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(71) Applicant: **Thule S.p.A.**
23847 Molteno (Lecco) (IT)

(72) Inventor: **Redaelli, Elisabetta**
23848 Oggiono (LC) (IT)

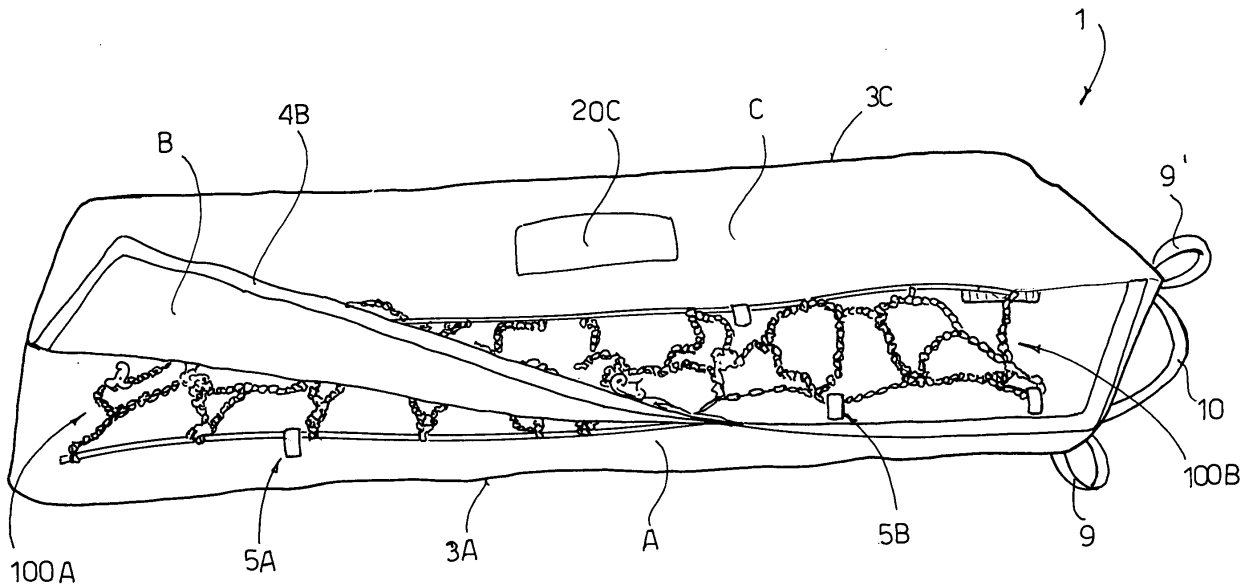
(74) Representative: **Coggi, Giorgio et al**
Racheli & C. S.p.A.
Viale San Michele del Carso, 4
20144 Milano (IT)

(54) **Packaging for snow chains**

(57) Packaging for snow chains is described comprising a support (1) able to support at least one snow

chain (100A, 100B) in an open, spread-out configuration. The support is made of foldable material to enable it to be rolled into a space-saving configuration.

FIG. 2



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Description

DESCRIPTION

[0001] The present invention refers to packaging for snow chains.

[0002] Snow chains are designed to be mounted on the tyres of vehicles to bite into the snow and/or the ice deposited on the road surface, increasing traction on the tyre tread and allowing the vehicle tyres to achieve a good grip.

[0003] As is known, a snow chain generally consists of two side members (chains, flexible cables, steel wires, ropes or the like) which during use are closed in a ring on the inner side and the outer side of the wheel, respectively, and which will be referred to herein as the inner ring and outer ring. These side members are connected by a series of chain portions variously disposed to achieve tread traction, the whole being completed by a tensioning device for said members, known as a tensioner.

[0004] In order to mount the snow chains, the user must spread the snow chain out near the vehicle wheel, position the wheel on the chain, close the inner and outer rings and tighten the chains.

[0005] Snow chains are generally packaged in hard plastic packaging with a flattened cylindrical shape. This leads to drawbacks because often the snow chains become tangled inside the packaging. Consequently the user must waste a lot of time untangling the chains and then placing them in a spread-out configuration near the vehicle tyre.

