by de-activating the at least one binding means **5,** is operated by an action selected from the group of cutting, tearing-apart, undoing, untying, unlocking, slacking, ungluing, and combinations thereof. According to a preferred execution, said de-activation step is operated by cutting said binding means **5,** although the present invention is not that limited.

[0051] The dimensions and values disclosed herein are not to be understood as being strictly limited to the exact numerical values recited. Instead, unless otherwise specified, each such dimension is intended to mean both the recited value and a functionally equivalent range surrounding that value. For example, a dimension disclosed as "40 mm" intended to mean "about 40 mm".

Claims

1. A package assembly (**1**) comprising:

(a) a carrying member (**2**);
(b) a covering member (**3**);
(c) a multiplicity of packaged goods articles (**4**) arranged on said carrying member (**2**) in mutually organized relation; and
(d) at least one binding means (**5**);

characterised in that said packaged goods articles (**4**) in integrated relation with said carrying member (**2**) and said covering member (**3**) are secured using said binding means (**5**) to form a structural unit, and wherein said carrying member (**2**) comprises three distinct panels (**6**), said covering member (**3**) comprises three distinct panels (**6**), and where any one individual panel of said three distinct panels (**6**) of said carrying member (**2**) is substantially identical in shape and dimension to the corresponding panel on said covering member (**3**).

2. A package assembly (**1**) according to claim 1, wherein said three distinct panels (**6**) extend at a substantially right-angle from each other.

3. A package assembly (**1**) according to any of the preceding claims, wherein said three distinct panels (**6**) are arranged in a hod-type configuration.

4. A package assembly (**1**) according to any of the preceding claims, wherein said three distinct panels (**6**) said panels are formed of material selected from the group of corrugated cardboard, cardboard, paperboard, fiber board, carton, foldable plastic, and combinations thereof.

5. A package assembly (**1**) according to any of the preceding claims, wherein said packaged goods articles (**4**) take a form selected from flexible bags, semi-flexible bags, and combinations thereof.

6. A package assembly (**1**) according to claim 5, wherein said flexible bags further define opposite side regions (**8**) extending between the opposing major faces, wherein said major faces comprise a front panel (**9**) and a back panel (**10**), and whereby upon final assembly, said front panel (**9**) extends in a substantially horizontal manner relative to the carrying member (**1**).

7. A package assembly (**1**) according to any of the preceding claims, which further comprises a retaining means (**18**) for securing said packaged goods articles (**4**) together.

8. A kit for a package assembly (**1**) containing a multiplicity of packaged goods articles (**4**) comprising:

(a) a first blank (**11**) for forming a carrying member (**2**);
(b) a second blank (**12**) for forming a covering member (**3**);
(c) at least one binding means (**5**) for securing said packaged goods articles (**4**) in integrated relation with said carrying member (**2**) and said covering member (**3**) to form a structural unit;
(d) a multiplicity of packaged goods articles (**4**);

characterised in that said kit can be arranged to form said package assembly (**1**), and wherein said carrying member (**2**) comprises three distinct panels (**6**), said covering member (**3**) comprises three distinct panels (**6**), and where any one individual panel of said three distinct panels (**6**) of said carrying member (**2**) is substantially identical in shape and dimension to the corresponding panel on said covering member (**3**).

9. A kit according to claim 8, which further comprises a retaining means (**18**) for securing said packaged goods articles (**4**) together.

10. A method of assembling a multiplicity of packaged goods articles (**4**) comprising the steps of:

(a) providing a first blank (**11**) for forming a carrying member (**2**);
(b) providing a second blank (**12**) for forming a covering member (**3**);
(c) providing a multiplicity of packaged goods articles (**4**) arranged on said carrying member (**2**) in mutually organized relation;
characterised in further comprising the steps of:
(d) providing at least one binding means (**5**) for securing said packaged goods articles (**4**) in integrated relation with said carrying member (**2**) and said covering member (**3**) to form a structural unit;
(e) forming said first blank (**11**) into said carrying member (**2**);
(f) forming said second blank (**12**) into said covering member (**3**);
(g) arranging said multiplicity of packaged goods articles (**4**) on said carrying member (**2**) in mutually organized relation;
(h) placing said covering member (**3**) onto said multiplicity of packaged goods articles (**4**) arranged into said carrying member (**2**);
(i) securing said packaged goods articles (**4**) in integrated relation with said carrying member (**2**) and said covering member (**3**) by using said at least one binding means (**5**) so as to form a structural unit;

11. A method according to claim 10, which further comprises the step of securing said packaged goods articles (**4**) with a suitable retaining means (**18**).

