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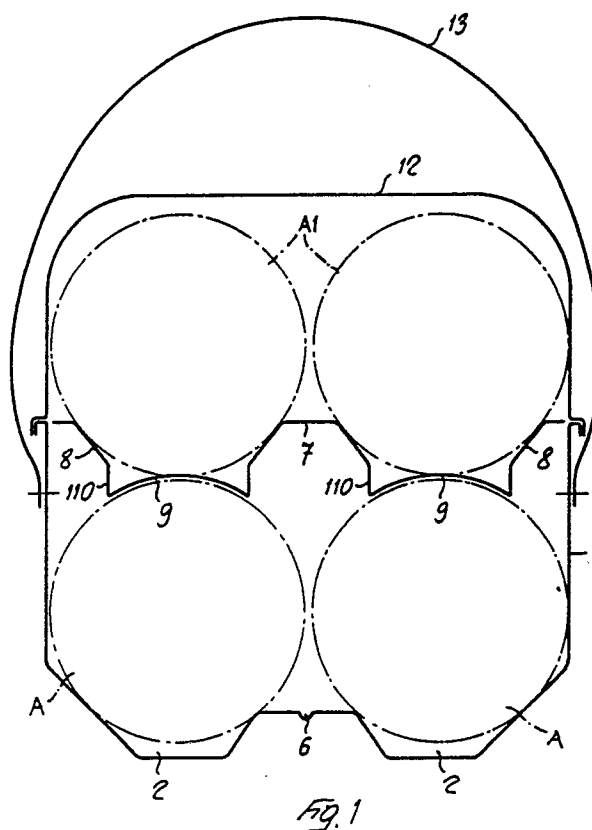
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**Package for at least two layers of fruit or vegetable products having a roundish shape.**

A packing for fruit or vegetable products of roundish shape, particularly for apples, oranges, peaches, or the like, comprises a basket (1) adapted to orderly contain a certain number of fruit or vegetable products (A), each accommodated in a recess (2) of the bottom of the basket (1), and an intermediate tray (7) adapted to be fitted into said basket (1) and to rest on said fruit or vegetable products (A) contained in the basket, said tray (7) supporting a certain number of orderly-arranged fruit or vegetable products (A1), each accommodated in a recess (8, 9) of the intermediate tray (7), and a dome-shaped cover (12) adapted to be fitted on the basket (1) so as to cover the fruit or vegetable products (A1) supported on the intermediate tray (7) and protruding above the edge of the basket (1).



**EP 0 292 715 A2**

**"Packing for at least two layers of fruit or vegetable products having roundish shape".**

This invention relates to a packing for fruit or vegetable products of roundish shape, particularly for apples, oranges, peaches, or the like.

The packing according to the invention comprises substantially the following elements:

a) a basket comprising, if desired, a handle and capable of orderly containing a certain number, generally a limited number, of fruit or vegetable products, e.g. four or six apples, oranges, peaches, or the like;

b) an intermediate tray, adapted to be fitted into the basket and to be laid down onto the fruit or vegetable products contained therein, said tray supporting a certain number of orderly arranged fruit or vegetable products, preferably the same number of apples, oranges, peaches, or the like, contained in the basket;

c) a dome-shaped cover adapted to be fitted on the basket so as to cover the fruit or vegetable products supported on the intermediate tray and protruding above the edge of the basket.

Preferably, the bottom of the basket is recessed and each recess thereof accommodates one of the fruit or vegetable products contained in the basket.

The intermediate tray, preferably, is recessed and comprises one recess for each fruit or vegetable product supported thereon.

According to a preferred characteristic of the invention, the intermediate tray rests on each of the underlying fruit or vegetable products contained in the basket, by means of a correspondingly-shaped surface (e.g. a spherical segment) of its bottom.