[0006] In any case this operation is awkward because the road surface is often muddy and consequently the user finds it difficult to avoid coming into contact with the ground and in any case dirtying his hands to spread the snow chains adequately.

[0007] The aim of the present invention is to overcome the drawbacks of the prior art by providing a packaging for snow chains that is versatile, practical and able to allow easy, straightforward mounting of the snow chains by the user.

[0008] Another object of the present invention is to provide such a packaging for snow chains that has a pleasing aesthetic appearance and at the same time is compact, occupies little space and is easy for the user to transport.

[0009] These objects are achieved in accordance with the invention with the characteristics listed in appended independent claim 1.

[0010] Advantageous embodiments of the invention are apparent from the dependent claims.

[0011] The packaging for snow chains according to invention comprises a support able to support at least one snow chain in an open, spread-out configuration. In this manner, the snow chain is ready to be mounted on the vehicle wheel and thus the user is not obliged to waste time untangling the chain and placing it in its spread-out configuration. The support furthermore acts as a base

on which to rest the chain and thus avoids all the problems related to the difficulty in positioning the chains on the road surface dirty with mud, snow and the like.

[0012] This support also provides a base on which the user can rest his knees and hands, thus avoiding dirtying himself on contact with the ground.

[0013] The support is made of foldable material to enable it to be rolled into a space-saving configuration. In this manner the packaging in its space-saving, rolled-up configuration can easily be handled, transported and placed inside the vehicle.

[0014] The support advantageously takes the form of a closable case, so as to create inside it at least one compartment to accommodate at least one snow chain in an open, spread-out configuration.

[0015] Further characteristics of the invention will be made clearer by the detailed description that follows, referring to a purely exemplifying and therefore non-limiting embodiment thereof, illustrated in the appended drawings, in which:

Figure 1 is a plan view illustrating a packaging for snow chains according to the invention in an open, spread-out configuration, with the intermediate layer partially folded;

Figure 2 is a view like Fig. 1, in which the snow chains have been inserted in the packaging;

Figure 3 is a view like Fig. 2, in which the intermediate layer is completely spread out;

Figure 4 is a view like Figure 2, in which the intermediate layer is superimposed on the top layer;

Figure 5 is a plan view illustrating the packaging according to the invention spread out and closed;

Figure 6 is a perspective view of the packaging according to the invention during rolling thereof; and

Figure 7 is a front view of the packaging for snow chains according to the invention, in its closed, space-saving condition.

[0016] The packaging for snow chains according to the invention, indicated as a whole with reference numeral 1, is described with the aid of the figures.

[0017] As shown in Figure 2, the packaging 1 comprises three layers or strips or panels A, B, C: that is to say a bottom layer A, an intermediate layer B and a top layer C. The layers A, B, C are substantially rectangular and have a surface able to receive a snow chain in an open, spread-out configuration, ready to be fitted to the tyre of a wheel.

[0018] The layers A, B, C are made of any type of soft, flexible material, such as, for example, fabric, non-woven fabric, synthetic material such as plastic film and the like. The layers A, B and C which form the packaging 1 are preferably made of washable material, since the packaging 1 is destined to become dirty since it must be positioned on the road surface, acting as a base on which to rest the chains.

[0019] The three layers A, B, C are connected to each

other along a fold line 2 which follows the edge of their major sides, by means of any known type of connection, such as stitching, heat-sealing, gluing and the like.

[0020] The bottom layer A and the top layer C have along their perimeter, except for the fold line 2, reciprocal engagement means 3A, 3C which can engage with each other to form the book-type closure of the packaging 1, with the three layers A, B, C one on top of the other as illustrated in Figure 5. In this manner the packaging 1 takes on the form of a case with two compartments separated by the intermediate layer B. The reciprocal engagement means 3A, 3C can be disposed continuously or discontinuously on the peripheral edges of the bottom layer A and of the top layer C and can be of different types, such as for example, zips, Velcro, buttons, hooks and the like.

