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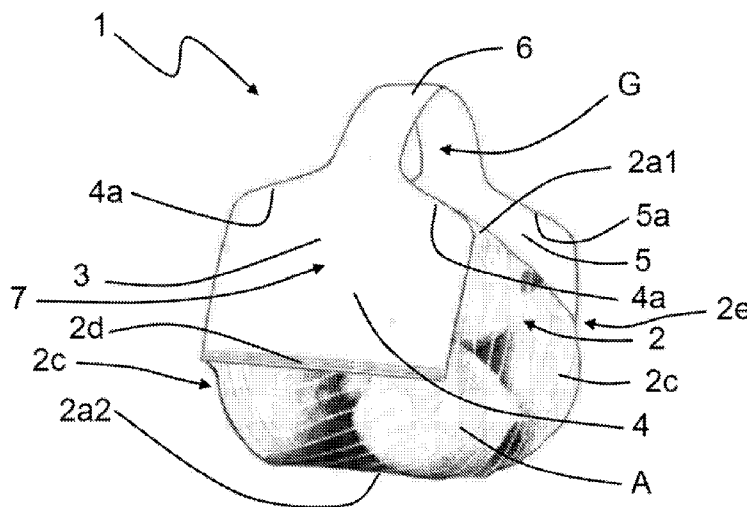


Fig. 1

(57) Abstract: A container for fruit and vegetable products comprises one closed mesh casing (2) for storing products (A), and one shaped band (3) including one first end portion (4) and one second end portion (5) associative with the respective ends to the mesh casing (2), and one narrower intermediate portion (6) for connecting between the first end portion (4) and the second end portion (5), the intermediate portion (6) making a hand grip for the user, so as to allow optimal visibility of the fruit and vegetable products (A) packed and easy and safe transportation thereof.

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Description of a Patent for an Industrial Invention  
having the title:

"CONTAINER FOR FRUIT AND VEGETABLE PRODUCTS AND METHOD  
FOR MAKING THE CONTAINER AND FOR PACKING SUCH  
PRODUCTS".

Designated inventor: Andrea Mercadini

#### TECHNICAL FIELD OF THE INVENTION

The present invention relates to a container for fruit  
and vegetable products and method for making the  
container and for packing such products.

5 In particular the present invention relates to a  
container for fruit and vegetable products that allows  
optimal visibility of the products themselves contained  
in it, and at the same time allows it to be easily and  
safely transported by the user.

#### 10 STATE OF THE ART

There are known containers for fruit and vegetable  
products, suitable for containing products of various  
kinds like for example potatoes, tubers in general,  
onions, and yet more, generally consisting of mesh  
15 portions associated with extended portions of film made  
from synthetic material.

The mesh and film portions can be associated with each  
other for example through welding, or even gluing,

crimping, or in yet other ways.

The film portions display information of various kinds, like for example concerning the goods, nutrition, storage and expiry date of the products, and the like, 5 as well as writing and commercial data, producer's logos, and yet more data.

However, containers of this known type, due to the aforementioned extended film portions, do not allow the products contained inside them to be seen clearly, in 10 this way preventing the user from checking the appearance, the integrity or the cleanliness of the fruit and vegetable products.

In many cases, containers do not have adequate handgrip portions for the user, making them awkward to 15 transport; in other cases the existing containers instead have handles specially made in the processing steps, which obviously lengthens the production times, also worsening the final costs of the containers themselves.

20 Spanish utility model ES1027802U teaches, for example, a bag with mesh casing and a label that has a first strip element extending from one end of the bag to the other and externally opposite the rear face of the bag, as well as a second and a third strip element each 25 arranged externally opposite the front face of the bag

and each welded to a respective portion of the first strip element with interposition of the ends of the bag, said ends thus being clamped one between the first and the second strip element welded together and the  
5 other between the first and the third strip element welded together.

The European patent application with publication number EP2535281A1, on the other hand, teaches a bag with mesh casing and a label having two elements arranged on  
10 opposite sides to one another with respect to the bag and connected together at the ends of the casing, so that both the ends are locked between the two strip elements.

Bags with structures similar to those indicated above  
15 are taught by EP2210735A1, US5912197, WO2011034038A1.

In order to obtain all of the bags according to the patent documents mentioned above, it is necessary to use a substantial amount of material for the label, taking into account, furthermore, the fact that it is  
20 necessary to foresee label elements or components arranged on opposite sides to one another at the two ends of the bag and, also for this reason, the packing and fastening procedure of the label to the casing involves a series of complex steps that are expensive  
25 to carry out.

## PURPOSES OF THE INVENTION

The technical task of the present invention is therefore to devise a container, such as a bag for fruit and vegetable products and method for making the container and packing the such products, which allows optimal visibility of the products contained inside it, so as to allow the user to easily and quickly check the appearance, the integrity and the cleanliness of the products themselves, still displaying all the necessary information and data.

In such a technical task, a particular purpose of the present invention is to make a container for fruit and vegetable products that can be easily and safely transported by the user.

A further purpose of the present invention is to devise a method for making the container and packing such products that requires simple and quick processing steps, cutting production times and costs.

Another purpose of the present invention is to provide a new bag as stated above having an amount of material for a band or band component, such as a label, that is less than the solutions proposed previously.

This task and this purpose are accomplished by the container for fruit and vegetable products according to the attached claim 1.

The container for fruit and vegetable products comprises at least one closed mesh casing for storing the products, and at least one shaped band comprising at least one first end portion and at least one second  
5 end portion suitable for being associated with the respective ends to the mesh casing; the shaped band also comprising at least one narrower intermediate portion for connecting between the first end portion and the second end portion, such an intermediate  
10 portion is suitable for making a handgrip for the user, so as to allow optimal visibility of the fruit and vegetable products packed and easy and safe transportation thereof.

Further advantageous characteristics are described in  
15 the dependent claims.

#### BRIEF DESCRIPTION OF THE DRAWINGS.

The characteristics of the invention will become clearer to any man skilled in the art from the following description and from the attached tables of  
20 drawings, given as a non-limiting example, in which:

figure 1 is a perspective view of a possible embodiment of the container for fruit and vegetable products, according to the present invention;

figure 2 is a section view of the container of figure  
25 1;

figure 3 is a perspective view of another possible embodiment of the container for fruit and vegetable products, according to the present invention;

le figure 4 and 5 schematically illustrate in detail engagement areas of a band with a casing in a container according to the present invention;

figure 6 illustrates a longitudinal section view of a container according to figure 1;

figure 7 is a perspective view of a second possible embodiment of the container for fruit and vegetable products, according to the present invention;

figure 8 is a perspective view according to another angle of the container for fruit and vegetable products highlighting a hand grip for the user, according to the present invention;

figure 9 is a perspective view of a further possible embodiment of the container according to the invention;

figure 10 is a perspective view slightly from above of another example embodiment of a container according to the present invention;

figure 11 is a view similar to figure 10 of another example embodiment of a container according to the present invention;

figure 12 is a perspective view slightly from above of

a welding and cutting group for obtaining a container according to the present invention; figure 13 is a side view of the group of figure 12; and figure 14 is a perspective view slightly from above of a component of the group of figure 12.

#### EMBODIMENTS OF THE INVENTION.

With reference in particular to the attached figures 1-3, a container for fruit and vegetable products, according to the present invention, is wholly indicated with 1.

The container 1 for fruit and vegetable products A comprises at least one closed mesh casing 2 for storing the products A.

The container 1 also comprises at least one shaped band 3.

The mesh casing 2, if so desired having a substantially tubular body, includes a first face 2a1, a second face 2a2 and two side walls 2b and 2c.

According to the present invention, the shaped band is fixed solely to the first face 2a1 of the container, whereas the second face 2a2 is free or not engaged or in contact with the band 3.

The tubular body comprises a first end 2d and a second end 2e each defined between respective end sections 2f, 2g (figure 2) of the first face 2a1 and of the second



face 2a2. The substantially tubular body, moreover, is closed at its ends 2d, 2e through respective welding sections and the shaped band is fixed to the mesh casing 2 solely at both the ends 2d, 2e.

5 Preferably, the shaped band comprises at least one first end portion 4 and at least one second end portion 5 suitable for being associated with the respective ends to the mesh casing 2.

Even more preferably, the shaped band 3 also comprises  
10 at least one intermediate portion 6, if so desired narrower for connecting between the first end portion 4 and the second end portion 5.

The intermediate portion 6 is suitable for making a hand grip for the user, so as to allow optimal  
15 visibility of the fruit and vegetable products A packed and easy and safe transportation thereof.

In particular, at least one from the first end portion 4 and the second end portion 5 defines at least one extended surface 7 suitable for the application of  
20 writing, logos and the like, as represented in figure 2.

In a possible solution, represented in figures 1-3, both the first end portion 4 and the second end portion 5 can each comprise a respective surface 7 for the  
25 application of writing, imprints and the like;

moreover, the first end portion 4 and the second end portion 5 can comprise at least two respective opposite side walls 4a, 5a converging in the direction of the narrower intermediate portion 6.

5 In particular, the ends of the first end portion 4 and of the second end portion 5 of the shaped band 3 are associated with respective ends of the mesh casing 2.

The shaped band 3 and the mesh are preferably made from synthetic material, so that at least the ends of the  
10 first end portion 4 and of the second end portion 5 can be associated through welding with the mesh casing 2.

