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**(54) Package for rod-shaped articles along with accessories comprising inspection window**

Verpackung für rohrförmige Gegenstände mit Zubehörteilen sowie Inspektionsfenster

Emballage pour objets tubulaires et ses accessoires, comportant une fenêtre d'inspection

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(73) Proprietor: **VKR Holding A/S**  
**2970 Hørsholm (DK)**

(72) Inventors:  
• **Coggan, Andrew James**  
**6900 Skjern (DK)**  
• **Simonsen, Lars**  
**6900 Skjern (DK)**

(74) Representative: **Carlsson, Eva et al**  
**Internationalt Patent-Bureau A/S**  
**Rigensgade 11**  
**1316 Copenhagen K (DK)**

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## Description

**[0001]** The present invention relates to a package for the packaging of a product together with accessories belonging to the product, the package comprising a primary package element for accommodation of the product and at least one secondary package element for accommodation of the accessories, the primary package element comprising at least one transparent part, in which the package has an essentially elongated form and extends between a first end and a second end, and in which the package is rectangular essentially over the entire length of the package.

**[0002]** When packaging of e.g. screening products, such as awning blinds, light awning blinds, roller blinds, pleated blinds and other similar products with associated installation and mounting components for windows, in individual packages, one of at least two different principles is generally used.

**[0003]** In a first type of package which is often characterized as a transport package, the main interest is that the package must protect the product against damage during transport. This is usually obtained by choosing a relatively stiff cardboard box which is elongated and e.g. quadratic or rectangular in cross section. Subsequently, supporting blocks of e.g. polystyrene are placed in each end of the product which is then put down in the cardboard box. In addition, a number of different fittings, screws and tools, together with an installation and mounting manual for use during the mounting of the screening product, are usually gathered in a plastic bag and put down with the screening in the package which is then closed.

**[0004]** In a second type of package which is often characterized as a sales package, the main interest is that the package must be inexpensive and at the same time permit the consumer to see the product through the package without having to open it. This is usually obtained by choosing an elongated tubular plastic bag, placing the screening product in the bag and heat seal the ends of the bag. One end might be welded together with a suspension hook, such that the package can be suspended in a rack. As in the above-mentioned type, a number of different fittings, screws and tools, etc. to be used for the mounting of the screening product are generally gathered in a plastic bag and put down together with the screening in the package which is then closed.

**[0005]** The use of conventional packaging methods requires a definition of the basic practical demands to be satisfied by the package, since a special type of package is used for each of the two said methods with their individual advantages and inconveniences, and the compliance with the practical demands of both types goes to a certain extent in opposite directions.

**[0006]** Where the individual package is primarily suitable for transport, the production comprises making and assembling of several different sub-elements and thus demands considerable resources both as to time and costs of production. As it is in general not immediately

possible to see the product packed in such packages, a consumer will be inclined to open the package, watch the contents, perhaps close the package again and take a new unbroken package. This entails that the subsequent consumers cannot be sure that the package that they buy contains a complete product. As a possible solution, some transport packages of the art comprise one or more smaller transparent parts. However, such parts are generally insufficient to allow for a user to get a satisfactory view of the product since larger transparent parts in the packages of the prior art would compromise the stability of the package.

**[0007]** Where the individual package is primarily meant for sale, the package is not suitable for transport as the screening product is easily damaged in the simple bag packages.

**[0008]** A package of the kind mentioned in the introduction is disclosed in DE 198 29 125 A1.

**[0009]** Therefore, an object of the present invention is to provide a package which eliminate above drawbacks.

**[0010]** This object is obtained according to the invention by a package of the initially stated kind, which is characterized in that the primary package element comprises at least two tubular stiffening parts, each having a cross section essentially corresponding to that of the package, the tubular parts have predetermined lengths and are positioned at a mutual distance in the longitudinal direction of the package, and the at least one transparent part of the primary package element surrounds the tubular parts and extends over the entire length of the package, that the package further comprises a bottom cover and a top cover for connection to the primary package element, and that a suspension hook is connected to said top cover.