The invention devises, moreover, a particular system for collecting and/or draining water from condensation or defrosting. For this purpose, each recess in the bottom can be formed with a central depression and/or a hole, and/or it can be formed with radial grooves in the walls thereof. Also outside of the recesses of the basket, e.g. at the center of the basket bottom, there may be provided a depression and/or a hole towards which may converge, with some inclination, grooves formed in the bottom of the basket, between said recesses, and preferably extending as far as the walls of said basket. In the intermediate tray there may be provided at least one depression and/or hole formed, for example, centrally and communicating with the bottoms of the adjacent recesses through channels sloping toward said depression and/or hole.

In a preferred embodiment of the invention, each recess of the intermediate tray is in form of a flared concave surface adapted to accommodate and support the respective fruit or vegetable product, and a convex bottom forming on the lower side

of the partition tray a concave surface resting on the underlying fruit or vegetable product contained in the basket.

These and other characteristics of the invention and the advantages resulting therefrom will appear with more details from the following description made with reference to the accompanying drawings, wherein:

Figure 1 is a vertical sectional view through the closed packing according to the invention, taken on the line I-I of Figure 2.

Figure 2 is a top plan view of the basket bottom.

Figure 3 is a diagrammatic vertical section through the basket, taken on the line III-III of Figure 2.

Figure 4 is a top plan view of the intermediate tray.

Figure 5 is a diagrammatic sectional view of the intermediate tray, taken on the line V-V of Figure 6.

The Figures show a packing according to the invention, containing eight apples collectively, i.e. four apples in a lower layer and the other four apples in a superposed layer. The invention, however, is not limited to any number of apples, because similar packings may be provided for any number of apples. The invention is not limited even to apples, because this type of packing may be used for any other fruit or vegetable products of roundish shape, such as peaches or the like.

With reference to the Figures, the illustrated packing comprises a basket 1 adapted to contain a lower layer of four apples A arranged orderly. Each apple A is accommodated in a corresponding recess 2 formed in the bottom of the basket 1.

The side wall of the basket 1 is formed with outer vertical ribs which form corresponding vertical grooves 3 in the inner side of said wall of the basket 1. Each recess 2 of the basket 1 is formed with radial grooves 4 one or more of which may be in communication with corresponding vertical inside grooves 3 in the side wall of the basket 1.

At the center of the basket 1, between the four recesses 2, the bottom of the basket 1 is formed with a depression 5 which, if desired, may be provided with a hole, and which communicates with grooves 6 formed also in the bottom of the basket 1 and communicating, preferably, each with one of the vertical inside grooves 3 in the side wall of the basket 1, as shown in detail in Figures 2 and 3. Through the grooves 3, 4 and 6 any water from condensation or defrosting will collect on the bottom of the recesses 2 or in the central depression 5 of the basket 1.

The packing comprises an intermediate tray 7 which supports an upper layer of four apples A1 and rests on the apples A of the lower layer. Each apple A1 of the upper layer of apples is accommodated in a recess of the intermediate tray 7. This recess is constituted by an upper, flared, conical or spherical portion 8, and a bottom 9 which has a convex upper side and a concave lower side. The intermediate tray 7 rests on the apples A of the underlying layer of apples by means of the concave lower sides of the bottoms 9 of its recesses. The bottom 9 of each recess of the intermediate tray 7 is connected at its peripheral edge to the upper flared portion 8 which supports the respective apple A1 through a cylindrical union 110 having such a height whereby an apple A1 supported on the flared supporting portion 8 will not engage the convex upper side of the bottom 9, or it engages it only slightly. In other words, the central portion of the concave upper side of the bottom 9 is formed at such a depth whereby an apple A1 will rest mainly on the upper flared portion 8 of the respective recess of the intermediate tray 7.