[0021] The layer B, on the other hand, has along its perimeter, except for the fold line 2, a strip or insert of reflecting material 4B, in accordance with road safety regulations, to enable it to be seen from a distance by vehicle drivers, even in conditions of poor visibility. As shown in Figure 5, such a strip of reflecting material 4 is also disposed along the fold edge 2 on the outer surface of the top layer C and of the bottom layer A, to enable it to be seen when the packaging is closed.

[0022] Retaining means 5A and 5B are provided on the upper surface of the bottom layer A and of the intermediate layer B, variously disposed to retain respective snow chains 100A and 100B disposed in an open configuration on the bottom layer A and on the intermediate layer B, as shown in Figure 2.

[0023] The retaining means 5A and 5B can be, for example, Velcro strips or hooks 40 which have one end connected to the respective layer by means of rivets 41 or other similar systems such as stitching, heat-sealing or gluing.

[0024] As better shown in Figure 3, the retaining means 5B are disposed on two rows near to the edges of the major sides of the layer B, so as to be able to block the inner ring 101B and the outer ring 102B of the snow chains, which are disposed respectively near the fold line 2 and near the reflecting strip 4B.

[0025] A retaining means 5B' is provided on the intermediate layer B, in a central position, to block the terminal portion 103B for tensioning the outer ring 102B. Four pockets 6B are provided near the four corners of the intermediate layer B to receive respectively the two end hooks of the inner ring 101B and the two end hooks of the outer ring 102B.

[0026] As shown in Figure 4, the retaining means 5A on the bottom layer A have an arrangement similar to the retaining means 5B on the intermediate layer B. The only difference is represented by the fact that the second snow chain 100A is disposed on the bottom layer A, with the inner ring 101 A facing towards the engagement means 3A and the outer ring 102A facing towards the fold line 2.

[0027] In this case also, a retaining means 5A' is provided in a central position on the bottom layer A to block

the terminal portion 103A for tensioning the outer ring 102A and four pockets 6A are provided near the four corners of the bottom layer A to receive respectively the two end hooks of the inner ring 101A and the two end hooks of the outer ring 102A.

[0028] A window 20C in which the mounting instructions for the chains are printed is provided on the inner surface of the top layer C. In this manner, when the packaging is open and ready for mounting of the chains, the instructions are always readily visible to the user.

[0029] As shown in Figure 5, the packaging 1 has a pocket 7 on the outer surface of the top layer C or of the bottom layer A. The instructions for use of the snow chains and other tools for mounting thereof, such as gloves for the user and a spare parts kit can be placed in the pocket 7.

[0030] At one end of the packaging 1, near the two corners, are provided two strips 9, 9' which can be closed in a ring configuration to receive inside them the packaging 1, which is rolled as shown in Figure 6 and then blocked in its space-saving configuration as shown in Figure 7. The closing strips 9, 9' are preferably joined to the end of the bottom layer A and can be elastic bands, Velcro or laces provided with a sliding buckle.

[0031] A handle 10 is fixed between the two closing strips 9, 9', at the end of the packaging 1, for transporting the packaging 1. The handle 10 can be formed, for example, by a strip of material, which is preferably fixed at its ends to the bottom layer A of the packaging 1. The handle 10 is provided with a hook 11 to attach a label 12 bearing the measurements of the snow chain.

[0032] Even if in the detailed description and in the drawings a packaging 1 in the form of a case with two compartments separated by the intermediate layer B has been described, it must be understood that the invention also extends to a packaging made from a folding support on which is disposed at least one snow chain in an open, spread configuration.

[0033] Numerous variations and modifications of detail within the reach of a person skilled in the art can be made to the present invention without departing from the scope of the invention, as set forth in the appended claims.

45 Claims

1. Packaging for snow chains, **characterized in that** it comprises a support (1) able to support at least one snow chain (100A, 100B) in an open, spread out configuration, said support (1) being made of foldable material to enable it to be rolled into a space-saving configuration.
2. Packaging according to claim 1, **characterized in that** said support (1) is in the form of a closable case, so as to give rise to at least one compartment to receive said at least one snow chain (100A, 100B) in an open, spread-out configuration.