**[0011]** This way of designing the primary package element as an integrated transport and sales package combines exactly the advantages related to each of the above-mentioned packaging principles, as a sturdy package of a simple construction is provided, but where it is nevertheless possible to examine the product contained in the packaging. Provided that the tubular stiffening parts are designed with an information print concerning the product, the transparent part will also protect this print against outside impact.

**[0012]** A tubular stiffening part is appropriately placed in the vicinity of each end of the package such that a package is obtained which is stable when subject to loads, and at the same time, the central area of the package provides visual access from all sides of the product.

**[0013]** In an embodiment technically simple to construct, the package further comprises a bottom cover and a top cover for connection with the primary package element. A suspension hook can preferably be connected to the top cover.

**[0014]** In an inexpensive embodiment, the tubular stiffening elements are formed by folding a cardboard blank. Alternatively, the tubular stiffening elements can be designed as components of plastics or similar material.

**[0015]** The length of each tubular stiffening element may constitute between 10% and 40%, preferably between 20% and 30%, especially 25%, of the total length of the primary package element.

**[0016]** The secondary package elements are preferably formed by folding a cardboard blank or formed as components made of plastics or similar material and are appropriately placed at one or each end of the package outside the tubular stiffening part in question.

**[0017]** In order to permit also to examine the contents of the secondary package element or elements, it or they may be provided with at least one window portion.

**[0018]** The length of each secondary package element may constitute between 5% and 20%, preferably between 10% and 15%, of the total length of the package.

**[0019]** In order to assure that the package permits to examine the contents thoroughly and at the same time is stable, the area which is merely covered by the transparent part may constitute between 10% and 60%, preferably between 20% and 50%, especially between 30% and 40%, of the total length of the package.

**[0020]** The transparent part comprises in one embodiment a plastic foil, preferably with a thickness of between 0.1 and 1.5 mm. Alternatively, the transparent part can be designed as a plastic pipe, preferably made by extrusion.

**[0021]** In the following, the invention will be described in more detail with reference to the schematic drawing, in which Fig. 1 shows an exploded perspective view of a first embodiment of the package according to the invention.

**[0022]** In Fig. 1, a screening product is shown in the form of a roller blind 1 of a type known per se with the screening cloth in a rolled up condition and with an associated package generally indicated by the referential number 2.

**[0023]** The package 2 comprises a primary package element 3 which is in the packed condition of the screening product 1, essentially corresponding to the one shown in Fig. 1, adapted to accommodate the product and in the shown embodiment one secondary package element 4 for accommodation of accessories not shown in detail. The package 2 has an essentially elongated form and extends between a first end 2a and a second end 2b, and has a predetermined cross section over essentially the entire length of the package which is almost quadratic in the shown embodiment.

**[0024]** The primary package element 3 comprises two tubular stiffening parts 5 and 6, also with essentially quadratic cross section, positioned in the vicinity of a corresponding end, respectively 2a and 2b, however, the second tubular part 6 is placed at such a distance from the end 2b that the secondary package element is accommodated in the primary package element 3 of the package 2 between the second tubular part 6 and the end 2b. The primary package element 3 further comprises a transparent part 7 which encloses the tubular parts 5 and 6 over the entire length of the package.

**[0025]** The tubular stiffening parts 5 and 6 are in this embodiment formed by a cardboard sheet, e.g. with a thickness of 1-5 mm, which is folded to the desired form, whereupon the ends of the sheet facing each other are fastened to each other by means of adhesion. In this connection it should be observed that the term tubular is to be understood as comprising any element with a circumferential wall and with an arbitrary cross section, and such an element may further comprise an end wall. The cardboard sheets can be provided with different forms of information prints, such as information on the nature of product, etc., and as an additional advantage of the invention, such an information print will be protected from outside impact by the transparent part 7.

**[0026]** In the embodiment shown in Fig. 1, the transparent part 7 comprises a foil sheet of a suitable plastic material with a thickness which is typically in the area of 0.1-1.5 mm, and which is wrapped or wound tightly around the two tubular stiffening parts 5 and 6, after these have been placed at the desired mutual distance on the foil sheet, after which the ends of the plastic foil sheet facing each other are fastened to each other by means of adhesion. Adhesion may also be used as a supplementary securing of the tubular stiffening parts 5 and 6 to the transparent part 7. The transparent part 7 can by a suitable choice of material also contribute to the stiffness and strength of the package.