At the center of the intermediate tray 7 there is formed a depression 10 which communicates with each recess of said tray 7 through a channel 11. The channels 11 are connected to the lowermost edge portion of the bottom 9 of each recess of the intermediate tray 7 and their bottoms are inclined from the respective recess to the central depression 10, as shown more particularly in Figures 4 and 5. The condensation or defrosting water will collect at the peripheral area of the bottom 9 of each recess and it flows therefrom through the sloping channels 11 to the central depression 10, wherein it collects and, if desired, it may be drained through a hole formed in said depression 10.

The basket 1 containing the lower layer of apples A and the intermediate tray 7 with the upper layer of apples A1 (the latter protruding mostly above the upper edge of the basket 1), is closed by a dome-shaped cover 12 which is fitted on the upper edge of said basket 1.

The basket 1 is also provided with a handle 13 which is secured at the ends thereof to two opposite side walls of said basket 1 and extends above the dome-shaped cover 12.

The packing described above may be made of any suitable plastics material, particularly transparent PVC.

## Claims

1. A packing for fruit or vegetable products of roundish shape, particularly for apples, oranges, peaches, or the like, characterized in that it comprises the following elements:
  - a) a basket (1) adapted to orderly contain a certain number, usually a limited number, of fruit or vegetable products (A);
  - b) an intermediate tray (7) adapted to be fitted into said basket (1) and to rest on said fruit or vegetable products (A) contained in the latter, said tray (7) supporting a certain number of orderly-arranged fruit or vegetable products (A1), preferably the same number of the underlying products (A) contained in the basket (1);
  - c) a dome-shaped cover (12) adapted to be fitted on the basket (1) so as to cover said fruit or vegetable products (A1) supported on the intermediate tray (7) and protruding above the edge of the basket (1).
2. A packing according to claim 1, characterized in that the basket (1) is provided with a handle (13) extending above said cover (12).
3. A packing according to claims 1 or 2, characterized in that the bottom of the basket (1) is formed with recesses (2) each adapted to contain one fruit or vegetable product (A).
4. A packing according to claim 3, characterized in that each recess (2) in the bottom of the basket (1) may be formed with a central depression and/or a hole and/or it may be formed with radial grooves (4) in the walls thereof.
5. A packing according to any one or more of the preceding claims, characterized in that in at least a spot of the bottom of the basket (1), e.g. at the center of said bottom, there is provided a depression (5) and/or a hole to which converge suitable grooves (6) formed in the bottom of the basket (1), if desired, with a certain inclination towards said depression (5) and/or hole.
6. A packing according to one or more of the preceding claims, characterized in that the side walls of the basket (1) are formed with vertical grooves (3) in their inner side, some of said grooves communicating with one or more radial grooves (4) in the recesses (2) of the basket (1) and/or with one or more of the grooves (6) communicating with the depression (5) and/or hole formed in the bottom of the basket (1).
7. A packing according to one or more of the preceding claims, characterized in that the intermediate tray (7) is formed with recesses (8, 9) each of which accommodates one of the fruit or vegetable products (A1) supported by said intermediate tray (7).

8. A packing according to any one or more of the preceding claims, characterized in that the intermediate tray (7) rests on each of the underlying fruit or vegetable products (A) by means of a correspondingly curved surface, e.g. in the shape of a spherical segment, of its bottom (9). 5

9. A packing according to claims 7 and 8, characterized in that each recess of the intermediate tray (7) is constituted by a concave flared surface (8), of conical, spherical or similar shape, adapted to receive and support the respective fruit or vegetable product (A1), and by a bottom (9) of which the upper side is convex and the lower side is concave, which forms the curved surface resting on the underlying fruit or vegetable product. 10  
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10. A packing according to claim 9, characterized in that the uppermost portion of the concave upper side of the bottom (9) of each recess (8, 9) of the intermediate tray (7) is at such a level with respect to the overlying concave flared surface (8) supporting the fruit or vegetable product (A1) whereby the latter will not substantially engage the bottom (9) of the recess. 20