3. Packaging according to claim 2, **characterized in that** said case (1) comprises:
- a bottom layer (A) destined to receive a first snow chain (100A) in an open, spread-out configuration,
 - a top layer (C) that can be coupled to said bottom layer (A) so as to close said case (1) and
 - an intermediate layer (B) disposed between said bottom layer (A) and said top layer (C) so as to define a second compartment within the case to receive a second snow chain (100B) in an open, spread-out configuration.
4. Packaging according to claim 3, **characterized in that** on said bottom and intermediate layers (A, B) there are respectively retaining means (5A, 5A', 6A, 5B, 5B', 6B) able to retain said snow chains (100B, 100B) in an open, spread-out configuration.
5. Packaging according to claim 4, **characterized in that** said retaining means comprise:
- Velcro strips or hooks (5A, 5B) disposed in two rows on the respective layers (A, B) to retain respectively the inner ring and the outer ring (101A, 102A, 101B, 102B) of said snow chains, and/or
 - Velcro strips or hooks (5A', 5B') disposed in a central position on the respective layers (A, B) to retain the tensioning end portion (103A, 103B) of the outer ring of the snow chains, and/or
 - pockets (6A, 6B) disposed near the corners of said layers (A, B) to receive the end hooks of the inner and outer rings of the snow chains.
6. Packaging according to any one of claims 3 to 5, **characterized in that** on the outer surface of the case (1) and/or in at least one peripheral portion of the intermediate layer (B) are provided respectively a strip or insert of reflecting material (4, 4B) to be enable it to be seen from a distance by the driver of a vehicle.
7. Packaging according to any one of the preceding claims, **characterized in that** it comprises two strips that can be closed in a ring (9, 9') disposed at one end of the case (1) to block the packaging in its rolled, space-saving configuration.
8. Packaging according to any one of the preceding claims, **characterized in that** it comprises a handle (10) disposed at the end of the case (1) to allow the packaging to be gripped by the user when is in its rolled, space-saving configuration.
9. Packaging according to any one of the preceding claims, **characterized in that** it comprises a pocket
- (7) able to accommodate the instructions (8) for use of the snow chains and other tools for mounting, such as gloves for the user and a spare parts kit.
10. Packaging according to any one of claims 3 to 9, **characterized in that** on the inner surface of said top layer (C) of the case (1) is provided a window (20C) on which are printed the mounting instructions for the snow chains.