Moreover, for example in the case in which a particularly thin mesh is required, the shaped band 3 can be associated with the mesh casing 2 through  
15 welding at least of the ends of the first end portion 4 and of the second end portion 5 to the mesh itself, if so desired, with the interposition of respective pieces made from strengthening synthetic material. Such a solution is not represented in the figures.

20 The casing 2 and/or the band 3 at the respective attachment area can be flat, as illustrated in figure 2, or they may not be flat, as illustrated in particular in figure 6.

In this version, the casing 2 and/or the band 3 have a  
25 substantially corrugated or undulating configuration,

so that the contact surface between them is greater than that between two contact portions (of the band and of the casing) that are both substantially flat.

Moreover, the band, in particular at the attachment  
5 area, could have a substantially corrugated configuration, so as to comprise, from one side wall to the other of the bag, raised portions 3a alternating with recessed portions 3b.

It should be noted that the raised portions 3a define  
10 convexities facing towards the end sections 2f, 2g of an end 2d, 2e of the container or bag, whereas the recessed portions 3b define concavities facing towards the end sections 2f, 2g of an end 2d, 2e of the container, so as to have an attachment area that has a  
15 greater extension than an attachment area that lies entirely on one same plane and also shaped attachment portions so as to increase the stability and secureness of the attachment.

Concerning this, the raised portions 3a and/or the  
20 recessed portions 3b can comprise V-shaped sections (see figure 4), U-shaped sections (see figure 5) or substantially curved sections of the band or label.

The raised portions 3a of a band component or label can, in use, be housed in, and welded to respective  
25 hollow portions 3c of a first end section 2f of an end

2d, 2e of the casing, whereas the recessed portions 3b of a band or label can, in use, be housed in, and welded to respective projecting portions 3d of a first end section 2f of an end 2d, 2e.

5 The hollow portions 3c of an end section 2f will, in this case, alternate with projecting portions 3d thereof.

According to a version of the present invention, the hollow portions 3c will in turn be housed in, and  
10 welded to respective channel portions 3e of the other or second end section 2g of an end 2d, 2e, whereas the projecting portions 3d of a label are, in use, welded to respective projecting portions 3f of the other or second end section 2g of an end 2d, 2e.

15 The channel portions 3e of an end section 2g will alternate with projecting portions 3f thereof.

Preferably, between band or rather between the intermediate portion 6 and the first face 2a1, see figures 1, 2 and 6, a gap G is defined.

20 The band can, of course, have a different width or length.

In a container according to the present invention, as will be understood, it is possible to use a smaller amount of label/labels than the solutions presented  
25 earlier, taking into account the fact that it has one

or more bands, each fixed just on one face, first (front) or second (rear if so desired), or rather just on one face of one or both of the ends 2d, 2e of the container or bag itself.

5 This is possible in particular precisely due to the characteristic according to which the attachment area of the label to a respective face of the mesh casing is not flat or in any case does not lie in a single plane, but has raised portions 3a and recessed portions 3b  
10 and, if so desired, hollow portions 3c and projecting portions 3d, channel portions 3e and projecting portions 3f, which make it possible to obtain a larger contact surface and with suitably shaped sections so as to improve the anchoring or attachment with respect to  
15 bags with conventional labels that, indeed, have a substantially flat surface or attachment area.

If so desired, a container according to the present invention could comprise one or more bands 3, each fixed solely at an end 2d or 2e of the mesh casing (see  
20 figure 10), or it extends from one end 2d to the other 2e and is fixed just at the ends 2d and 2e of the mesh casing (see figures 1-3, 6, 7, 8, 9 or 11).

Therefore, in such a second case, the band component or label 3 would be detached or in any case not fixed to  
25 the mesh casing 2 in the portions of the first face 2a1

for connecting between the top and bottom ends 2d, 2e.

Alternatively, the mesh casing 2 could be folded upon itself, or undulated, or rolled up, at the attachment end to the band so as to still allow a contact surface  
5 to be obtained between them that is larger than that between two contact portions (of the band and of the casing) that are both substantially flat.

According to a further version (not illustrated) of the present invention in the lower part of the casing 2,  
10 substantially at the second face 2a2, it is possible to insert a sheet of soft material, or bubbled material, which allows the most delicate fruit and vegetable products to be protected.

Hereafter we will describe the method for making the  
15 container 1 and for packing such products A, according to the present invention.

The method comprises the steps of providing at least one mesh made from synthetic material, feeding the products A to be packed into the mesh, welding the mesh  
20 so as to enclose the products A, cutting the mesh so as to make the aforementioned closed mesh casing 2, associating at least one shaped band 3 with the mesh casing 2 through welding. In the case of the container of figures 1-3, 6, 7, 8, 9 or 11, it is envisaged to  
25 weld at least the ends of the first end portion 4 and

of the second end portion 5 to the mesh itself.

In particular, the quoted steps of welding the mesh so as to enclose the products A and of welding at least the ends of the first end portion 4 and of the second  
5 end portion 5 to the mesh can take place in a single operating step.

In greater detail, the method can comprise the step of providing a mesh of the flat type, for example taken from a storage reel, arranging the mesh around a  
10 tubular element with the side edges overlapping, welding it at such edges so as to give it a tubular structure, feeding the products A to be packaged, welding the mesh so as to enclose the products A, cutting the mesh so as to make the closed mesh casing  
15 2.

In the case in which it is required for example to use a particularly thin flat mesh, the step of welding the edges of the mesh wound on the tubular element can take place with the interposition of a strip 8 of  
20 strengthening synthetic material, to ensure the hold of the weld itself, as illustrated for example in the solutions of figures 3, 7 and 8.

Figure 9 on the other hand illustrates a solution similar to that of figure 3, but without the strip 8 of  
25 strengthening synthetic material.

Otherwise, the flat mesh can comprise a side edge previously associated with a strip of synthetic material, and once arranged around the tubular element with at least the quoted strip overlapping the other  
5 free side edge, it is welded at at least the strip and at the other free edge, so as to give it a tubular structure.

The welding can take place by overlapping just the strip and the free side edge, or overlapping the strip  
10 with the respective edge associated with the free side edge.

Or even both of the side edges of the flat mesh can be associated in advance with respective strips of synthetic material, and once the mesh has been arranged  
15 around the tubular element with at least the strips overlapping, it is welded at at least such strips so as to give it a tubular structure.

The welding can take place by overlapping just the strips, or the strips and an edge or both edges of the  
20 mesh.

Alternatively it is possible for a mesh to be provided directly already of the tubular type, also stored in a respective reel.

The solutions comprising the strips are not represented  
25 in the figures.



Preferably, a method for obtaining a bag according to the present invention can also comprise an attachment step, such as welding or thermowelding of the band or label on the casing 2 so as to obtain a sequence of  
5 raised portions 3a alternating with recessed portions 3b, as well as, if so desired, hollow portions 3c and projecting portions 3d and/or channel portions 3e and projecting portions 3f.

Concerning this, it is possible to use a welding group  
10 11, if so desired a welding and cutting group 11 as illustrated in figures 12 to 14.

Such a group comprises a pair of half-bodies or jaws 12, 13 able to be moved apart/together, for example through suitable motor means and each having a  
15 respective first 14 and second 15 abutment front. The abutment fronts 14, 15 define the welding and cutting area WCZ of the casing 2 (figure 13) between them and they are thus intended to abut against each other to weld the end sections 2f, 2g of an end 2d, 2e as well  
20 as to weld or thermoweld one or more bands 3 on them.

With particular reference to the abutment front 14, it comprises at least one welding section.

From one side, for example the top, to the other, for example the bottom, the abutment front 14 can comprise  
25 a first welding section 14a, thus a housing recess 14b

in which it is possible to fix a blade or knife 16 that projects, in use, with respect to the abutment front 14, and finally a second welding section 14c, for example substantially aligned with the first section 5 14a.

The abutment front 15, on the other hand, can comprise at least one welding section configured, in use, to abut and engage a respective welding section of the first abutment front.

10 The second abutment front, from one side, for example top, to the other, for example bottom, can comprise a first welding section 15a configured, in use, to abut and engage the first welding section 14a, therefore a housing recess 15b, configured, in use, to receive the 15 blade or knife 16, and finally a second welding section 15c, for example substantially aligned with the first section 15a and configured, in use, to abut and engage the second welding section 14b.

As it has been possible to observe, at least one 20 welding section 14a, 15a, 14c and 15c has a configuration having raised portions, for example V or U-shaped alternating with recessed portions, for example V or U-shaped.

When the half-bodies 12, 13 are positioned close 25 together, the raised portions of the welding section

14a or 14c of the first abutment front 14 can shape-engage recessed portions of a respective welding section of the second abutment front 15a or 15c, whereas the raised portions of the welding section 15a or 15c of the second abutment front 15 shape-engage recessed portions of a respective welding section 14a, 14c of the second abutment front 14. The configuration with raised and recessed portions of one or more welding sections, makes it possible, as will be understood, to obtain the corrugated configuration - raised portions 3a and recessed portions 3b - indicated above of the band component or of the label 3, as well as, if so desired, the hollow portions 3c, the projecting portions 3d, the channel portions 3e and the projecting portions 3f of the end sections 2f, 2g.