11. A packing according to any one or more of the preceding claims, characterized in that the intermediate tray (7) is formed with at least one depression (10) and/or hole communicating with the bottoms (9) of the adjacent recesses (8, 9) of said intermediate tray (7) through channels (11) having a certain inclination towards said depression (10) and/or hole. 25  
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12. A packing according to any one or more of the preceding claims, characterized in that it is constructed so as to contain a lower layer of four fruit or vegetable products (A) and an upper layer of four fruit or vegetable products (A1) arranged in register with those (A) of the lower layer. 35

13. A packing according to any one or more of the preceding claims, characterized in that the basket (1), the cover (12) and the intermediate tray (7) are made of transparent plastics material, e.g. PVC. 40

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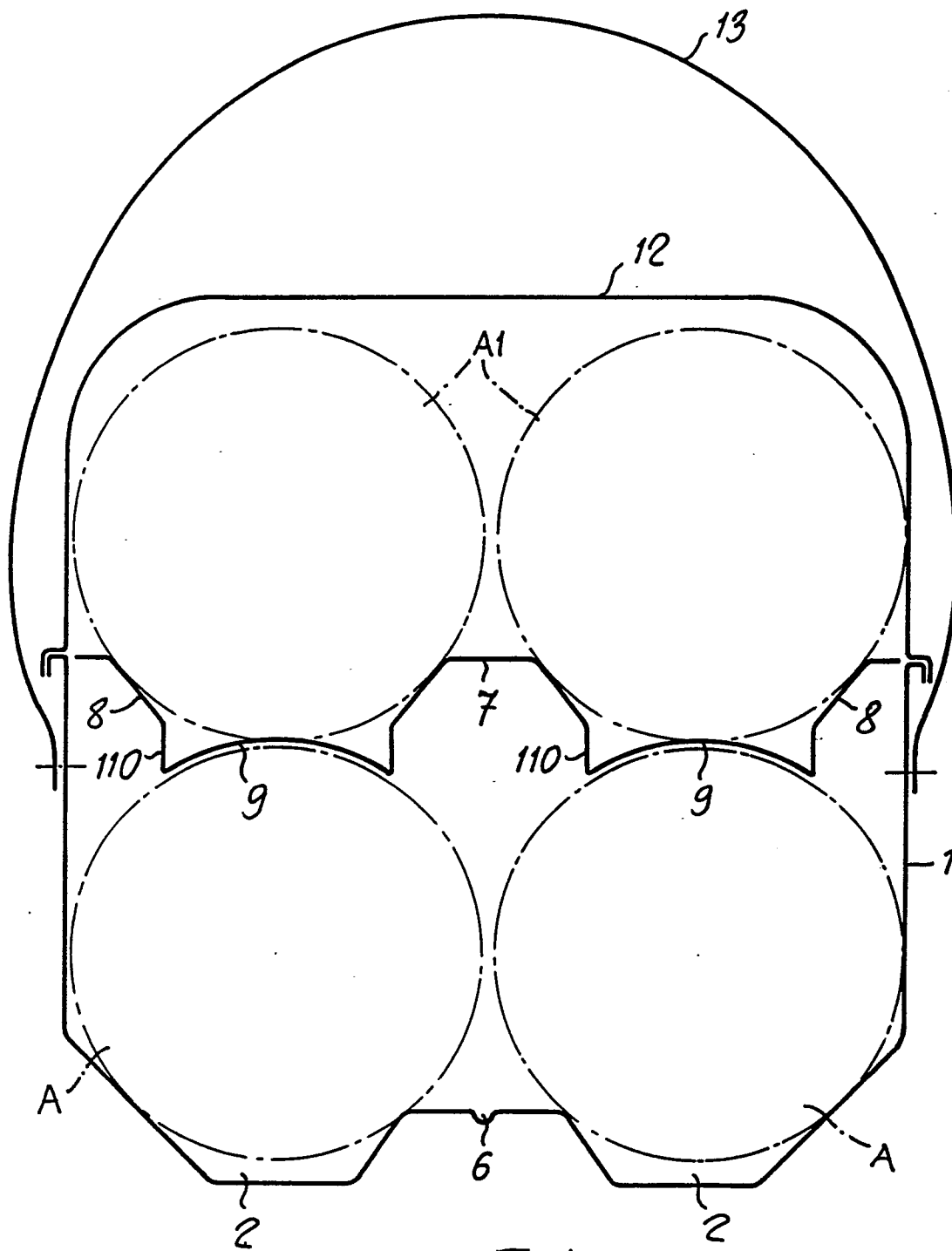