FIG. 1

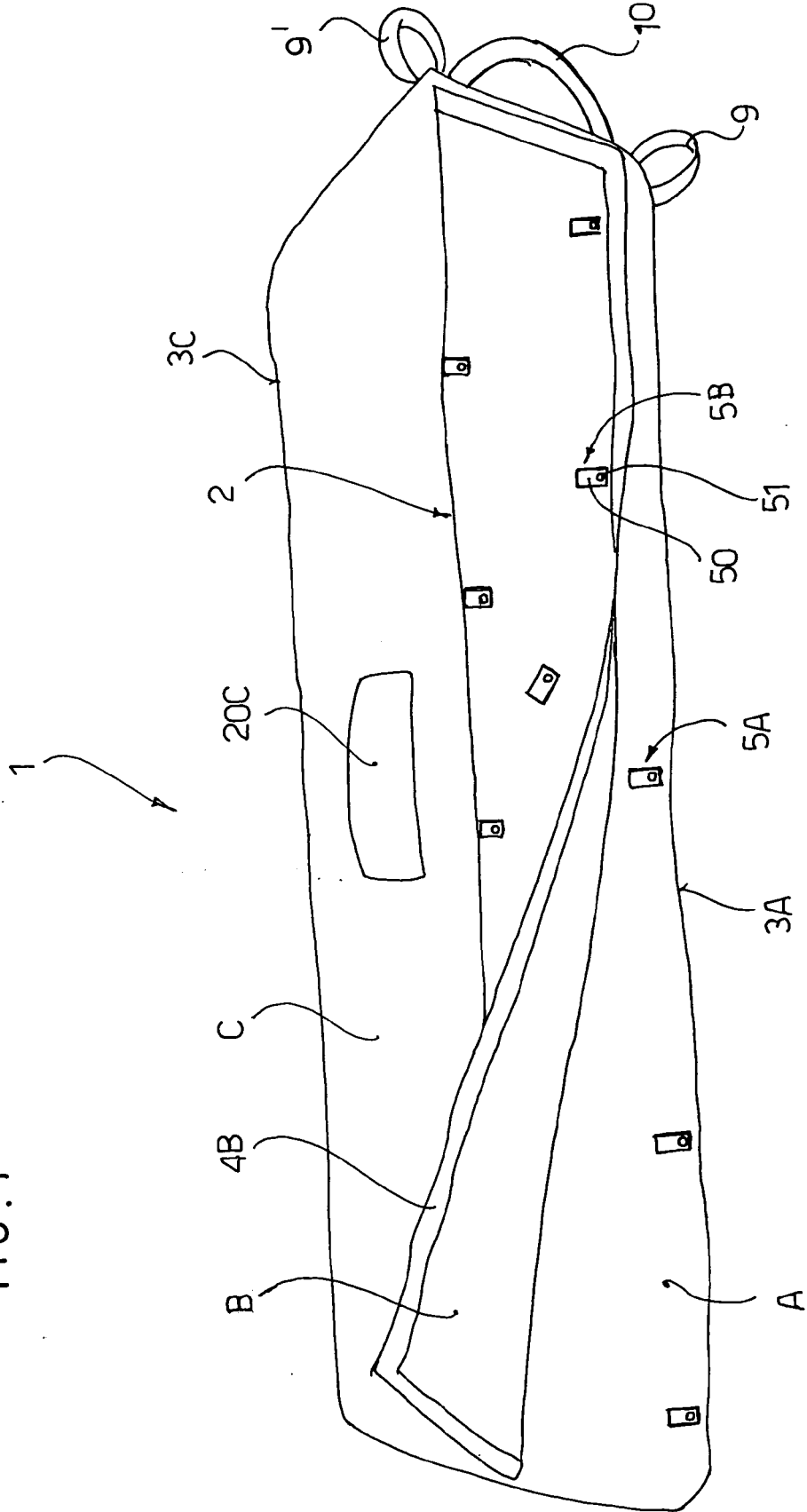


FIG. 2