It is also possible to envisage suitable heating means (not illustrated in the drawings) of one or both of the abutment fronts 14, 15.

With such a group, the casing to be welded as well as the band component or label 3 to be fixed to it are fed between the two abutment fronts 14 and 15 until one end, for example the bottom 2e, of the casing 2 is at the level of the first welding sections 14a and 15a of the group. At this point the group is commanded to close or the two jaws 12 and 13 are commanded to come

together, so as to weld the bottom end 2e of the casing and in this way obtained the bottom of a respective bag 1. Possibly, in such a step, it is possible to feed a band or label 3 between the casing and one of the welding sections 14a and 15a, so as to weld or thermoweld it to the bottom of the bag.

Thereafter, the welding and cutting group 11 is commanded to open or the half-bodies or jaws 12, 13 are commanded to move apart, and the casing 2 with the bottom end 2e welded is made to move in steps, with any suitable means, such as belts or rollers or by acting (pulling) on the bottom of the casing, until the top end 2d of the casing is at or at the level of the welding sections 14c and 15c.

At this point, the loose products to be packed are fed into the casing with bottom or lower end 2e closed and, thereafter, the group is commanded to close or the two jaws 12 and 13 are commanded to move together, so as to weld the upper end 2d of the casing and in this way obtain the closed top of a respective bag. Possibly, in such a step it is possible to feed a band or label between the casing 2 and one of the welding sections 14c and 15c, so as to weld it to the top of the bag. If, moreover, a label had been welded to the bottom of the bag that is now closed at the top, during such a

welding step of the top of the bag it is possible, if so desired, to fix the other end of the label 3 fixed to the bottom of the bag to the top end of the bag. In order to do this, suitable means for holding and  
5 guiding the label must of course been provided.

As can be understood, thanks to the presence of welding sections 14a and 15a and/or of welding sections 14c and 15c configured as stated above (raised portions alternating with recessed portions), it is possible to  
10 obtain the welding or attachment of a band or label to a casing only at a face thereof and at one or both ends, without however engaging the connecting portion or section between the ends of the casing.

Such a provision, as we have said, makes it possible to  
15 widen and improve the attachment or welding area of the band or label to the mesh casing with respect to the solutions proposed up to now and thus to avoid envisaging band or label portions arranged on both sides or faces of the casing and welded to one another  
20 with interposition of the casing or rather of the ends thereof. Such portions are necessary in the prior solutions proposed to ensure a good seal or in any case firm and stable anchoring of the label to the casing.

The way of using the container for fruit and vegetable  
25 products 1, according to the invention is, according to

what is described, totally intuitive.

As seen, the particular configuration of the shaped band 3, with the narrower intermediate portion 6 (if provided), and the first end portion 4 and the widened second end portion 5, leaves large areas of the mesh casing 2 in view, allowing the user to see the fruit and vegetable products A packed inside in an optimal manner.

It should be noted how on the shaped band 3 it is possible to display (in particular on the surfaces 7, but also on the intermediate portion 6) any information concerning the goods, nutrition, storage and expiry date of the products, and the like, as well as writing and commercial data, producer's logos, and yet more data.

Moreover, the intermediate portion 6 of the shaped band 3 constitutes a safe and easy handle for the user, so that they can transport the container 1 with the packed products A easily and without the risk of it breaking, also thanks to the possible presence of tissues, and/or strips 8 and strengthening strips, suitably welded as needed as described earlier.

As seen, the hand grip for the user is made directly and simply thanks to the intermediate portion 6 of the band 3 suitably associated with the mesh casing 2,

without additional processing steps of the container 1 being carried out, as happens, on the other hand, for known types of containers.

Thanks to a bag and to a method for obtaining it according to the present invention it is moreover possible to obtain a substantial reduction in the material of the band or label used to make a container or bag, at the same time obtaining an anchoring of the label to the mesh casing that is just as reliable and firm as, if not better than, prior solution.

The invention, thus conceived, makes it possible to obtain important technical advantages.

An important technical advantage consists of the fact that the container 1 for fruit and vegetable products A allows optimal visibility of the products contained inside it, so as to allow the user to easily and quickly check the appearance, the integrity and the cleanliness of the products A themselves.

As seen, the container 1 can also be transported easily and safely by the user, thanks to the hand grip made through the intermediate portion 6 of the shaped band 3.

The method for making the container 1 and for packing the products A requires, as seen, simple and quick processing steps - including those for obtaining the

hand grip - thus allowing advantages in terms both of reduction of production time and costs.

It has thus been seen how the invention achieves the proposed purposes.

- 5 The present invention has been described according to preferred embodiments, but equivalent variants can be devised without departing from the scope of protection offered by the following claims.



## CLAIMS

1. Container for fruit and vegetable products, comprising at least one closed mesh casing (2) for storing the products (A), and at least one  
5 shaped band (3), said mesh casing (2) having a first face (2a1), a second face (2a2) and two side walls (2b, 2c), **characterised in that** said at least one shaped band (3) is fixed solely to said first face (2a1) of said container, whereas  
10 said second face (2a2) is free or not engaged or in contact with said at least one band (3).
2. Container according to claim 1, characterised in that said mesh casing (2) comprises a first end (2d) and a second end (2e) each defined between  
15 respective end sections (2f, 2g) of said first face (2a1) and of said second face (2a2), said mesh casing (2) being closed at its ends (2d, 2e) through respective welding sections and in that said at least one shaped band (3) is fixed  
20 to said first face (2a1) of said mesh casing (2) solely at both said ends (2d, 2e).
3. Container according to claim 1 or 2, characterised in that said band comprises at least one first end portion (4) and at least one  
25 second end portion (5) associable with at least

the respective ends to said mesh casing (2), and comprising at least one narrower intermediate portion (6) for connecting between said first end portion (4) and said second end portion (5),  
5 said intermediate portion (6) being suitable for making a handgrip for the user, so as to allow optimal visibility of the fruit and packaged vegetable products (A) and easy and safe transportation thereof.

10 4. Container for fruit and vegetable products according to claim 3, wherein at least one of said first end portion (4) and of said second end portion (5) defines at least one extended surface (7) suitable for the application of  
15 writing, logos and the like.

5. Container for fruit and vegetable products according to claim 3 or 4, wherein said first end portion (4) and said second end portion (5) each comprise a respective extended surface (7)  
20 suitable for the application of writing, logos and the like, and each comprise at least two opposite side walls (4a, 5a) converging in the direction of said narrower intermediate portion (6).

25 6. Container for fruit and vegetable products

according to claim 3, 4 or 5, wherein at least the ends of said first end portion (4) and of said second end portion (5) of said shaped band (3) are associated with respective ends of said mesh casing (2).

5

7. Container according to claim 1, characterised in that said at least one band (3) is fixed solely at just one end (2d, 2e) of said mesh casing (2).

10

8. Container for fruit and vegetable products according to one of the previous claims, wherein said shaped band (3) and said mesh are made from synthetic material.

15

9. Container for fruit and vegetable products according to one of the previous claims, wherein said band is associated with said mesh casing (2) through welding.

20

10. Container for fruit and vegetable products according to any one of the previous claims when dependent on claim 3, wherein said shaped band (3) is associated with said mesh casing (2) through welding of at least the ends of said first end portion (4) and of said second end portion (5) to said mesh with the interposition of at least respective pieces of strengthening

25

synthetic material.

11. Container according to any one of the previous claims, characterised in that said mesh casing (2) and/or said shaped band (3) at the  
5 respective attachment areas are not flat, but have a substantially corrugated or undulating configuration, so that the contact surface between them is larger than that between two contact portions that are both substantially  
10 flat.
12. Container according to any one of the previous claims, characterised in that said band at the attachment area to said mesh casing (2) has a substantially corrugated configuration, so as to  
15 comprise, from one side wall to the other, raised portions (3a) alternating with recessed portions (3b).
13. Container according to claim 12 when dependent on claim 2, characterised in that said raised  
20 portions (3a) define convexities facing towards said end sections (2f, 2g) of an end (2d, 2e) of said casing (2), whereas said recessed portions (3b) define concavities facing towards the end sections (2f, 2g) of an end (2d, 2e) of said  
25 casing (2), so as to have an attachment area

with greater extension with respect to an attachment area lying in the same plane.

14. Container according to claim 13, characterised in that said raised portions (3a) are, in use, housed in, and welded to respective hollow portions (3c) of a first end section (2f) of an end (2d, 2e), whereas said recessed portions (3b) are, in use, housed in, and welded to respective projecting portions (3d) of a first end section (2f) of an end (2d, 2e), the hollow portions (3a) in this case alternating with projecting portions (3b).
15. Container according to claim 14, characterised in that said hollow portions (3c) are housed in, and welded to respective channel portions (3e) of the other or second end section (2g) of an end (2d, 2e) of said casing, whereas said projecting portions (3d) of a label are, in use, welded to respective projecting portions (3f) of the other or second end section (2g) of an end (2d, 2e), said channel portions (3e) of an end section (2g) alternating with projecting portions (3f) thereof.
16. Container according to any one of the previous claims, characterised in that said at least one

band (3) is detached or in any case is not fixed to said mesh casing (2) in the portions of said first face (2a1) for connecting between said first (2d) and said second (2e) end.

