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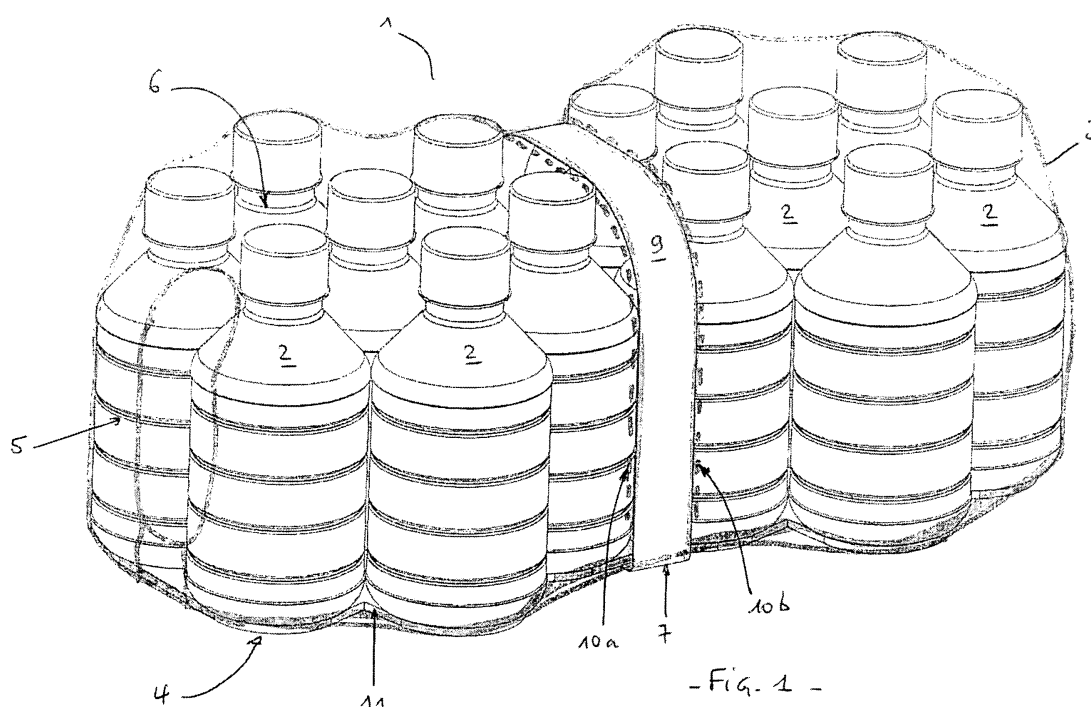
(54) Secondary package

(57) The invention relates to a secondary package (1) for gathering a plurality of primary packages (2), comprising an envelope (3) that surrounds the plurality of primary packages (2) so as to tightly hold the latter together, said envelope (3) comprising a base (4) supporting the primary packages (2), lateral sides (5), and a top side (6), characterized in that:

(i) said base (4) comprises a medium folding line (7) that pivotally connects two halves of the base (4) supporting the primary packages (2), and further comprises a car-

rying handle (9) that is disposed vertically along the medium folding line (7), and

(ii) the lateral sides (5) and the top side (6) of the envelope (3) comprise a transversal precut (10a, 10b) in the region of the medium folding line (7), and so that when the envelope (3) is open along said precut (10a, 10b), it still holds tightly the primary packages (2) disposed on each of the two base halves and said halves can be pivoted around the medium folding line (7) to allow complete access to the carrying handle (9).



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Description

[0001] The present invention relates to a package, preferably a film package, for gathering a plurality of primary containers, such as bottles, that comprises an integrated handle.

[0002] In the field of gathering packages, the prior art shows packages to group a plurality of primary containers such as for example water bottles, or metal cans. These known packages are typically made out of a shrinkable film that is rolled around the set of bottles and heat-treated so as to shrink around the bottles to tightly hold them together. Once gathered, the primary packages, for example the bottles, form a pack.

[0003] In the following description, it will be considered for the sake of clarity that the gathering package is made out of a shrinkable film, and the primary packages are plastic bottles. However, this limitation should not be considered as restricting the scope of the invention. Other types of materials than shrinkable plastic film may also be used for the gathering package, and other types of primary packages than plastic bottles may be gathered.

[0004] The interest of such film gathering packages has been known for long, and is a consumer must to facilitate handling and transportation of a set of primary containers.

[0005] Some of the known film gathering packages comprise a handle that is glued onto the outer surface of the film by means of adhesive tape for example.

[0006] These known film gathering packages show good reliability for consumers because they provide good gathering of the primary containers - for example bottles of mineral water - and the handle facilitates handling.

[0007] However, when a consumer is being shopping and wishes to transport the pack of bottles into a shopping trolley, it is necessary to place the pack into the trolley. However, such a pack is usually quite bulky and a lot of space into the trolley is lost for filling with other products.

[0008] Therefore, a need exists for a package for gathering a plurality of primary packages, that is easy to handle and that can be arranged in a shopping trolley in such a way that a maximum of space remains available into said trolley.

[0009] The present invention addresses the problems set out above with a secondary package for gathering a plurality of primary packages, comprising an envelope that surrounds the plurality of primary packages so as to tightly hold the latter together and so that said secondary package has a generally flat configuration, said envelope comprising a base side supporting the primary packages, lateral sides, and a top side.

[0010] According to the invention, the secondary package is characterized in that:

- its base comprises a folding line that pivotally connects two portions of the envelope supporting the primary packages,
- the lateral sides and the top side of the envelope

comprise a transversal predetermined weakness line in the region of the folding line, such that when the envelope is at least partially opened along said weakness line, it still holds tightly the primary packages disposed on each of the two portions and said portions can be pivoted around the folding line to allow compaction of the secondary package from its flat, unfolded, configuration into a compact configuration.