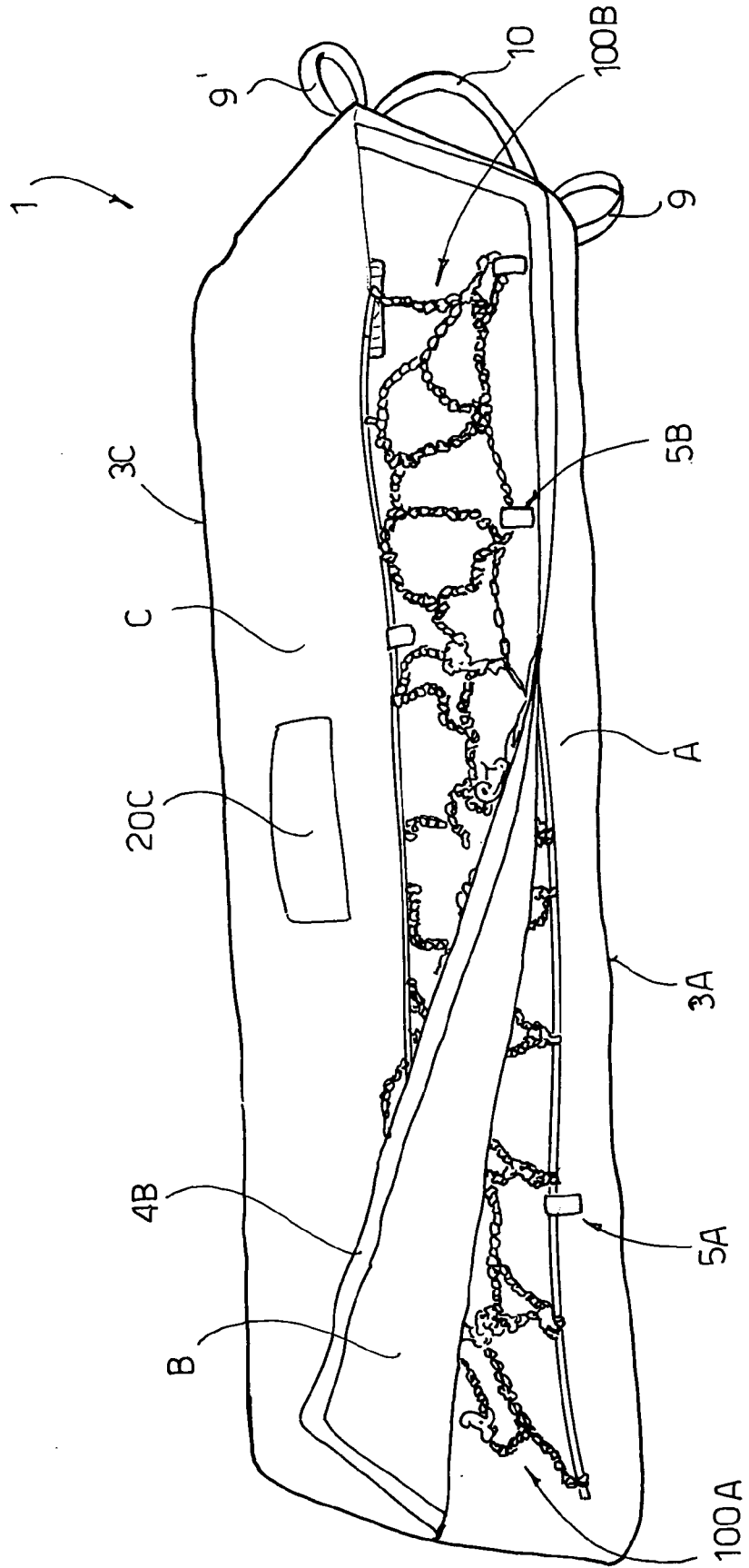


FIG. 3