- 5 17. Container according to any one of the previous claims, characterised in that it comprises a sheet of soft material, or bubbled material in the lower part of the casing (2), substantially at the second face (2a2), which makes it possible to protect more delicate fruit and vegetable products.
- 10 18. Method for making the container (1) and for packing such products (A), according to one of the previous claims, characterised in that it comprises the steps of supplying at least one mesh in synthetic material, feeding the products (A) to be packed into said mesh, welding said mesh so as to enclose the products (A), cutting said mesh so as to make said closed mesh casing (2), associating at least one said shaped band (3) with said mesh casing (2) through welding.
- 15 19. Method according to the previous claim, comprising the step of providing said mesh of the flat type, arranging it around a tubular element with overlapping side edges, welding at
- 20
- 25

said edges so as to give it a tubular structure.

20. Method according to claim 18 or 19, comprising the step of providing said flat mesh, arranging it around a tubular element with the side edge overlapping, welding it at said edges with the  
5 interposition of a strip (8) of strengthening synthetic material, so as to give it a tubular structure.

21. Method according to any one of claims 18 to 20,  
10 comprising the step of providing said flat mesh comprising at least one side edge previously associated with a strip of synthetic material, arranging it around a tubular element with at least said strip overlapping the other free side  
15 edge, welding it at at least said strip and at said other free edge so as to give it a tubular structure.

22. Method according to any one of claims 18 to 21,  
20 comprising the step of providing said flat mesh comprising the side edges previously associated with respective strips of synthetic material, arranging it around a tubular element with at least said strips overlapping, welding it at at  
25 least said strips so as to give it a tubular structure.

23. Method according to any one of claims 18 to 22, comprising the step of providing said mesh directly of the tubular type.

24. Method according to any one of claims 18 to 23  
5 for making the container according to claim 3, comprising the step of welding at least the ends of said first end portion (4) and of said second end portion (5) of said shaped band (3) to said mesh casing (2) with the interposition of  
10 respective tissues of strengthening synthetic material.

25. Method according to any one of claims 18 to 24, characterised in that it comprises the following steps:

15 - providing at least one welding group (11) comprising a pair of half-bodies or jaws (12, 13) able to be moved apart/together, a first half-body (12) having a first abutment front (14), whereas a second half-body comprises a  
20 second abutment front (15), said first abutment front (14) comprising at least one welding section (14a, 15a) and said second abutment front (15) having at least one welding section (15a, 15c) configured, in use, to abut and  
25 engage the welding section (14a, 14c) of said



first abutment front (14), wherein at least one welding section (14a, 14c, 15a, 15c) of said first (14) and/or said second (15) abutment front has a configuration having raised portions alternating with recessed portions,

- feeding said casing (2) and said band (3) between said abutment fronts (14, 15), so that said label is arranged between said casing (2) and at least one welding section (14a, 14c) of said first abutment front (14) and at least one welding section (15a, 15c) of said second abutment front (15);

- commanding said jaws to come together, so as to weld the label (3) to a face of said casing (2).

26. Method according to claim 25, characterised in that when said half-bodies (12, 13) are brought together, the raised portions of at least one welding section (14a, 14c) of said first abutment front (14) shape-engage recessed portions of a respective welding section of said second abutment front (15a, 15c), and the raised portions of at least one welding section (15a, 15c) of said second abutment front (15) shape-engage recessed portions of a respective welding

section (14a, 14c) of said second abutment front  
(14), the configuration with raised and recessed  
portions of one or more welding sections, so as  
to obtain the corrugated configuration of said  
at least one band (3).