[0011] Preferably, the predetermined weakness line is a precut line, and also preferably, the folding line is located in the medium part of the base.

[0012] In a highly preferred embodiment of the present invention, the base of the secondary package comprises a carrying handle that is disposed vertically between the portions of the envelope.

[0013] In this case, said carrying handle is more preferably disposed in said envelope, such that it is accessible only after said secondary package is folded in its compacted configuration.

[0014] Said handle can be a strip that is fixed along the medium folding line of the envelope base.

[0015] In an embodiment of the invention, said handle can be glued to the external surface of the envelope, the precut comprising two precut lines that are substantially parallel to one another.

[0016] In all cases, the base of the envelope is preferably reinforced by an independent secondary base.

[0017] In this case, said secondary base can be made out of a corrugated plastic board, and is preferably rigid.

[0018] In another embodiment of the invention, the portions of the envelope base are symmetrical along the folding line.

[0019] Preferably, said envelope is made out of a thermoshrinkable film.

[0020] In an alternative embodiment, said envelope is a net.

[0021] The present invention is preferably meant to be used such that the primary packages are water-containing plastic bottles.

[0022] Additional features and advantages of the present invention are described in, and will be apparent from, the description of the presently preferred embodiments which are set out below with reference to the drawings in which:

Figure 1 is a perspective top view of a secondary package according to one embodiment of the invention ;

Figure 2 is a bottom view of a secondary package according to one embodiment of the invention ;

Figure 3 is a perspective top view of a secondary package according to one embodiment of the invention in a partially unfolded state ;

Figure 4 is a perspective top view of a secondary package according to one embodiment of the invention in a completely unfolded state, with a completely

accessible carrying handle ;

Figure 5 is a similar view to Figure 1 showing another embodiment of the invention ;

Figure 6 is a similar view to Figure 3 showing another embodiment of the invention ;

Figure 7 is a similar view to Figure 4 showing another embodiment of the invention;

Figure 8 is a schematic top view of a plurality of secondary packages of the invention, disposed adjacent to one another in a pallet layer.

[0023] The secondary package 1 according to the invention, as shown in Figure 1, is meant for gathering a plurality of primary packages 2. In the particular embodiment as described hereafter in detail, the primary packages are plastic bottles 2 containing water.

[0024] The secondary package 1 according to the present invention comprises an envelope 3 that surrounds the plurality of primary packages 2 so as to tightly hold the latter together.

[0025] As shown in figures 1 and 2, said envelope 2 comprises a base 4 supporting the primary packages 2, as well as lateral sides 5, and a top side 6.

[0026] According to the invention, the base 4 of the envelope 3 comprises a medium folding line 7 that pivotally connects two halves 8a, 8b of the base 4 supporting the primary packages. The base 4 further comprises a carrying handle 9 that is disposed vertically along the medium folding line.

[0027] Also according to the present invention, the lateral sides 5 and the top side 6 of the envelope 3 comprise a transversal precut 10 in the region of the medium folding line 7, as shown in figures 1 or 5.

[0028] Therefore, as shown in figures 3, 4, 6 and 7, when the envelope 3 is open along said precut 10, said envelope 3 still holds tightly the primary packages 2 disposed on each of the two base halves 8a, 8b, and said halves can be pivoted around the medium folding line 7 in order to allow complete access to the carrying handle 9.

[0029] By "complete" access to the carrying handle it is meant that, although said handle is disposed outside of the envelope, when the secondary package is in its closed configuration, i.e. when the precut line has not been broken, the handle is not really accessible for the consumer because it is tightly adapted to the envelope and there is almost no gap between said handle and said envelope. Therefore, the consumer cannot insert his hand between said envelope and said handle, in order to grab the latter. On the contrary, when the precut has been broken and the secondary package is in its open configuration as illustrated in figure 7, said handle is clear from the envelope and therefore completely accessible to the consumer.

[0030] In one first embodiment of the present invention illustrated in figures 1, 2, 3 and 4, the base 4 of the envelope 3 is reinforced by an independent secondary base 11.

[0031] In this particular embodiment of the invention,

said secondary base 11 is made out of a rigid corrugated plastic board. Furthermore, in this first embodiment of the invention, the precut 10 comprises two precut lines 10a, 10b that are substantially parallel to one another.

[0032] In a second embodiment of the present invention illustrated in figures 5, 6, and 7, the base 4 of the envelope 3 is not reinforced and comprises solely the material making the whole envelope. The carrying handle 9 is a strip of thick film that surrounds said envelope 3, and that is attached to the latter by glue that is disposed at the interface between said handle and said envelope, in the base region of said envelope.

[0033] In both embodiments of the invention described hereinbefore, both halves 8a, 8b of the envelope base 4 are symmetrical along the medium folding line 7.

[0034] Furthermore, the envelope 3 is made out of a thermoshrinkable film.

[0035] As can be seen in figure 8, the disposition of the water bottles 2 on the base 4, and the fact that the contours of said base 4 is adapted to the disposition of the water bottles, makes it convenient to place several secondary packages of the invention, such that adjacent secondary packages are interlocked. This allows for building compact and strong layers of secondary packages in a pallet.

[0036] It should be understood that various changes and modifications to the presently preferred embodiments described herein will be apparent to those skilled in the art. Such changes and modifications can be made without departing from the spirit and scope of the present invention and without diminishing its attendant advantages. It is therefore intended that such changes and modifications be covered by the appended claims.