12. A method according to claim 10 or 11, wherein said packaged goods articles (**4**) take a form of flexible bags, wherein said flexible bags further define opposite side regions (**7**) extending between the opposing major faces, wherein said major faces comprise a front panel (**8**) and a back panel (**9**), and whereby upon final assembly, said packaged goods

articles (**4**) are stacked in a substantially horizontal manner relative to the carrying member (**2**), preferably with the corresponding packaged goods articles (**4**) resting on one of their major faces, more preferably on their back panel **9**.

13. A process of displaying a multiplicity of packaged goods articles (**4**) packaged in a package assembly (**1**), wherein said process comprises the steps of:

(a) un-securing said packaged goods articles (**4**) in integrated relation with a carrying member (**2**) and a covering member (**3**) by de-activating said at least one binding means (**5**); and
(b) removing said covering member (**3**) from said multiplicity of packaged goods articles (**4**) arranged into said carrying member (**2**);

characterised in that said package assembly (**1**) is the package assembly according to any of claims 1 to 7, and wherein said process results in said multiplicity of packaged goods articles (**4**) arranged into said carrying member (**2**) being ready for display.

14. A process according to claim 13, wherein said multiplicity of packaged goods articles (**4**) are arranged on said carrying member (**2**) in a substantially horizontal manner with respect to said carrying member (**2**), wherein said process further comprises the step of operating said packaged goods articles (**4**) from said substantially horizontal position towards being displayed in an upstanding manner.

15. A process according to claim 13, wherein said de-activation step of said at least one binding means (**5**) is operated by cutting said at least one binding means (**5**).