5

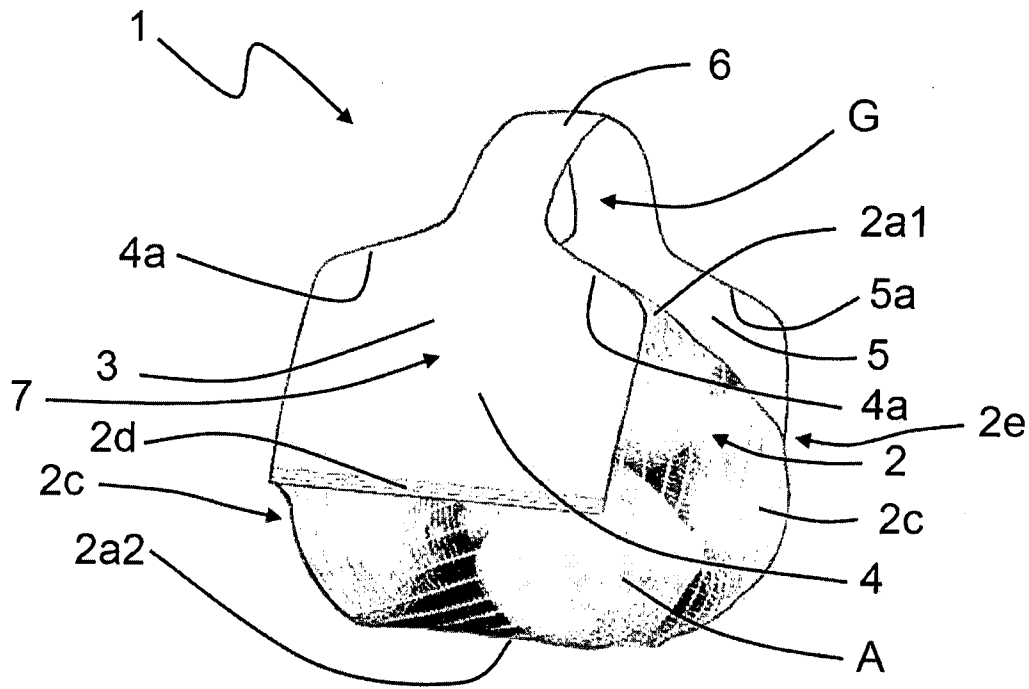


Fig. 1

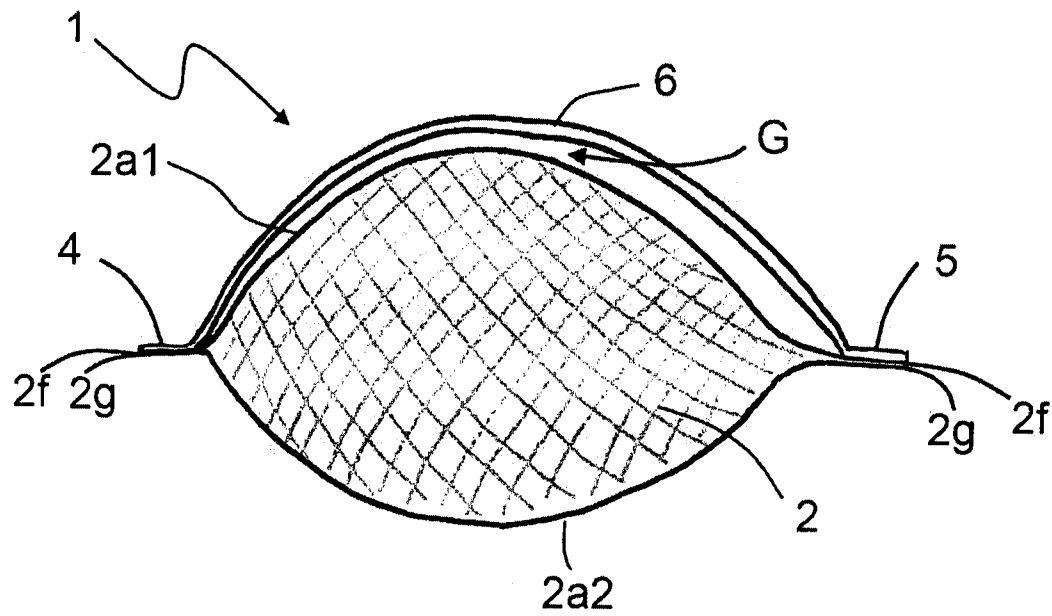


Fig. 2

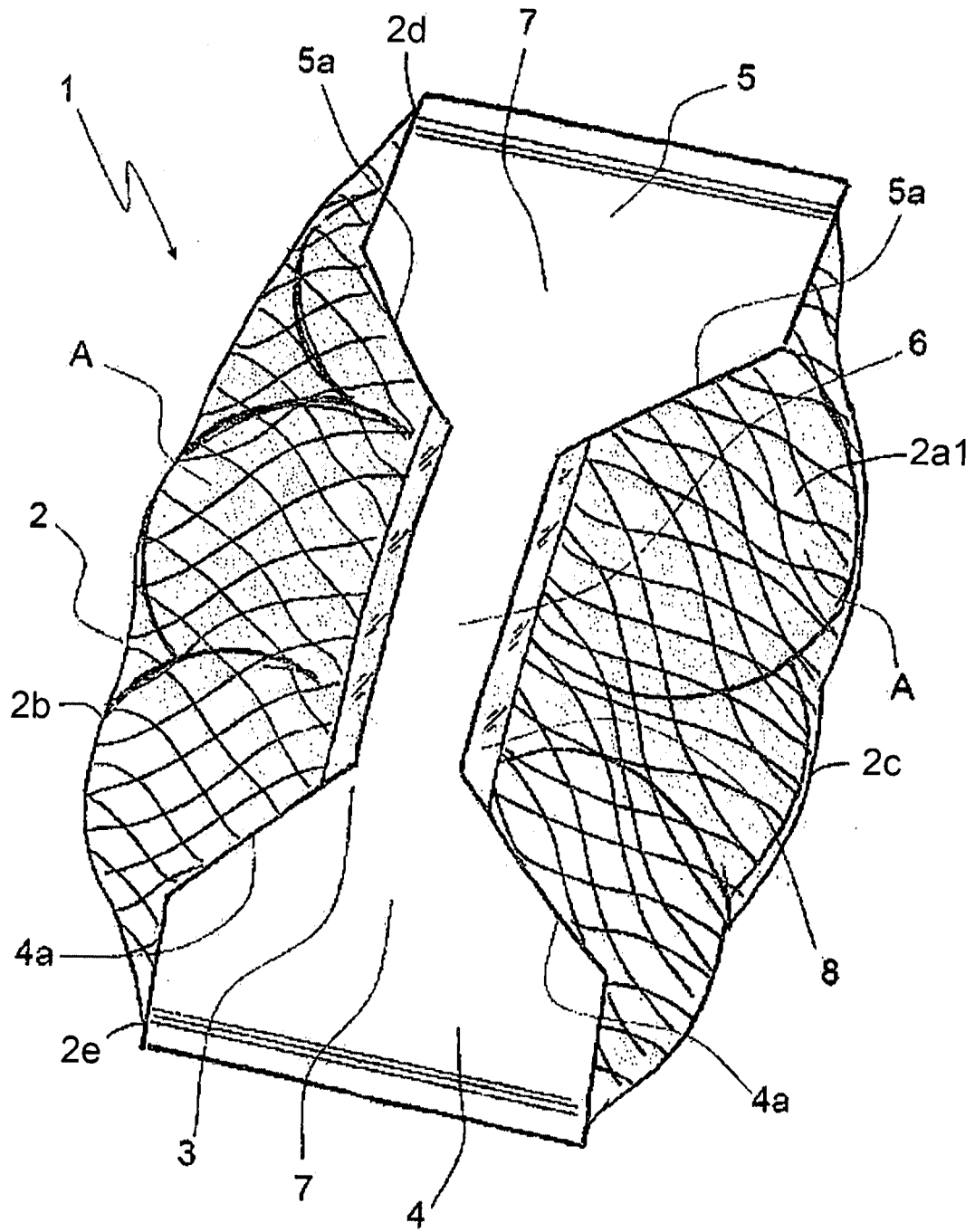


Fig. 3

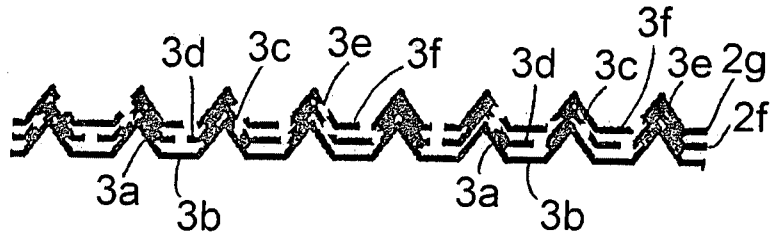


Fig. 4

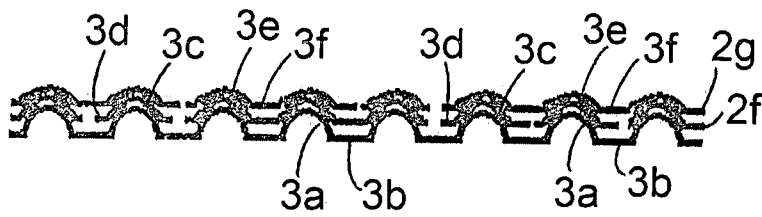


Fig. 5

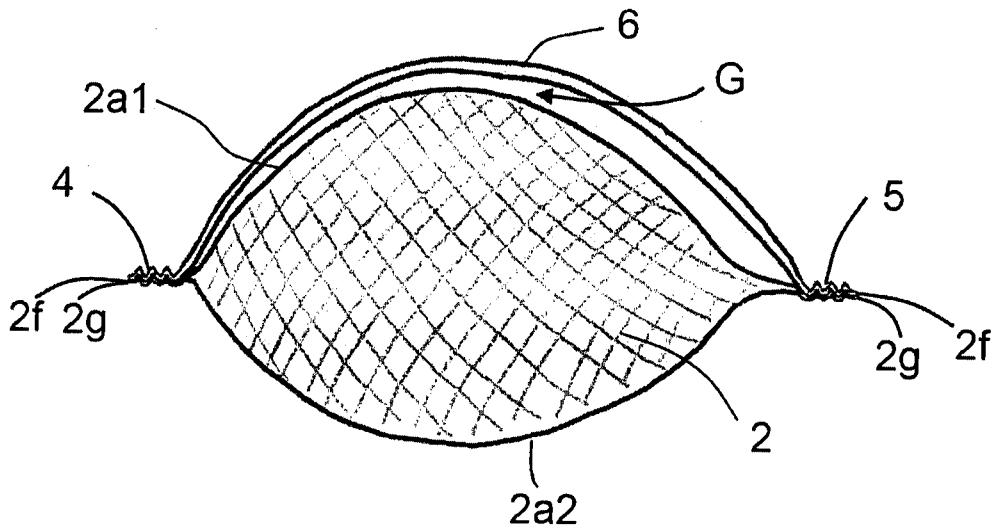


Fig. 6

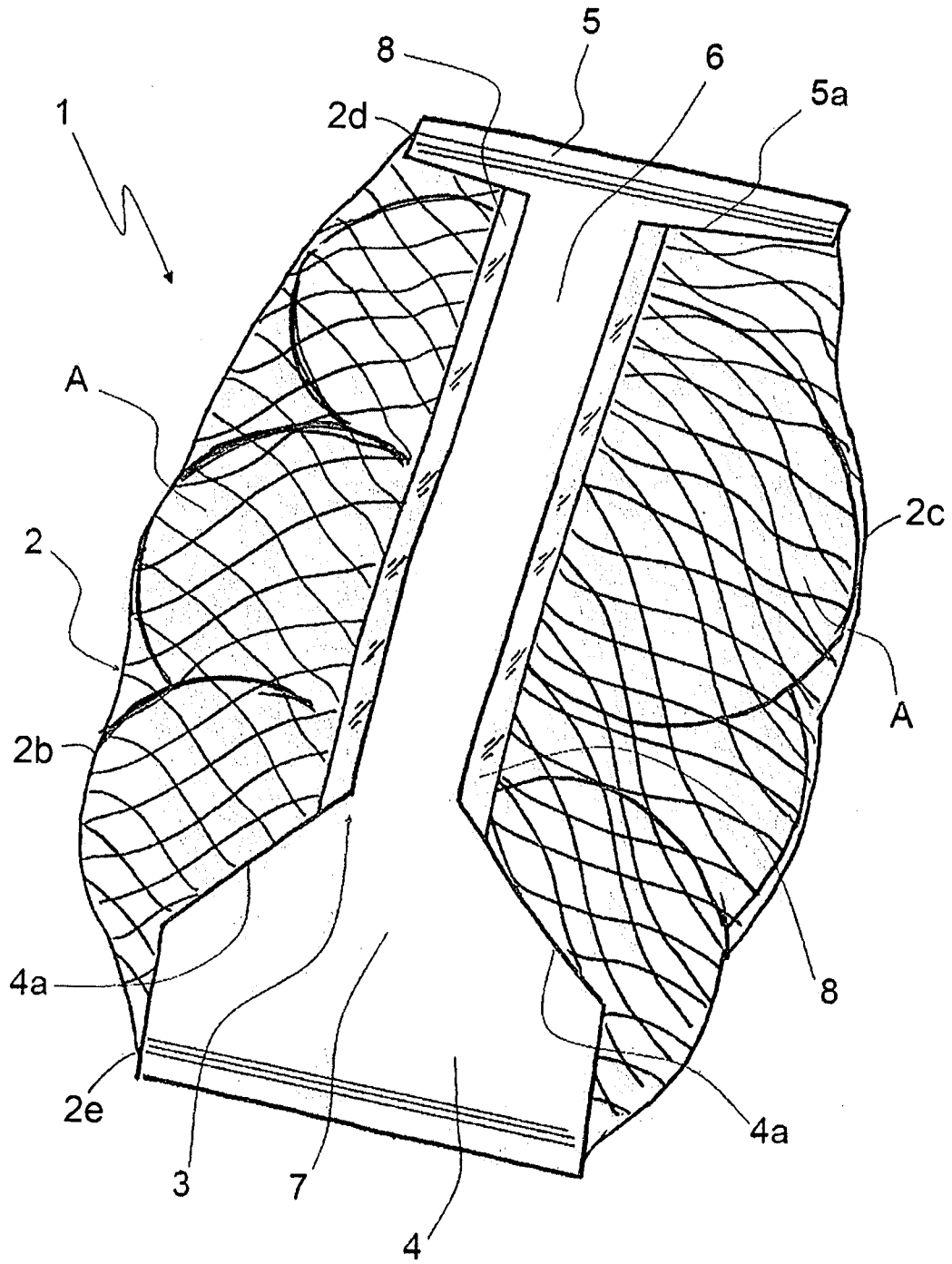


Fig. 7

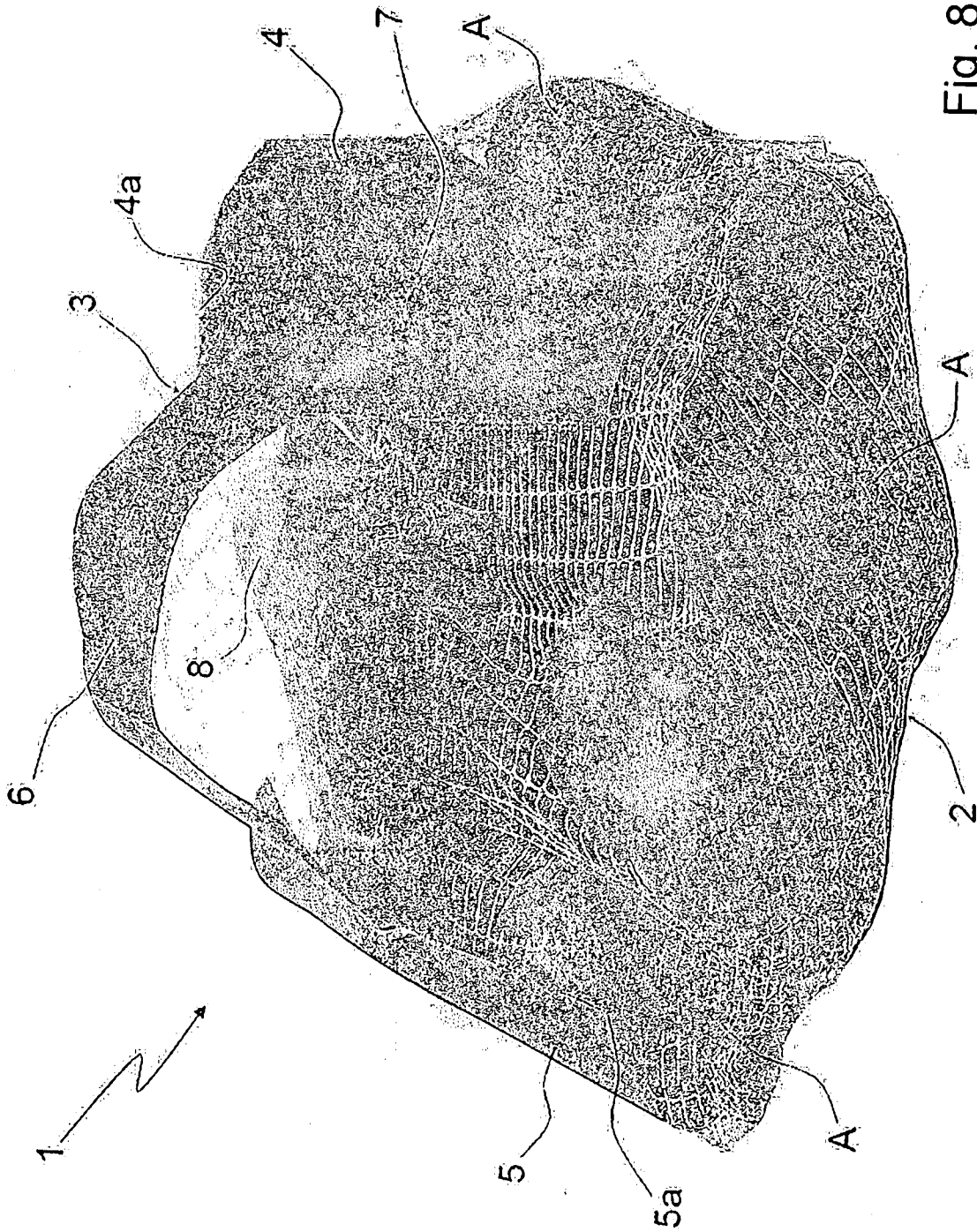


Fig. 8

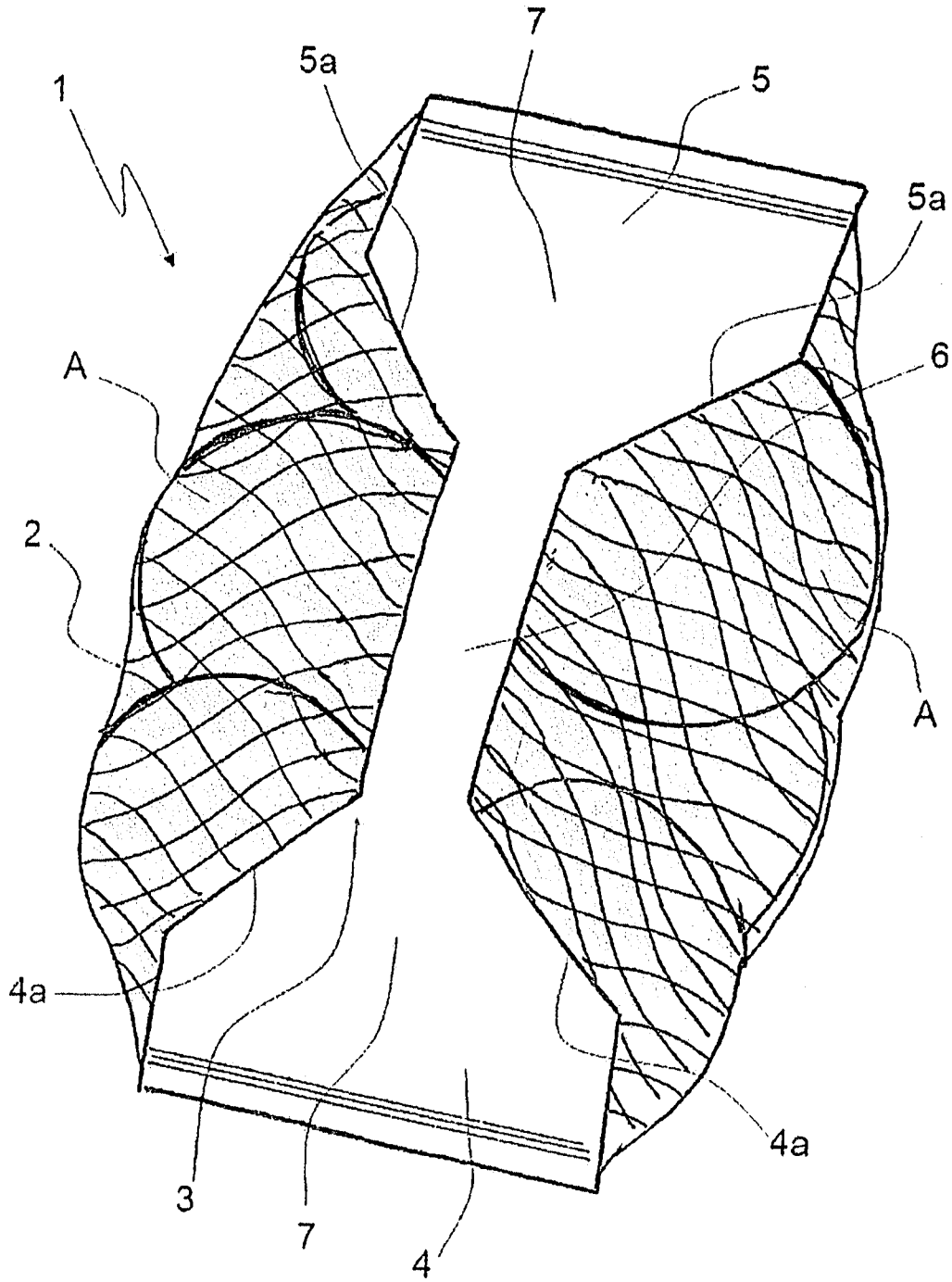


Fig. 9



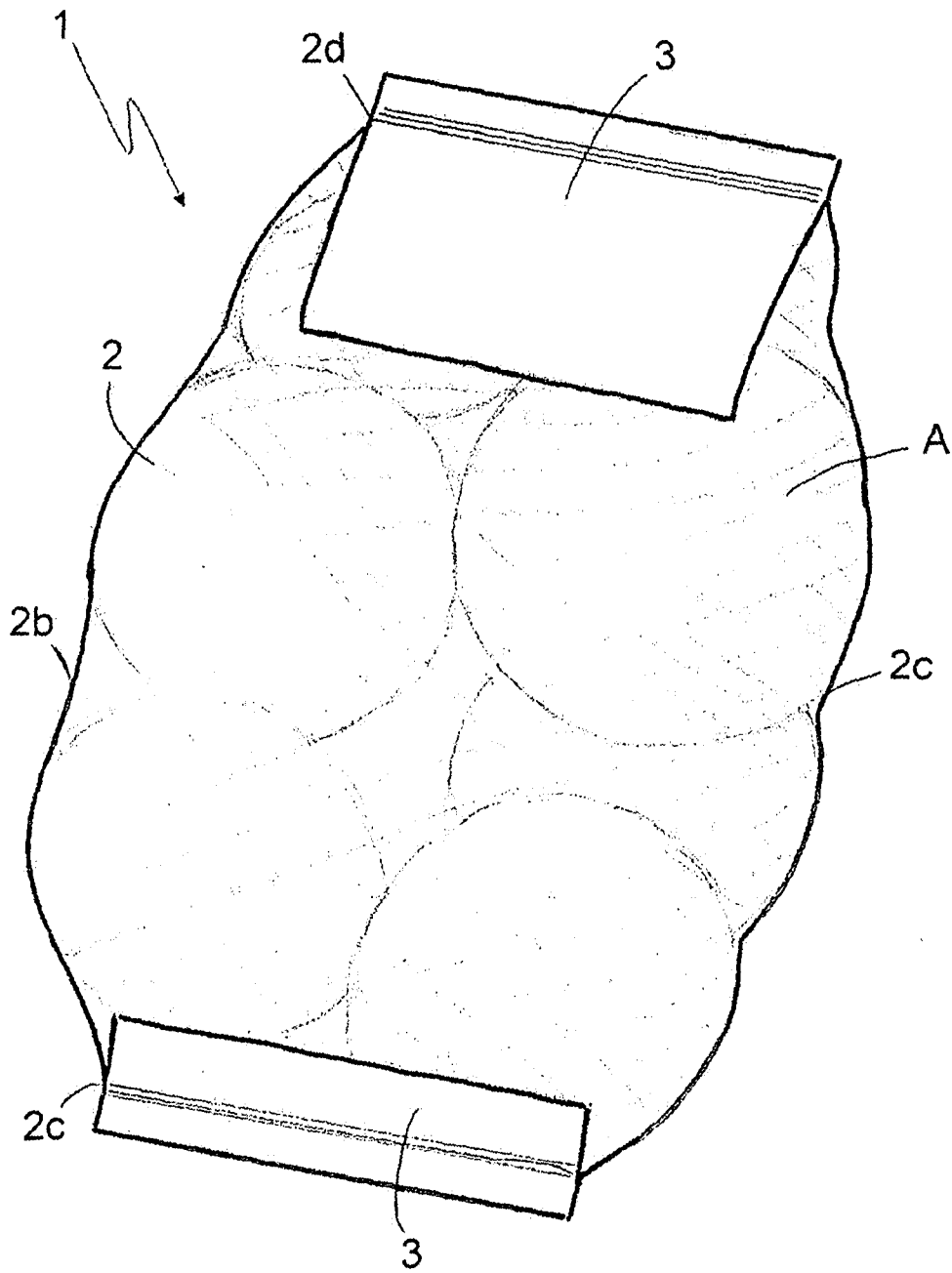


Fig. 10

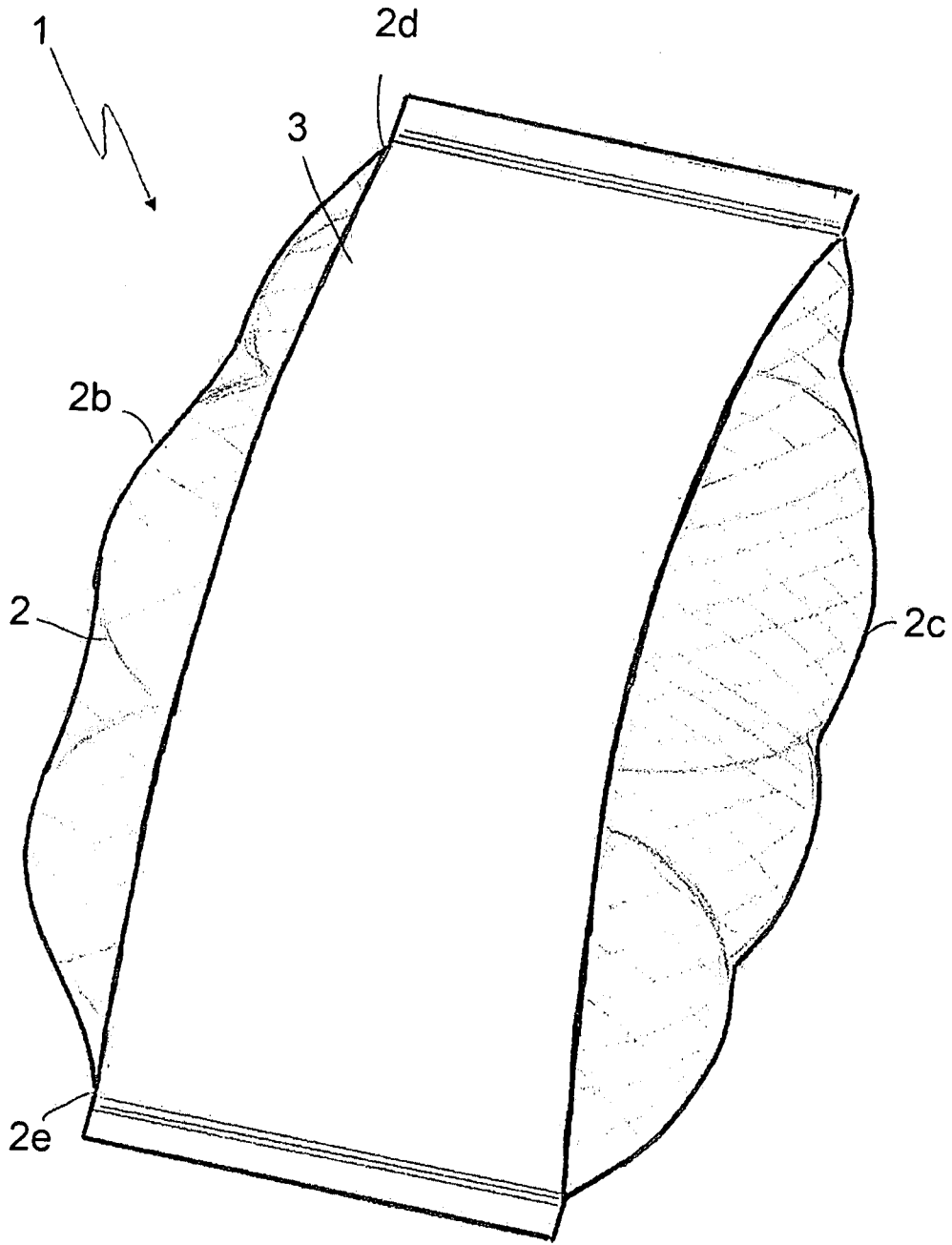


Fig. 11

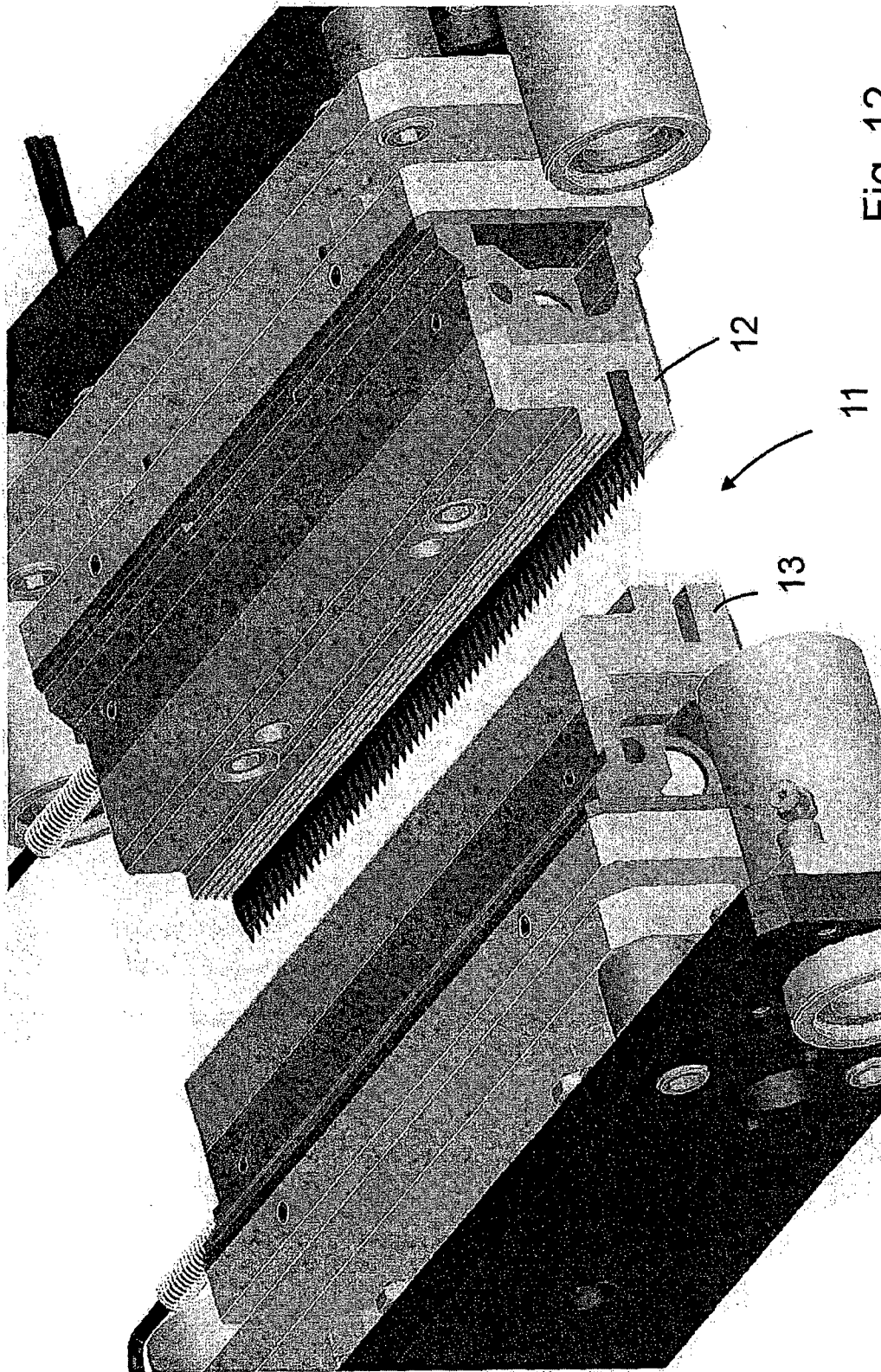


Fig. 12

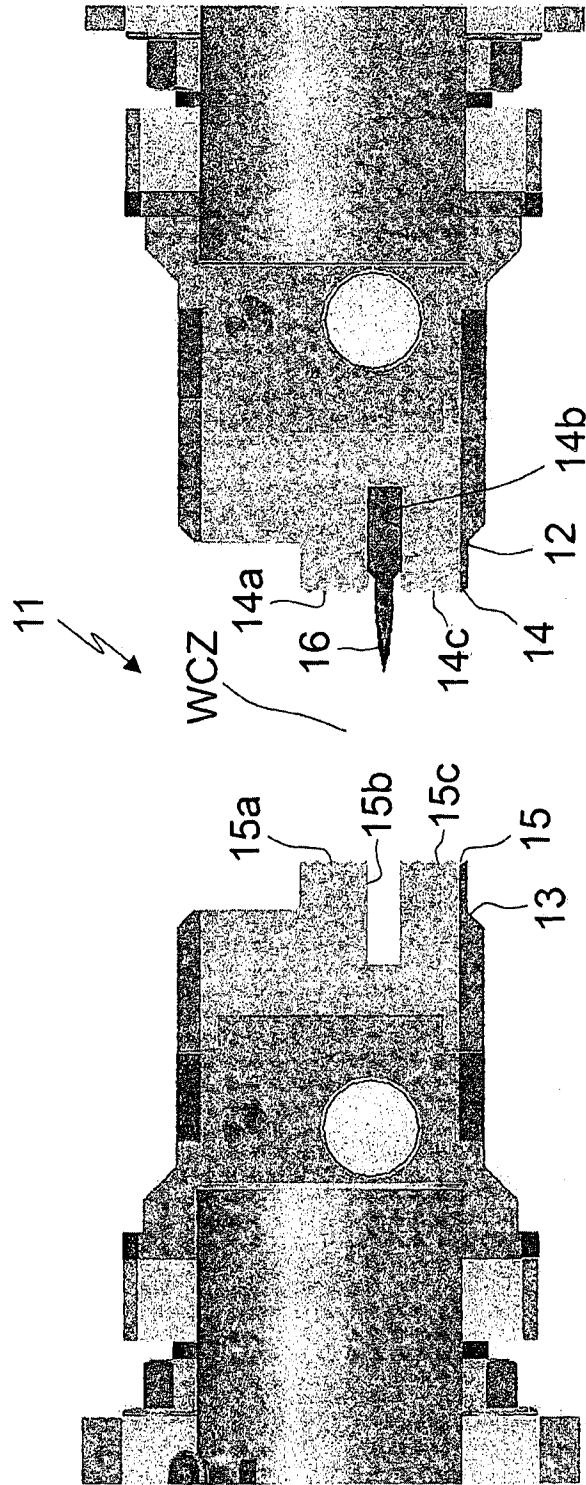


Fig. 13