Claims

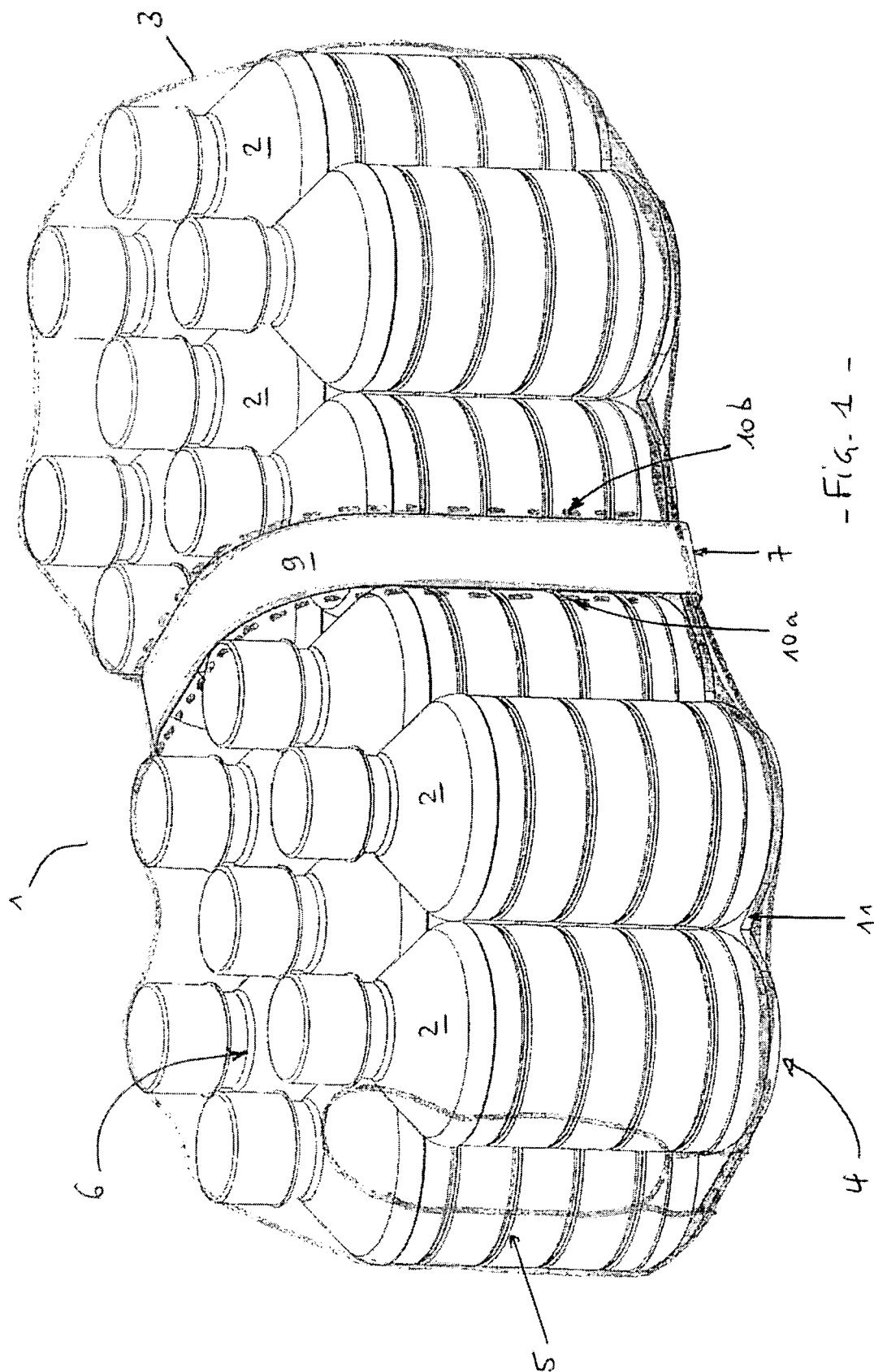
1. A secondary package (1) for gathering a plurality of primary packages (2), comprising an envelope (3) that surrounds the plurality of primary packages so as to tightly hold the latter together and so that said secondary package has a generally flat configuration, said envelope comprising a base side (4) supporting the primary packages, lateral sides (5), and a top side (6), **characterized in that :**

(i) said base (4) comprises a folding line (7) that pivotally connects two portions (8a, 8b) of the envelope supporting the primary packages,