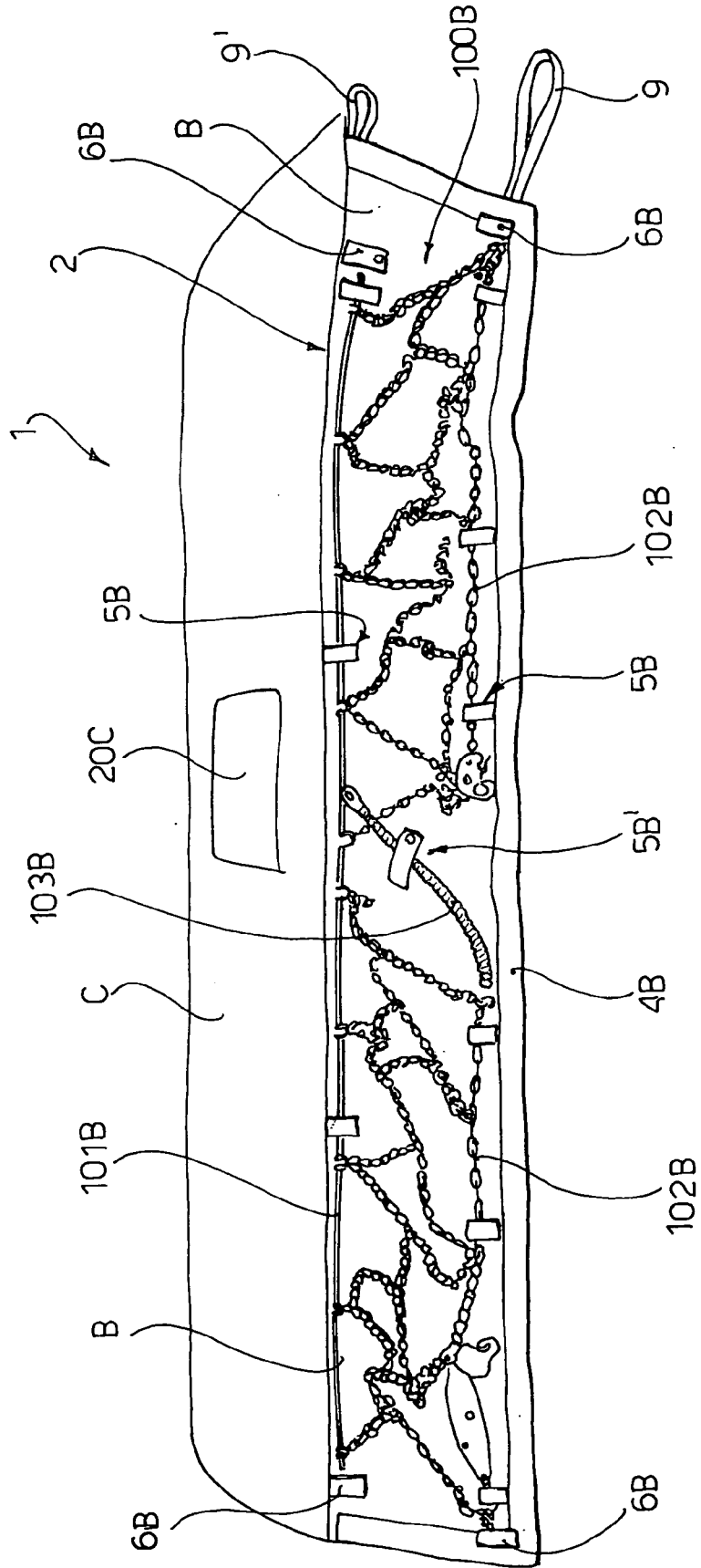
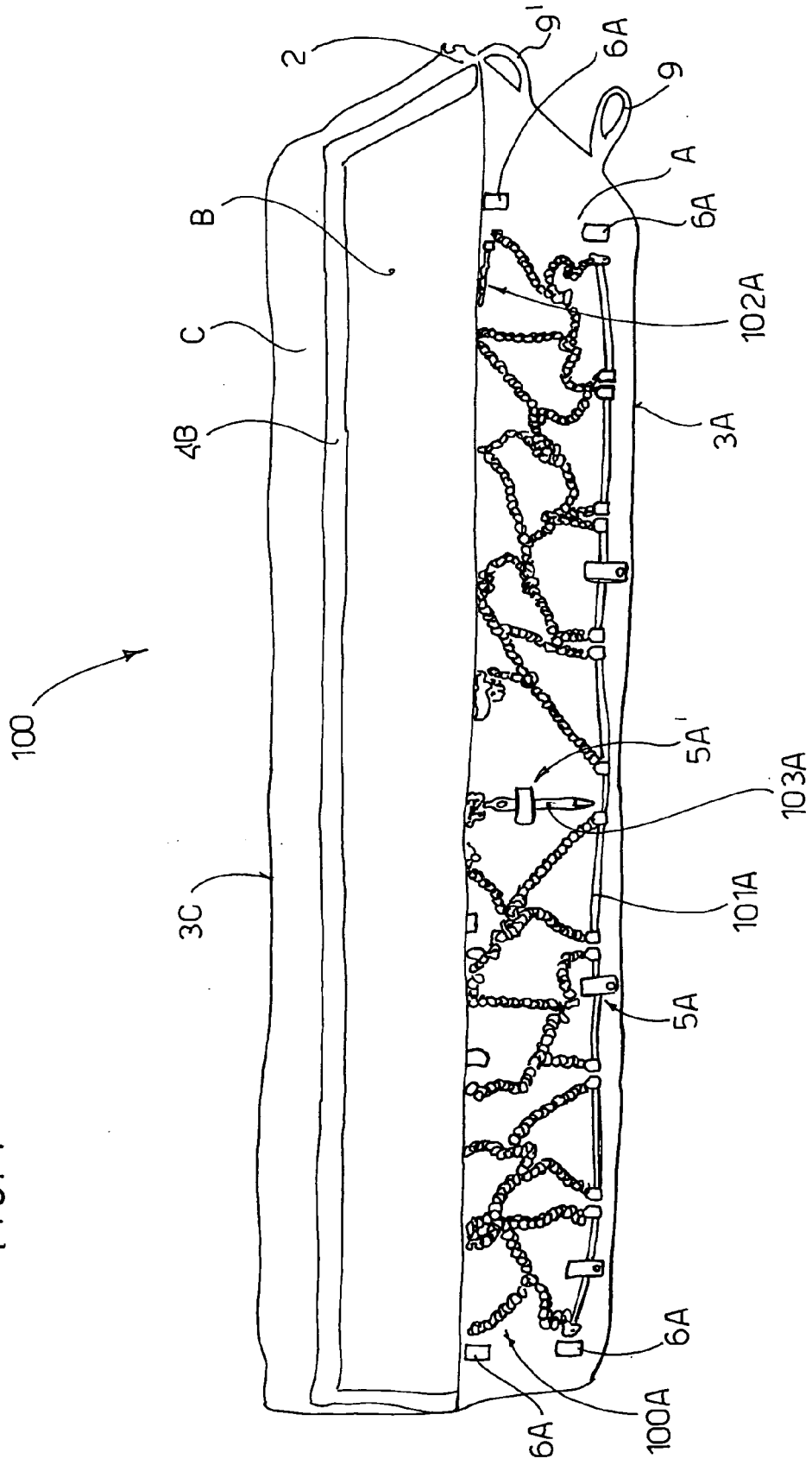