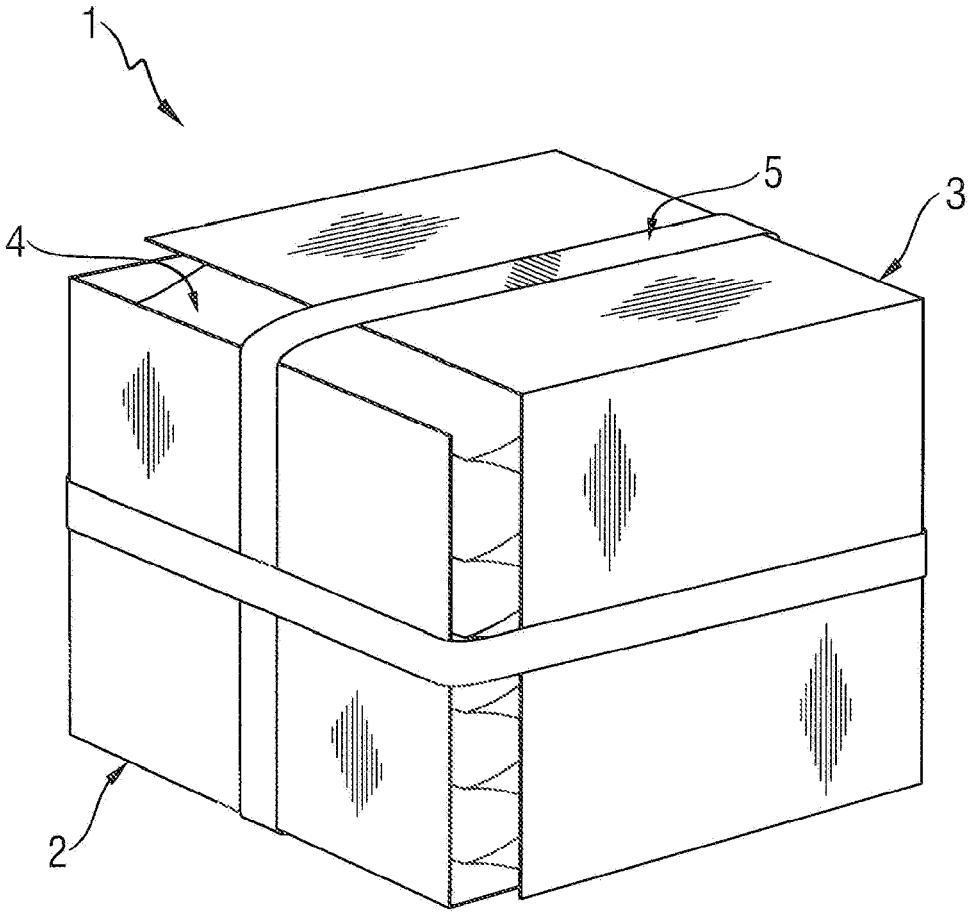

Fig. 1

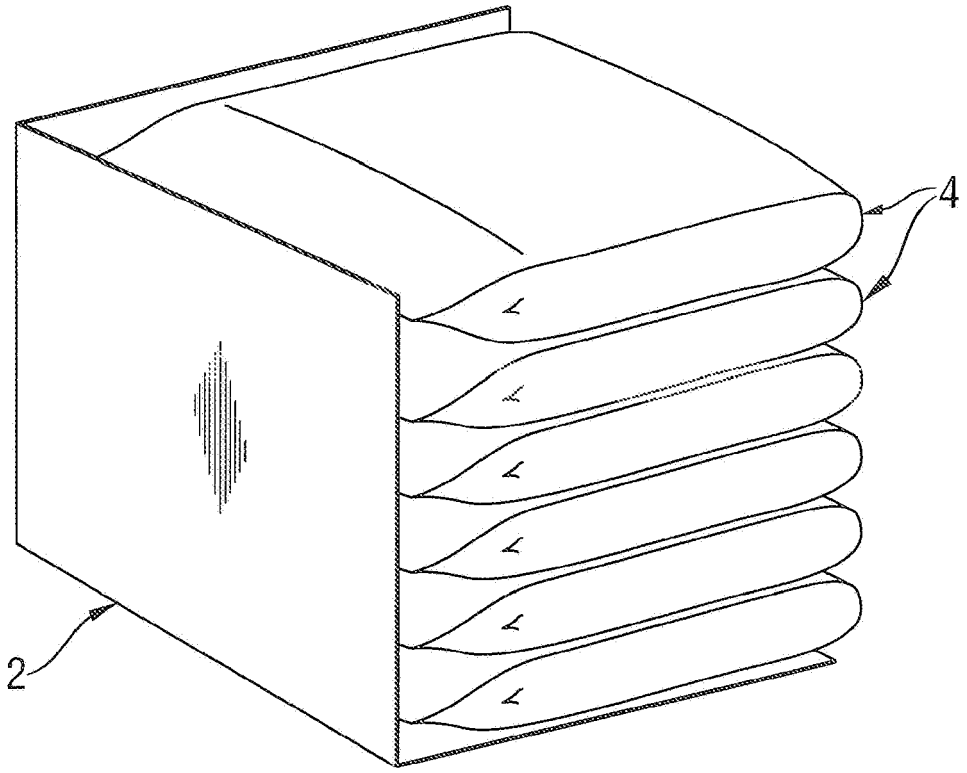

Fig. 2

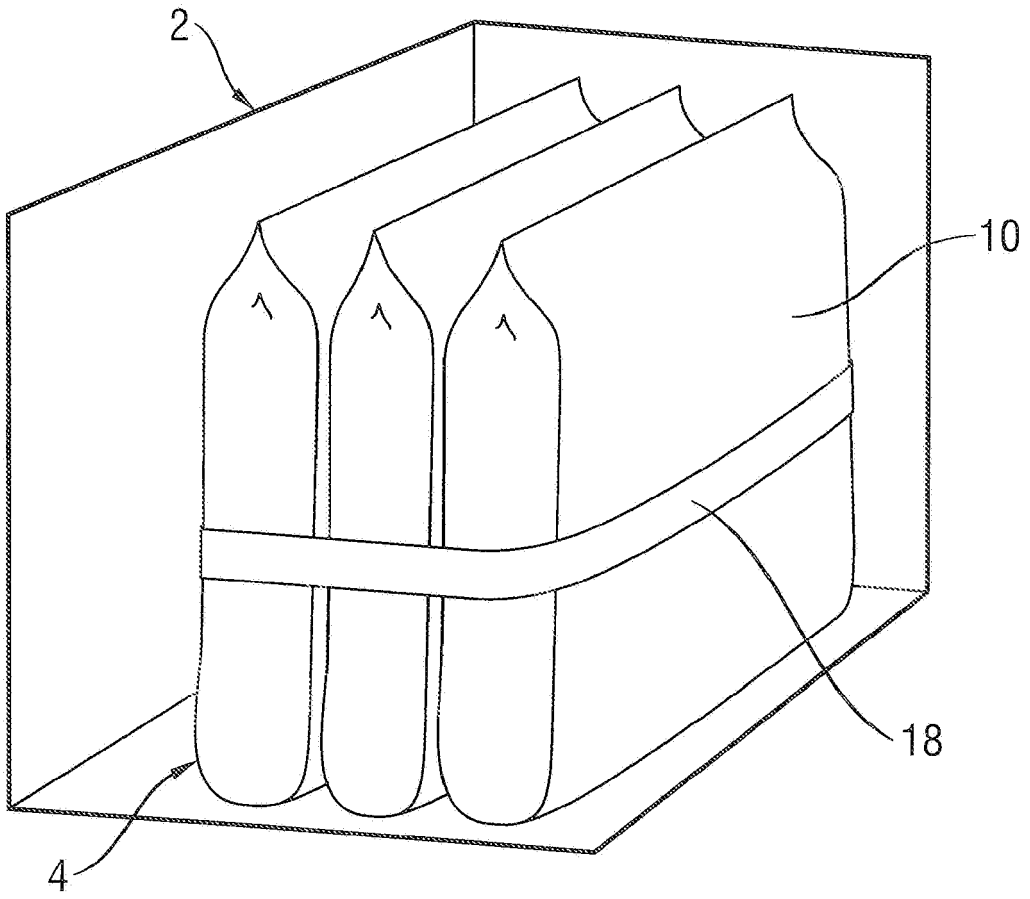

Fig. 3

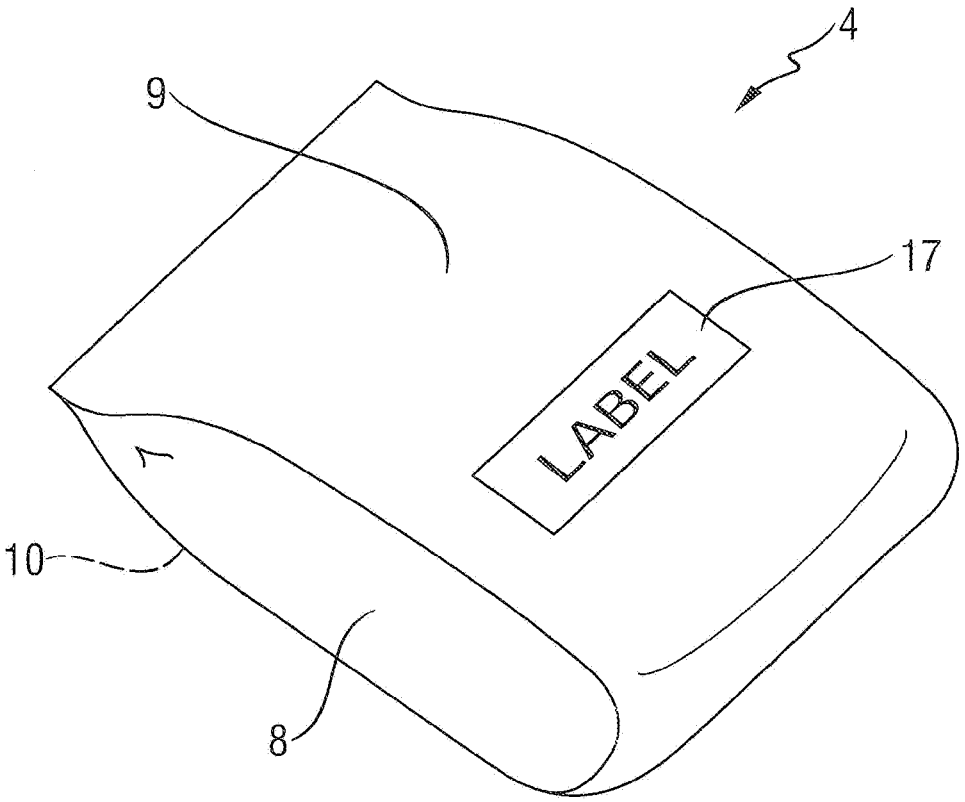

Fig. 4

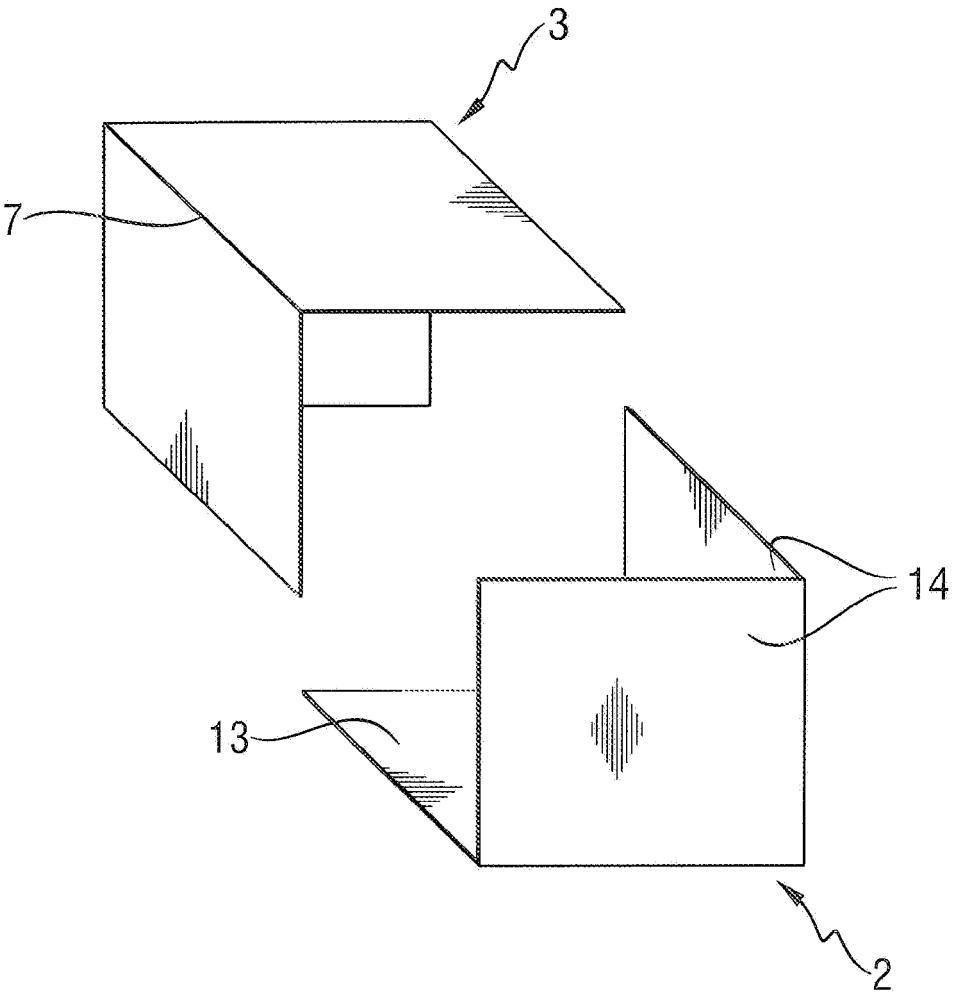

Fig. 5

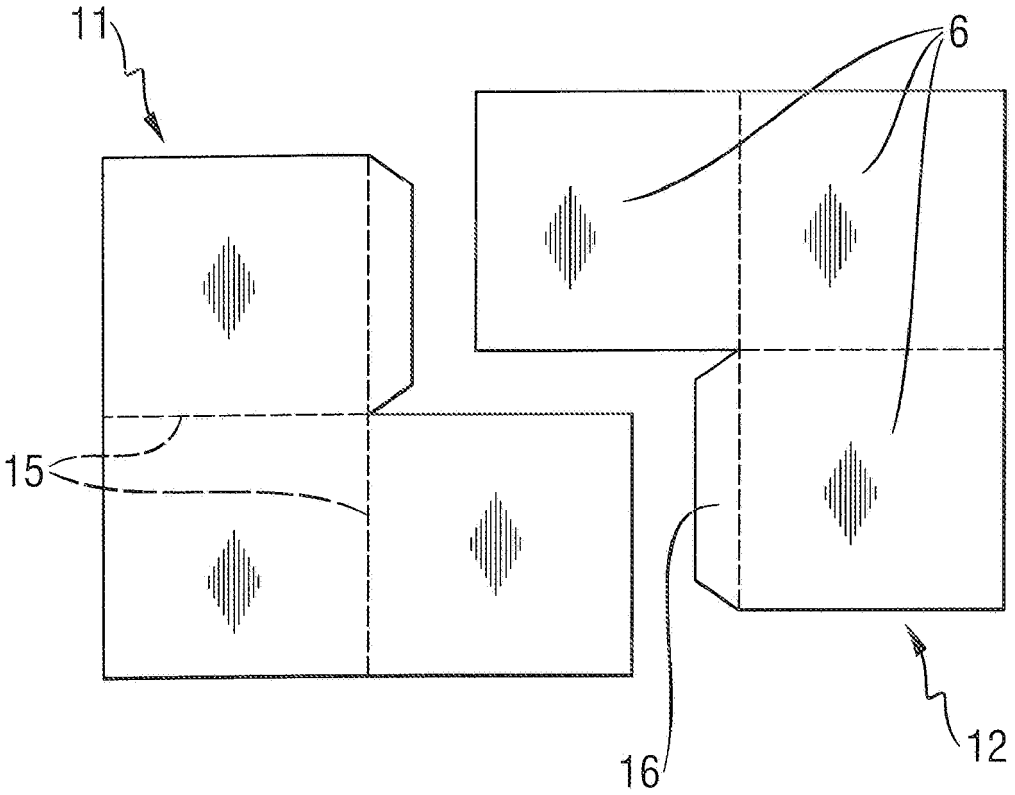

Fig. 6

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EUROPEAN SEARCH REPORT

Application Number
EP 08 10 5018

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 90 12 008 U1 (BRUELLS, GERD-ADAM, 