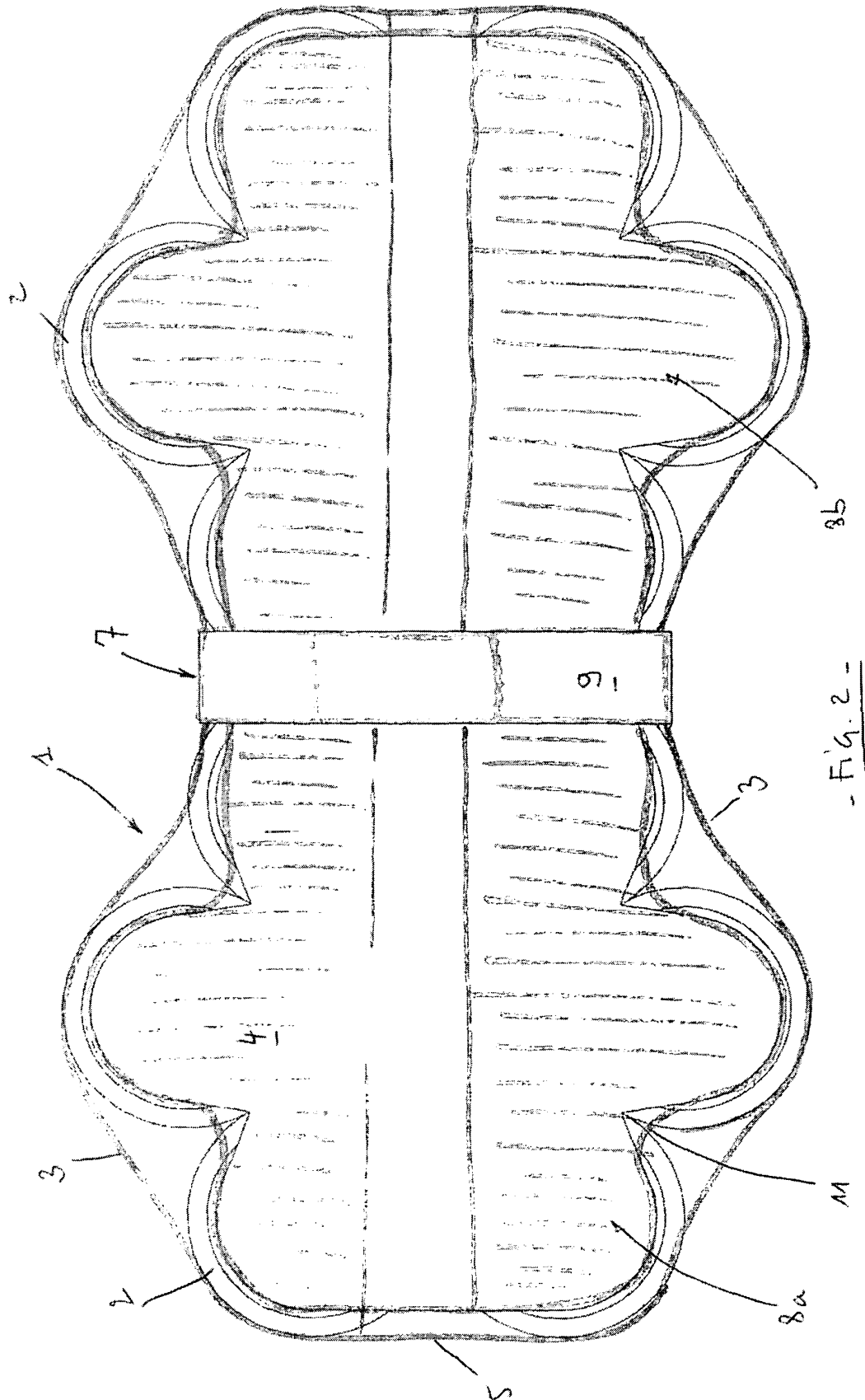
(ii) the lateral sides (5) and the top side (6) of the envelope (3) comprise a transversal predetermined weakness line (10) in the region of the folding line, such that when the envelope is at least partially opened along said weakness line (10), it still holds tightly the primary packages (2) disposed on each of the two portions (8a, 8b) and said portions can be pivoted around the folding line (7) to allow compaction of the secondary

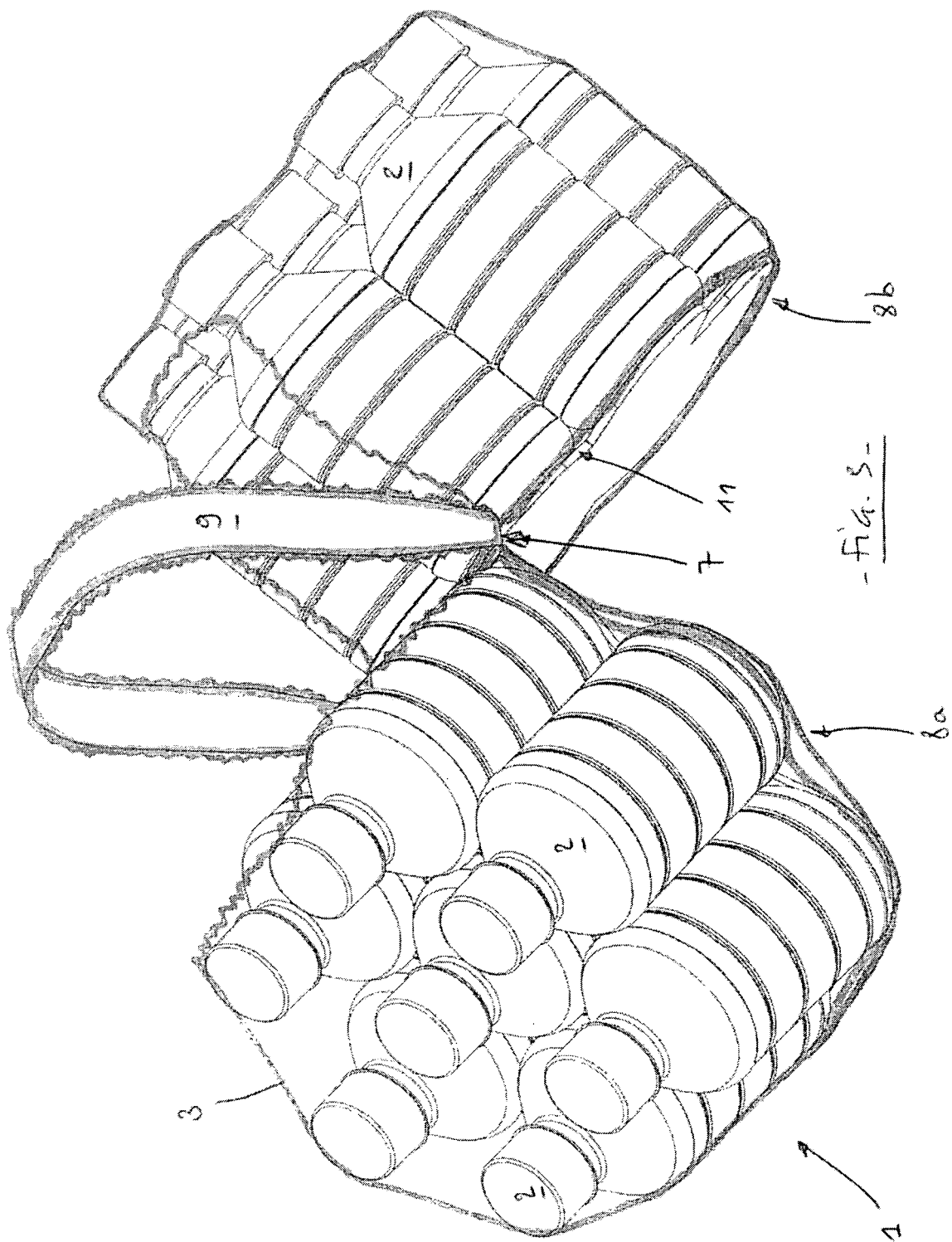
package from its flat, unfolded, configuration into a compact configuration.