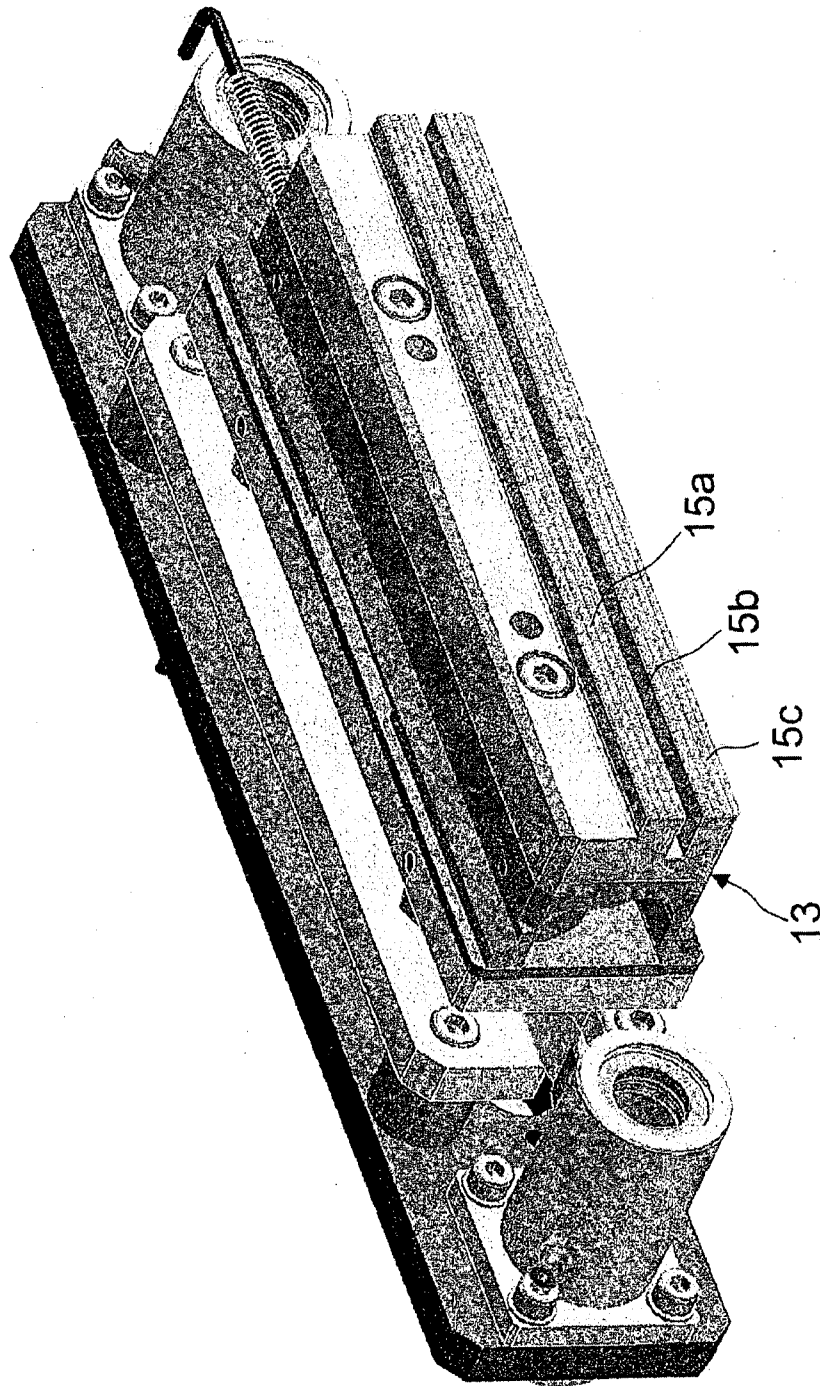


Fig. 14

# INTERNATIONAL SEARCH REPORT

International application No PCT/IB2014/060137
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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> INV. B65D30/06      B65D33/06      B65D85/34      B65B25/04 ADD.		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) B65D B65B B29C		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ES 1 027 802 U (PANIAGUA OLAECHEA ROSALINA [ES]) 16 October 1994 (1994-10-16) cited in the application	1-10, 16-18,24
Y	column 2, line 19 - line 32	19-23
A	column 3, line 3 - column 4, line 17; figures 1,8	11-15, 25,26