FIG. 1

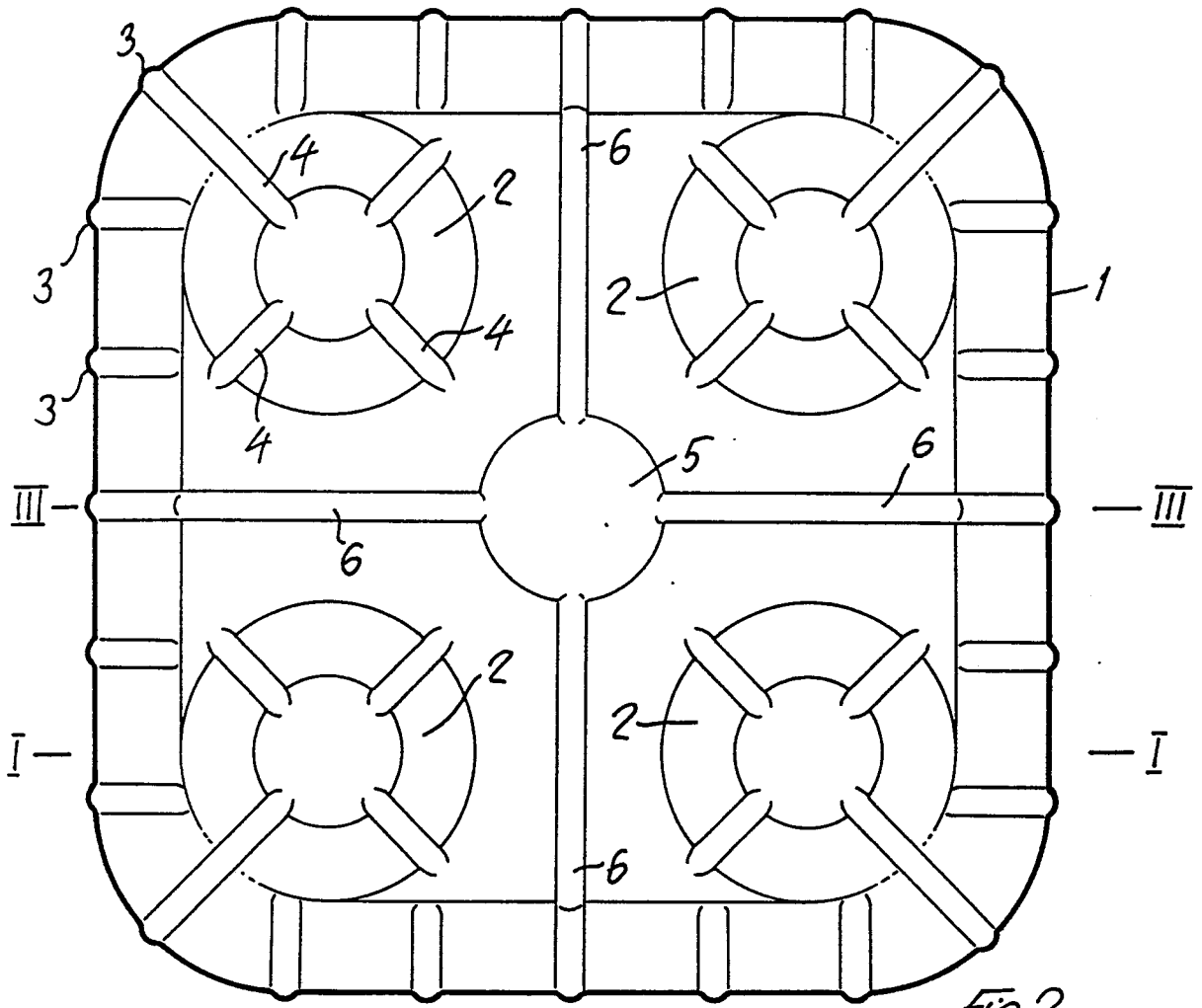


Fig. 2