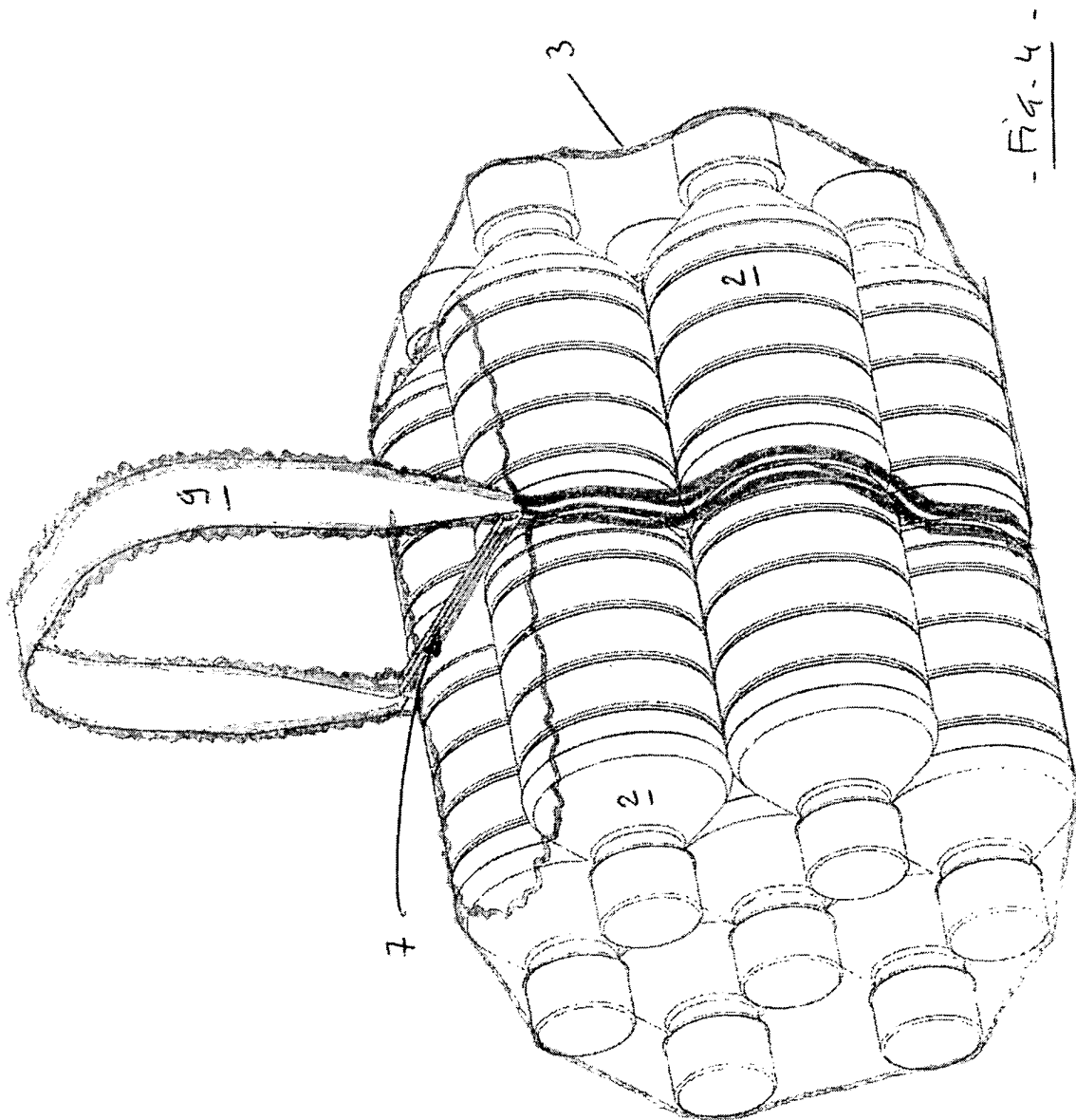
2. A secondary package according to claim 1, wherein said predetermined weakness line is a precut line. 5
3. A secondary package according to claim 2, wherein said folding line is located in the medium part of the base. 10
4. A secondary package according to claims 2 or 3, wherein said base further comprises a carrying handle (9) that is disposed vertically between the portions (8a, 8b) of the envelope. 15
5. A secondary package according to claim 4, wherein said carrying handle is disposed in said envelope, such that it is accessible only after said secondary package is folded in its compacted configuration. 20
6. A secondary package (1) according to claims 4 or 5, wherein said handle (6) is a strip that is fixed along the medium folding line (5) of the envelope base (3). 25
7. A secondary package according to claim 4, wherein said handle is glued to the external surface of the envelope, the precut comprising two precut lines that are substantially parallel to one another. 30
8. A secondary package (1) according to claims 1 to 5, wherein the base of the envelope is reinforced by an independent secondary base. 35
9. A secondary package (1) according to any of the claims 2 or 3, wherein said secondary base is made out of a corrugated plastic board. 40
10. A secondary package (1) according to any of the claims 2 or 3, wherein the secondary base is rigid. 45
11. A secondary package (1) according to any of the preceding claims, wherein portions (8a, 8b) of the envelope base are symmetrical along the folding line (5). 50
12. A secondary package (1) according to any of the preceding claims, wherein said envelope (4) is made out of a thermoshrinkable film. 55
13. A secondary package (1) according to claims 1 to 11, wherein said envelope (4) is a net.
14. A secondary package (1) according to any of the preceding claims, wherein the primary packages (2) are water-containing plastic bottles.