X	----- US 2009/046957 A1 (LIANG HSIEHYUEH WANG [US]) 19 February 2009 (2009-02-19)	1
Y	paragraphs [0030], [0037]; figures 5,6,7,8	23
Y	----- EP 2 210 735 A1 (GAVIPLAS S L [ES]) 28 July 2010 (2010-07-28)	19-22
A	cited in the application abstract; figures	1
	----- -/--	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents :		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	
"P" document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search	Date of mailing of the international search report	
1 September 2014	08/09/2014	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  Zanghi, Amedeo	

INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB2014/060137

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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A	NL 70 363 C (CORNELIUS WILLEM TEMPELMANS PLAT) 15 July 1952 (1952-07-15) figure 1 -----	1
A	US 5 912 197 A (MADDEROM ROBERT W [US]) 15 June 1999 (1999-06-15) cited in the application column 1, line 30 - line 65; figure 4 -----	1-25
X	EP 0 677 449 A1 (PANIAGUA OLAECHEA ROSALINA [ES]) 18 October 1995 (1995-10-18) page 2, line 44 - line 55; figure 5 -----	1-4
X	DE 26 36 821 A1 (TAKASAKI KUNICHIKA) 23 February 1978 (1978-02-23) figures 5,6,18 -----	1

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Information on patent family members

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