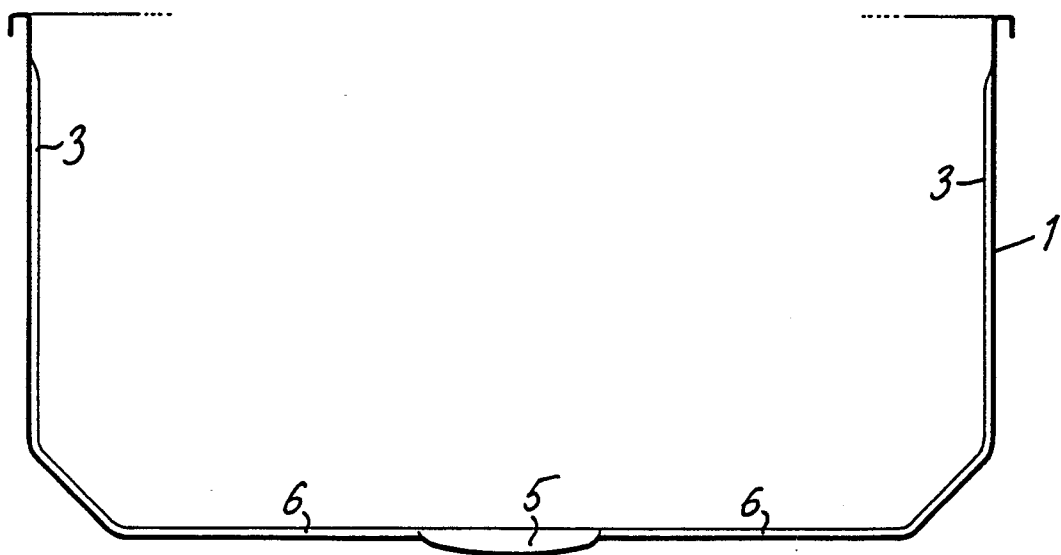


Fig. 3

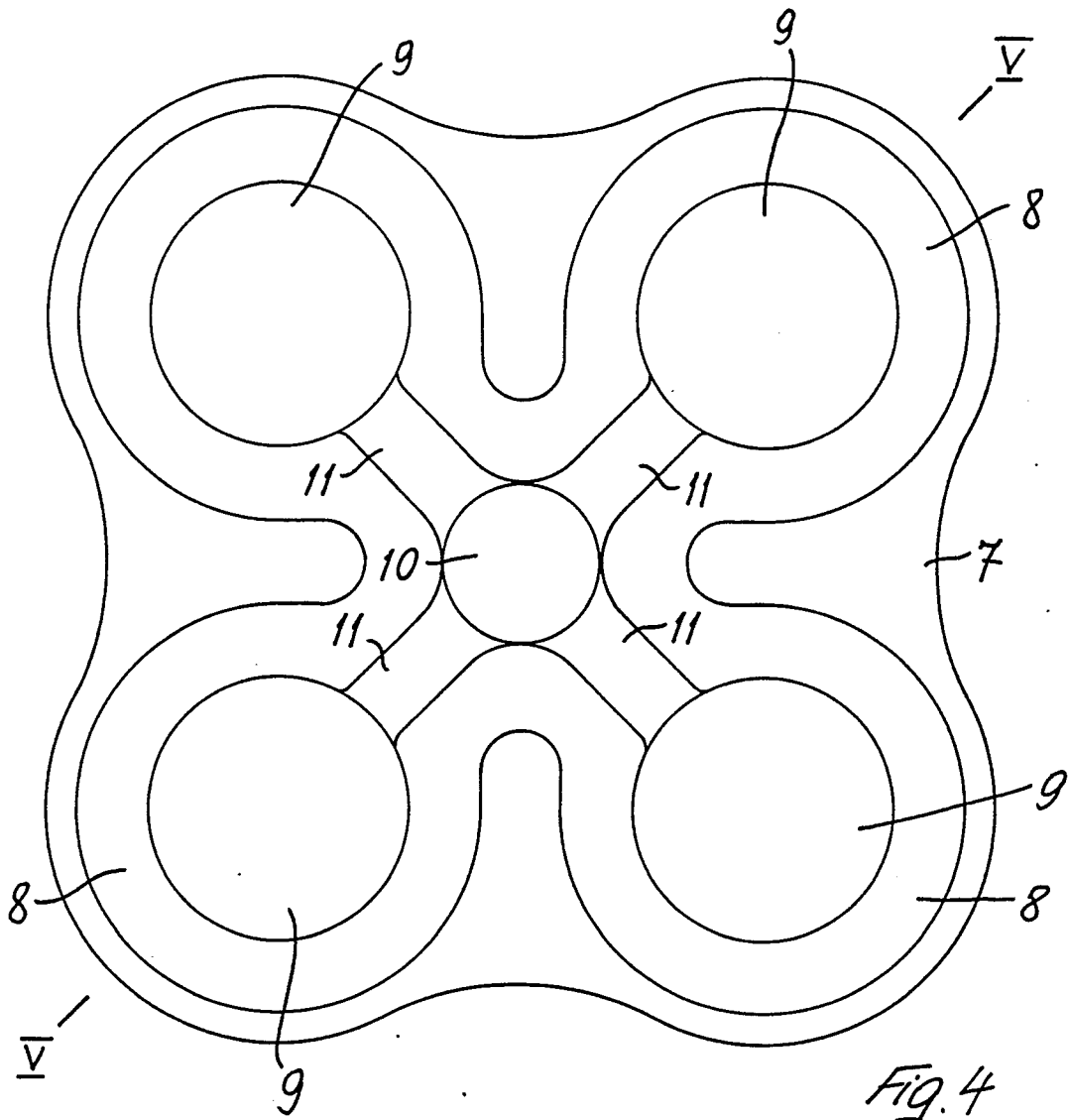