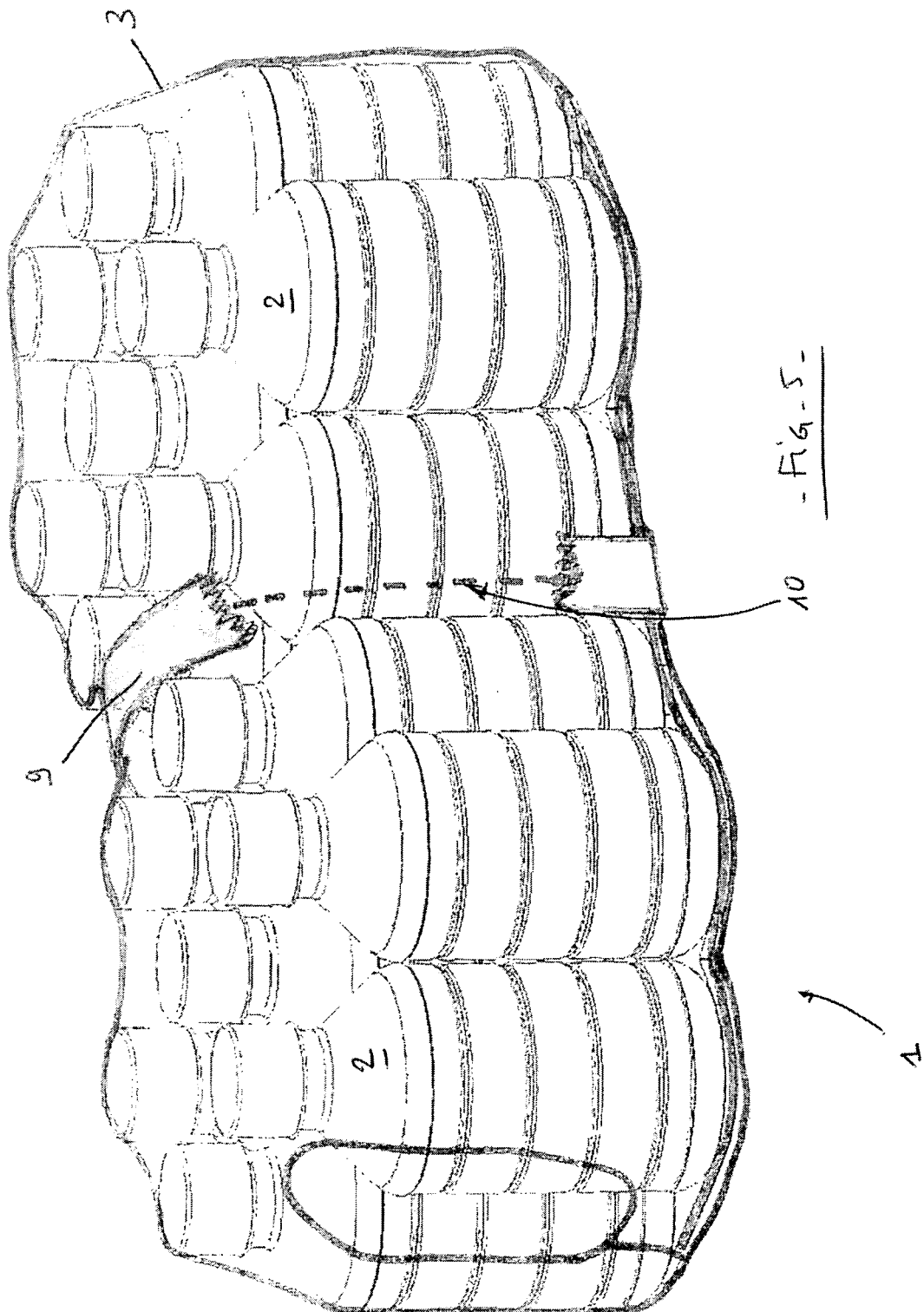


- Fig. 1 -

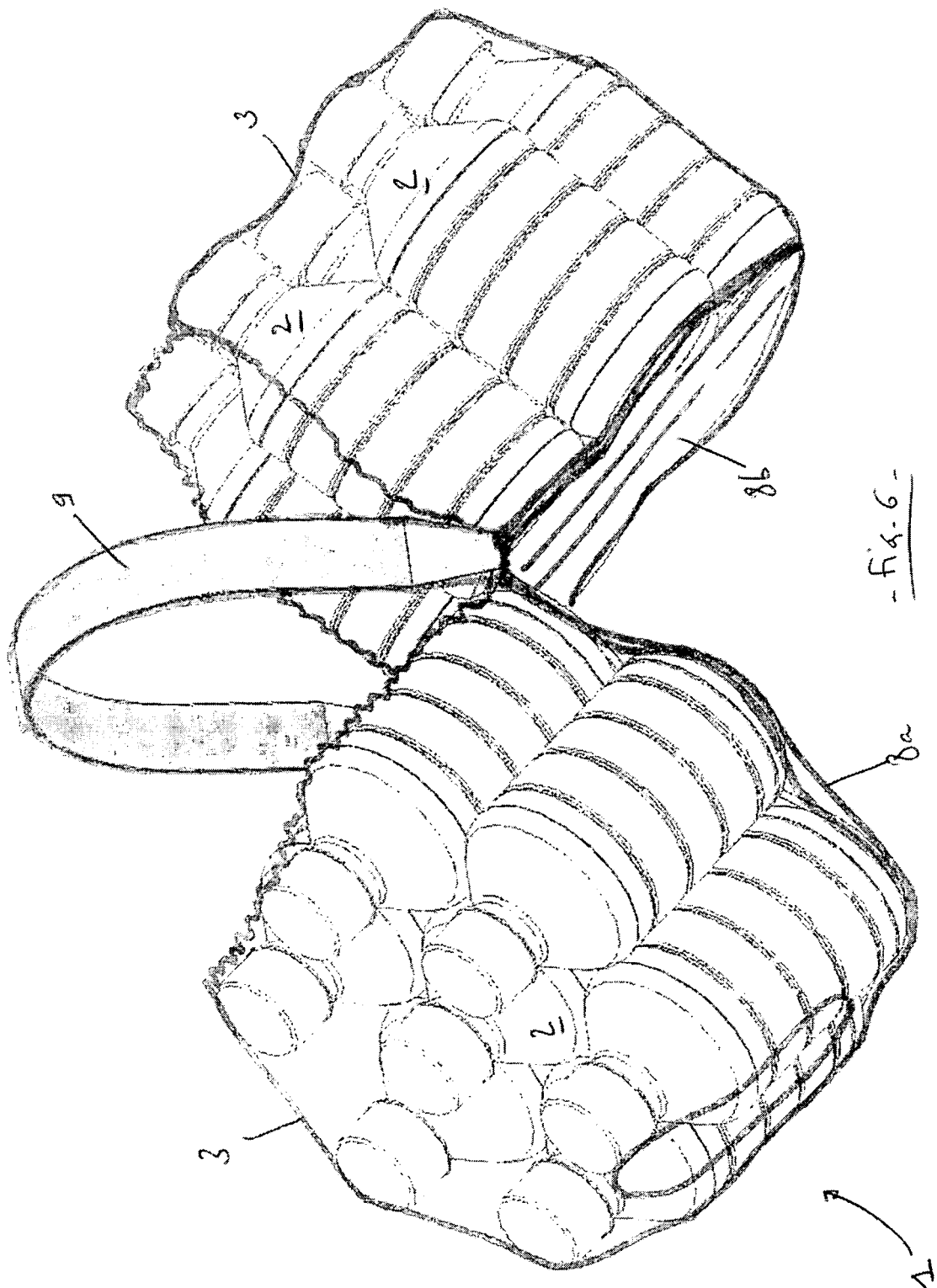


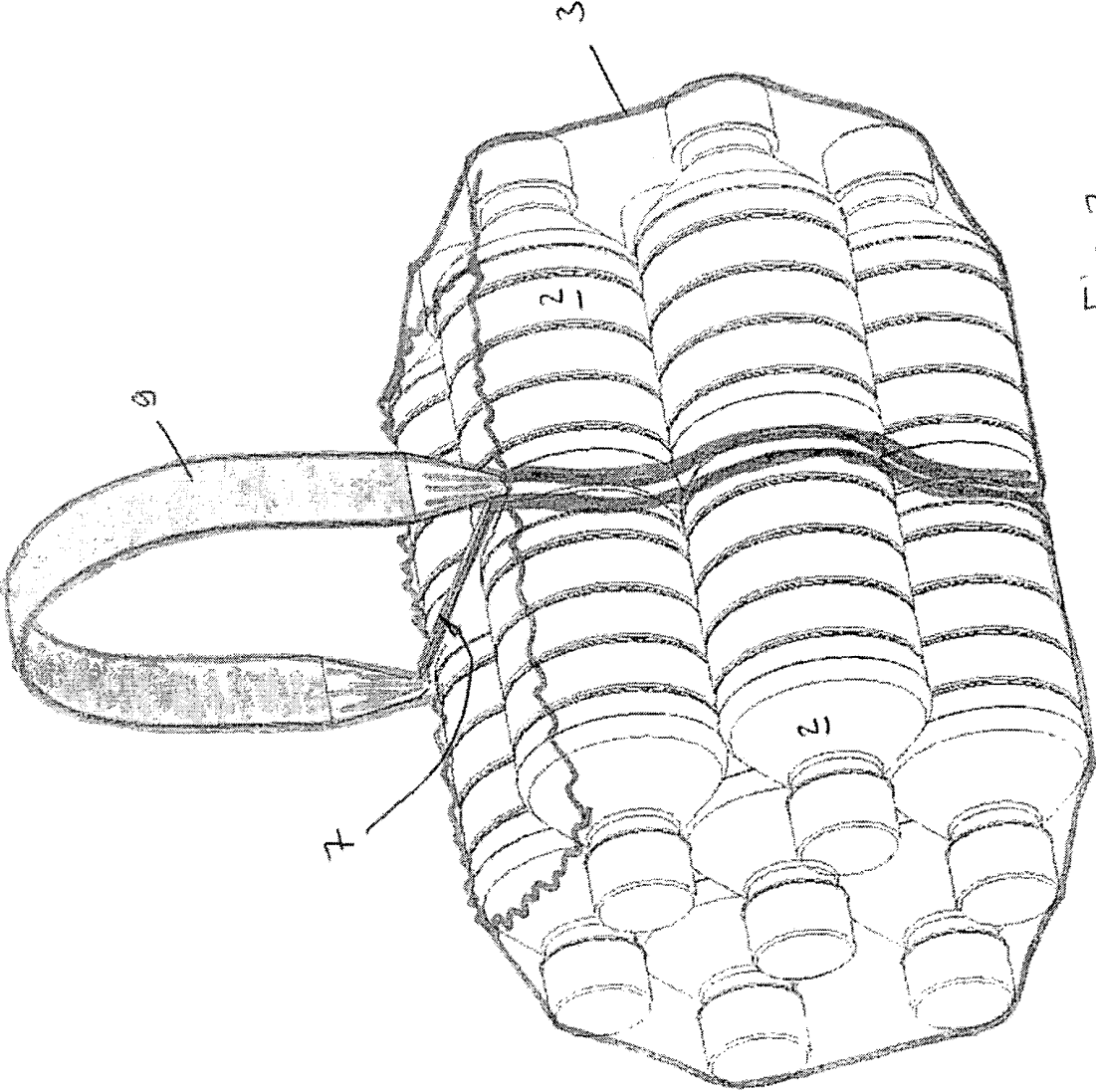






- Fig. 5 -





- Fig. 7 -

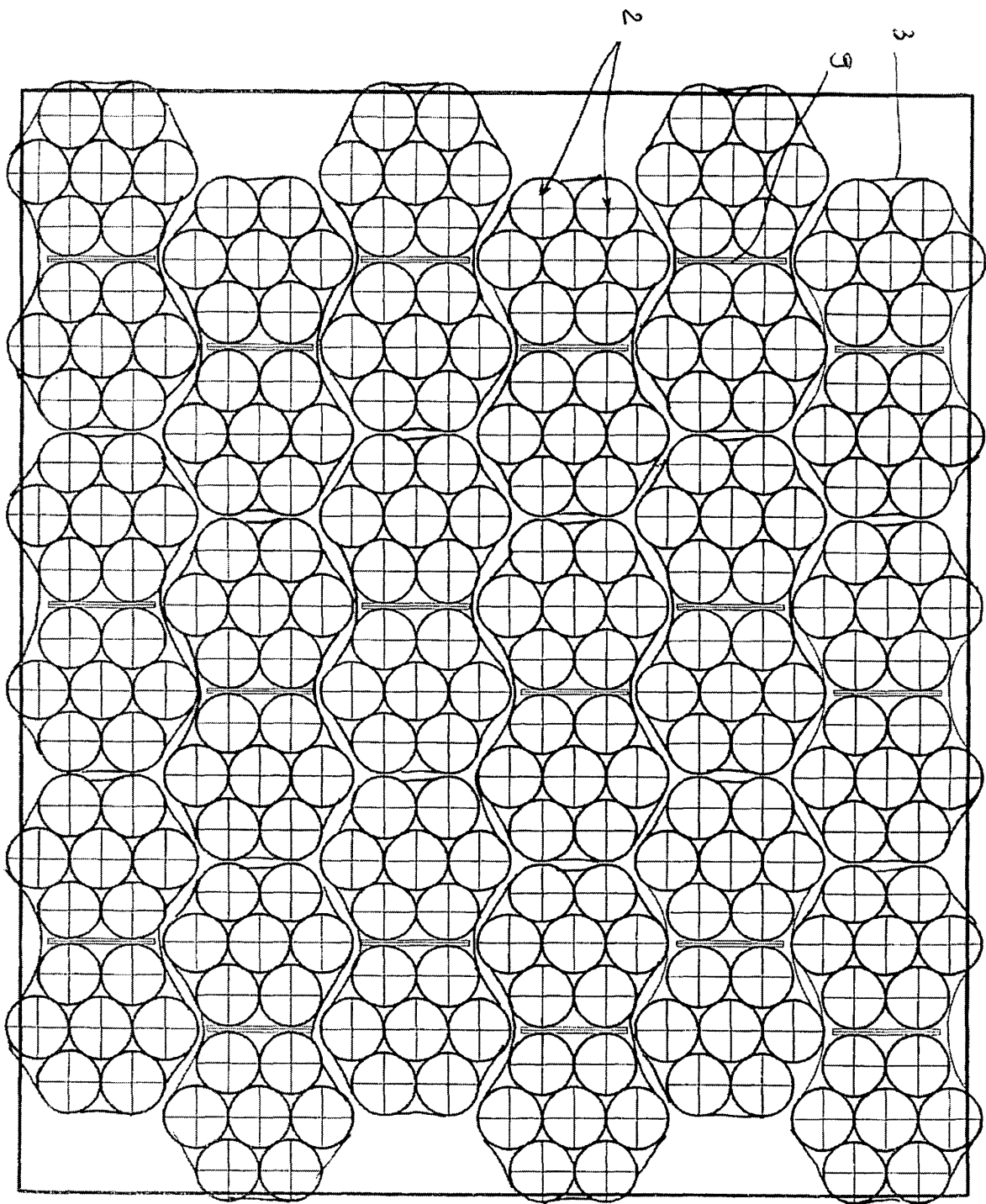


Fig. 8



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 06 00 7068

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X	US 5 361 905 A (MCQUEENY ET AL) 8 November 1994 (1994-11-08) * column 10, line 26 - column 11, line 34 * * figures 7A,7C,8A,8C *	1-6,11	INV. B65D71/08 B65D71/10
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			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 July 2006	Examiner Leijten, M
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