**[0027]** After the shaping of the primary package element 3, the screening product 1 is placed herein and may be secured in relation to the tubular stiffening parts 5 and 6, e.g. by polystyrene blocks or another mechanical securing, or by a releasable adhesive joint. The transparent part 7 covers in the shown embodiment an area which constitutes about 30% of the entire length of the package and provides visual access to the product over the entire circumference of the package in this area.

**[0028]** Accessories in the form of e.g. fittings, screws and tools are placed in the secondary package element 4 which can be designed as a conventional cardboard package, i.e. as a punched plane blank which is folded up and fastened by means of adhesion to form an openable cardboard box which in the shown embodiment has essentially the same cross section form as the primary package element 3 and the package 2. The secondary package element 4 is placed in the primary package element 3, and as the secondary package element 4 is provided with two window portions 8, 9 and because of the placement of the secondary package element 4 outside the second tubular stiffening element 6, it is thus possible also to see the accessories in packed condition.

**[0029]** Finally, the package 2 is closed with a cover 10, 11 in each end of the primary package element 3. The covers 10, 11 can be connected e.g. to the transparent part 7 or to the two tubular stiffening parts 5, 6 and can also be formed of a plastic foil sheet which can be folded and fastened by adhesion to the desired form. Alternatively, one of the tubular stiffening parts 5 and 6 can be provided with an integrated cover and/or the transparent

part 7 can be used for closure of the package in one or both ends.

[0030] The screening product 1 with associated accessories is then packed for transport and subsequent sale.

[0031] The invention is not to be considered as being limited to the shown and described embodiments as various combinations of the relevant parts are conceivable just as the form and the number of the individual parts in the package can be varied within the scope of the succeeding claims.

[0032] It is thus also possible to pack a main product comprising more parts or more products of the same type just as the invention is not limited to be used with packaging of the shown and described screening product, either.

[0033] Also, a suspension hook may be connected to the top cover. The suspension hook may either form an integrated part of the top cover or an independent part which is secured to the top cover, perhaps in such a way that is sunk or hidden in this cover during transport and/or storage for a subsequent release with a view to suspension.

## Claims

1. A package (2) for the packaging of a product together with accessories belonging to the product, comprising a primary package element (3) for accommodation of the product and at least one secondary package element (4) for accommodation of the accessories, the primary package element (3) comprising at least one transparent part (7), in which the package (2) has an essentially elongated form and extends between a first end (2a) and a second end (2b), and in which the cross section of the package (2) is rectangular essentially over the entire length of the package, **characterized in that** the primary package element (3) comprises at least two tubular stiffening parts (5, 6), each having a cross section essentially corresponding to that of the package (2), that the tubular parts (5, 6) have predetermined lengths and are positioned at a mutual distance in the longitudinal direction of the package, and the at least one transparent part (7) of the primary package element (3) surrounds the tubular parts (5, 6) and extends over the entire length of the package (2), that the package (2) further comprises a bottom cover and a top cover (10, 11) for connection to the primary package element (3), and that a suspension hook (112) is connected to said top cover.
2. A package according to claim 1, **characterized in that** a tubular stiffening part (5, 6) is placed in the vicinity of each end (2a, 2b) of the package.
3. A package according to any of the preceding claims, **characterized in that** the tubular stiffening ele-

ments (5, 6) are formed by folding a cardboard blank.