Fig. 4

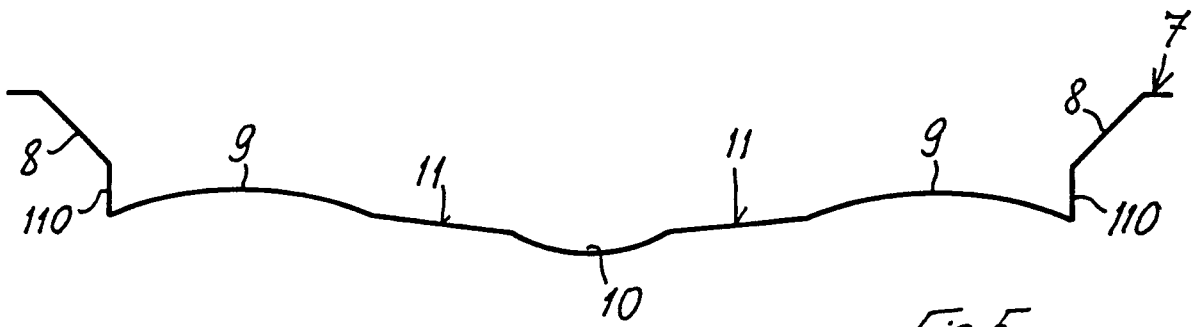


Fig. 5