5100 AACHEN, DE) 25 October 1990 (1990-10-25) * figure 1 *	1-3,8, 10,13,15	INV. B65D5/32 B65D71/02
D,Y	US 3 817 018 A (VICKERS J) 18 June 1974 (1974-06-18) * figure 7 *	1-15	
Y	EP 0 268 541 A (IMBERT ARNAUD) 25 May 1988 (1988-05-25) * figures 1-3 *	1-15	
Y	US 5 487 504 A (BAIRD WILLIAM J [US]) 30 January 1996 (1996-01-30) * column 1, lines 26-39; figure 1 * * column 3, lines 45-47 *	4,6, 12-15	
D,Y	US 2006/207905 A1 (WHITESIDE MICHAEL G [CA]) 21 September 2006 (2006-09-21) * figures 1-5 *	7,9,11	
A,D	US 2007/108090 A1 (WHITESIDE MICHAEL G [CA] ET AL) 17 May 2007 (2007-05-17) * paragraphs [0172], [0049] *	1-15	TECHNICAL FIELDS SEARCHED (IPC) B65D
A,D	US 5 607 056 A (WHITESIDE G MICHAEL [CA]) 4 March 1997 (1997-03-04) * abstract *	1-15	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	17 December 2008	Jervelund, Niels

CATEGORY OF CITED DOCUMENTS

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17-12-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 9012008 U1	25-10-1990	NONE	
US 3817018 A	18-06-1974	NONE	
EP 0268541 A	25-05-1988	DE 3766804 D1	31-01-1991
		FR 2621561 A2	14-04-1989
US 5487504 A	30-01-1996	NONE	
US 2006207905 A1	21-09-2006	NONE	
US 2007108090 A1	17-05-2007	CA 2608513 A1	08-05-2008
		WO 2008058203 A1	15-05-2008
US 5607056 A	04-03-1997	US 6039181 A	21-03-2000

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- US 3817018 A **[0002]**
- US 20070108090 A **[0002]**
- US 20060207905 A **[0002]**
- US 5607056 A **[0002]**