4. A package according to any of claims 1-2, **characterized in that** the tubular stiffening elements (5, 6) are designed as components of plastics or similar material.
5. A package according to any of the preceding claims, **characterized in that** the predetermined length of each tubular stiffening element (5, 6) constitutes between 10% and 40%, preferably between 20% and 30%, especially 25%, of the total length of the primary package element.
6. A package according to any of the preceding claims, **characterized in that** the said secondary package element or elements (4) are formed by folding a cardboard blank or formed as components made of plastics or similar material.
7. A package according to any of the preceding claims, **characterized in that** the secondary package element or elements (4) are placed at one end of the package outside the tubular stiffening part in question.
8. A package according to any of the preceding claims, **characterized in that** the secondary package element or elements (4) are provided with at least one window portion (8, 9).
9. A package according to any of the preceding claims, **characterized in that** the length of each secondary package element (4) constitutes between 5% and 20%, preferably between 10% and 15%, of the total length of the package.
10. A package according to any of the preceding claims, **characterized in that** the area which is merely covered by the transparent part (7) constitutes between 10% and 60%, preferably between 20% and 50%, especially between 30% and 40%, of the total length of the package.
11. A package according to any of the preceding claims, **characterized in that** said transparent part (7) comprises a plastic foil, preferably with a thickness of between 0.1 and 1.5 mm.
12. A package according to any of the claims 1-10, **characterized in that** said transparent part (7) is designed as a plastic pipe, preferably made by extrusion.

## Patentansprüche

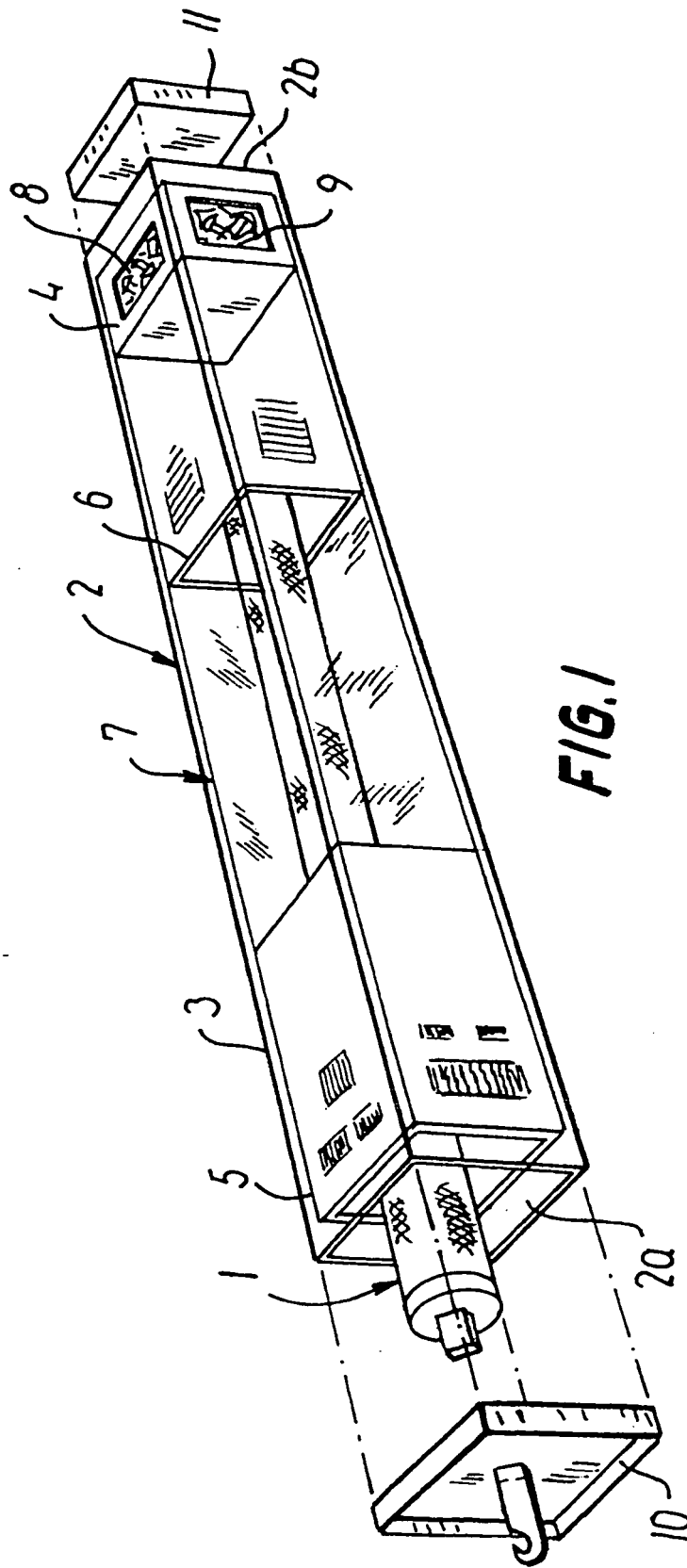
1. Verpackung (2) zum Verpacken eines Produktes zu-

- sammen mit zu dem Produkt gehörigen Zubehörteilen, umfassend ein primäres Verpackungselement (3) zur Aufnahme des Produktes sowie mindestens ein sekundäres Verpackungselement (4) zur Aufnahme der Zubehörteile, welches primäres Verpackungselement (3) zumindest ein transparentes Teil (7) umfasst, wobei die Verpackung (2) eine im wesentlichen längliche Form aufweist und zwischen einem ersten Ende (2a) und einem zweiten Ende (2b) verläuft, und wobei der Querschnitt der Verpackung (2) über im Wesentlichen die ganze Länge der Verpackung rechteckig ist, **dadurch gekennzeichnet, dass** das primäre Verpackungselement (3) zumindest zwei rohrförmige Versteifungsteile (5, 6) umfasst, deren Querschnitt im Wesentlichen dem Querschnitt der Verpackung (2) entspricht, dass die rohrförmigen Teile (5, 6) vorbestimmte Längen haben und in gegenseitigem Abstand in Längsrichtung der Verpackung angeordnet sind, und dass zumindest ein transparentes Teil (7) des primären Verpackungselements (3) die rohrförmigen Teile (5, 6) umgibt und über die ganze Länge der Verpackung (2) verläuft, dass die Verpackung (2) ferner einen unteren Deckel und einen oberen Deckel (10, 11) zur Verbindung mit dem primären Verpackungselement (3) umfasst, und dass ein Aufhängehaken (112) mit dem oberen Deckel verbunden ist.
2. Verpackung nach Anspruch 1, **dadurch gekennzeichnet, dass** ein rohrförmiges Versteifungsteil (5, 6) in der Nähe jedes Endes (2a, 2b) der Verpackung platziert ist.
  3. Verpackung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die rohrförmigen Versteifungselemente (5, 6) durch Falten eines Kartonstücks ausgebildet sind.
  4. Verpackung nach einem der Ansprüche 1 bis 2, **dadurch gekennzeichnet, dass** die rohrförmigen Versteifungselemente (5, 6) als Bestandteile aus Kunststoff oder ähnlichem Material ausgebildet sind.
  5. Verpackung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die vorbestimmte Länge jedes rohrförmigen Versteifungselements (5, 6) zwischen 10% und 40%, vorzugsweise zwischen 20% und 30%, insbesondere 25% der gesamten Länge des primären Verpackungselements beträgt.
  6. Verpackung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das sekundäre Verpackungselement bzw. die sekundären Verpackungselemente (4) durch Falten eines Kartonstücks hergestellt ist bzw. sind oder als Bestandteile aus Kunststoff oder ähnlichem Material ausgebildet ist bzw. sind.
  7. Verpackung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das sekundäre Verpackungselement bzw. die sekundären Verpackungselemente (4) bei einem Ende der Verpackung außerhalb des betreffenden rohrförmigen Versteifungsteils platziert ist bzw. sind.
  8. Verpackung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das sekundäre Verpackungselement bzw. die sekundären Verpackungselemente (4) mit zumindest einem Fenster (8, 9) versehen ist bzw. sind.
  9. Verpackung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die Länge jedes sekundären Verpackungselements (4) zwischen 5% und 20%, vorzugsweise zwischen 10% und 15% der Gesamtlänge der Verpackung beträgt.
  10. Verpackung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die lediglich vom transparenten Teil (7) gedeckte Fläche zwischen 10% und 60%, vorzugsweise zwischen 20% und 50%, insbesondere zwischen 30% und 40% der Gesamtlänge der Verpackung beträgt.
  11. Verpackung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das transparente Teil (7) eine Kunststoffolie, vorzugsweise mit einer Dicke zwischen 0,1 und 1,5 mm, umfasst.
  12. Verpackung nach einem der Ansprüche 1 bis 10, **dadurch gekennzeichnet, dass** das transparente Teil (7) als ein vorzugsweise durch Extrusion hergestelltes Kunststoffrohr ausgestaltet ist.

#### Revendications

1. Emballage (2) pour emballer un produit avec des accessoires appartenant au produit, comprenant un élément primaire d'emballage (3) pour recevoir le produit et au moins un élément secondaire d'emballage (4) pour recevoir les accessoires, l'élément primaire d'emballage (3) comprenant au moins une partie transparente (7), où l'emballage (2) présente une forme essentiellement longue et s'étend entre un premier bout (2a) et un deuxième bout (2b) et où l'emballage (2) présente une section essentiellement à travers toute la longueur de l'emballage, **caractérisé en ce que** l'élément primaire d'emballage (3) comprend au moins deux parties tubulaires de renforcement (5, 6), dont chacune présentant une section correspondant essentiellement à celle de l'emballage (2), **en ce que** les parties tubulaires (5, 6) présentent des longueurs prédéterminées et sont mutuellement espacées dans la direction longitudi-

- nale de l'emballage, **en ce que** l'au moins une partie transparente (7) de l'élément primaire d'emballage (3) entoure les parties tubulaires (5, 6) et s'étend à travers toute la longueur de l'emballage (2), **en ce que** l'emballage (2) comprend aussi un couvercle inférieur et un couvercle supérieur (10, 11) à relier à l'élément primaire d'emballage (3), et **en ce qu'**un crochet de suspension (112) est relié audit couvercle supérieur.
2. Emballage selon la revendication 1, **caractérisé en ce qu'**une partie tubulaire de renforcement (5, 6) est arrangée près de chaque bout (2a, 2b) de l'emballage.
3. Emballage selon l'une quelconque des revendications précédentes, **caractérisé en ce que** les éléments tubulaires de renforcement (5, 6) sont créés par pliage d'une pièce de carton.
4. Emballage selon l'une quelconque des revendications 1-2, **caractérisé en ce que** les éléments tubulaires de renforcement (5, 6) sont conçus comme des composants en plastique ou matériau similaire.
5. Emballage selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la longueur prédéterminée de chaque élément tubulaire de renforcement (5, 6) constitue entre 10% et 40%, préférablement entre 20% et 30%, particulièrement 25%, de la longueur totale de l'élément primaire d'emballage.
6. Emballage selon l'une quelconque des revendications précédentes, **caractérisé en ce que** ledit élément secondaire d'emballage ou lesdits éléments secondaires d'emballage (4) sont créés par pliage d'une pièce de carton ou formés comme des composants faits en plastique ou un matériau similaire.
7. Emballage selon l'une quelconque des revendications précédentes, **caractérisé en ce que** ledit élément secondaire d'emballage ou lesdits éléments secondaires d'emballage (4) sont arrangés à l'un bout de l'emballage en dehors de la partie tubulaire de renforcement en question.
8. Emballage selon l'une quelconque des revendications précédentes, **caractérisé en ce que** l'élément secondaire d'emballage ou les éléments secondaires d'emballage (4) sont pourvus d'au moins une partie de fenêtre (8, 9).
9. Emballage selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la longueur de chaque élément secondaire d'emballage (4) constitue entre 5% et 20%, préférablement entre 10% et 15%, de la longueur totale de l'emballage.
10. Emballage selon l'une quelconque des revendications précédentes, **caractérisé en ce que** l'étendue qui n'est couverte que par la partie transparente (7) constitue entre 10% et 60%, préférablement entre 20% et 50%, particulièrement entre 30% et 40%, de la longueur totale de l'emballage.
11. Emballage selon l'une quelconque des revendications précédentes, **caractérisé en ce que** ladite partie transparente (7) comprend un film plastique, préférablement d'une épaisseur entre 0,1 et 1,5 mm.
12. Emballage selon l'une quelconque des revendications 1-10, **caractérisé en ce que** ladite partie transparente (7) est conçue comme un tuyau plastique, préférablement fait par extrusion.



**REFERENCES CITED IN THE DESCRIPTION**

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