FIG. 4



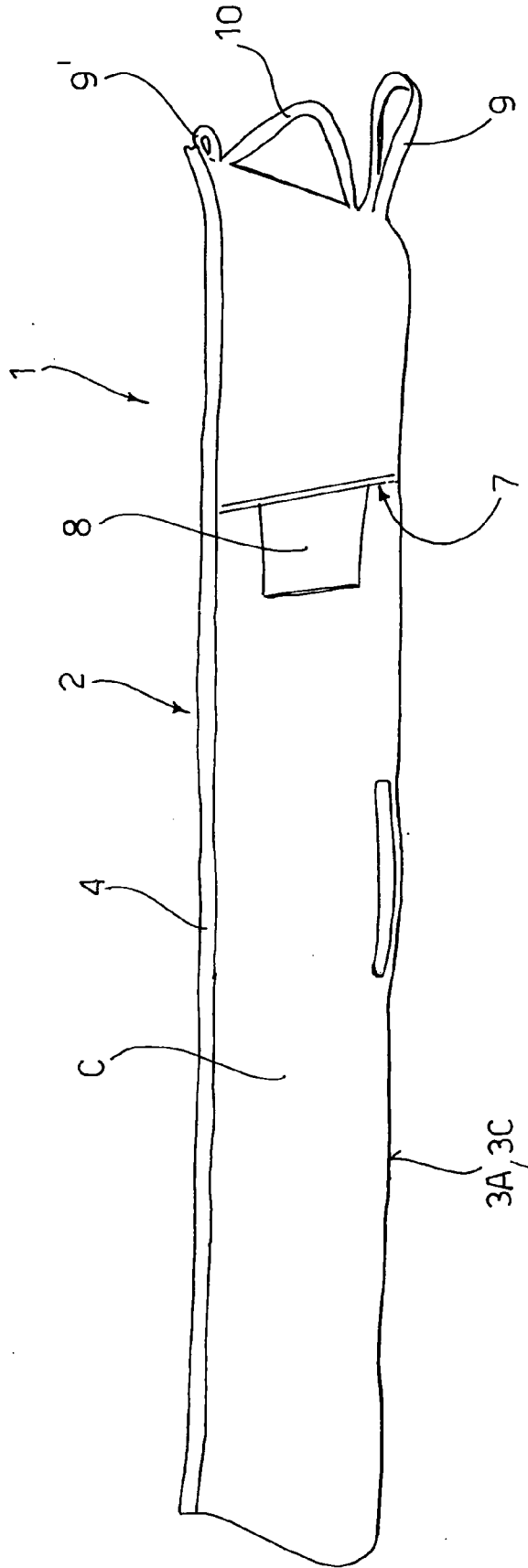
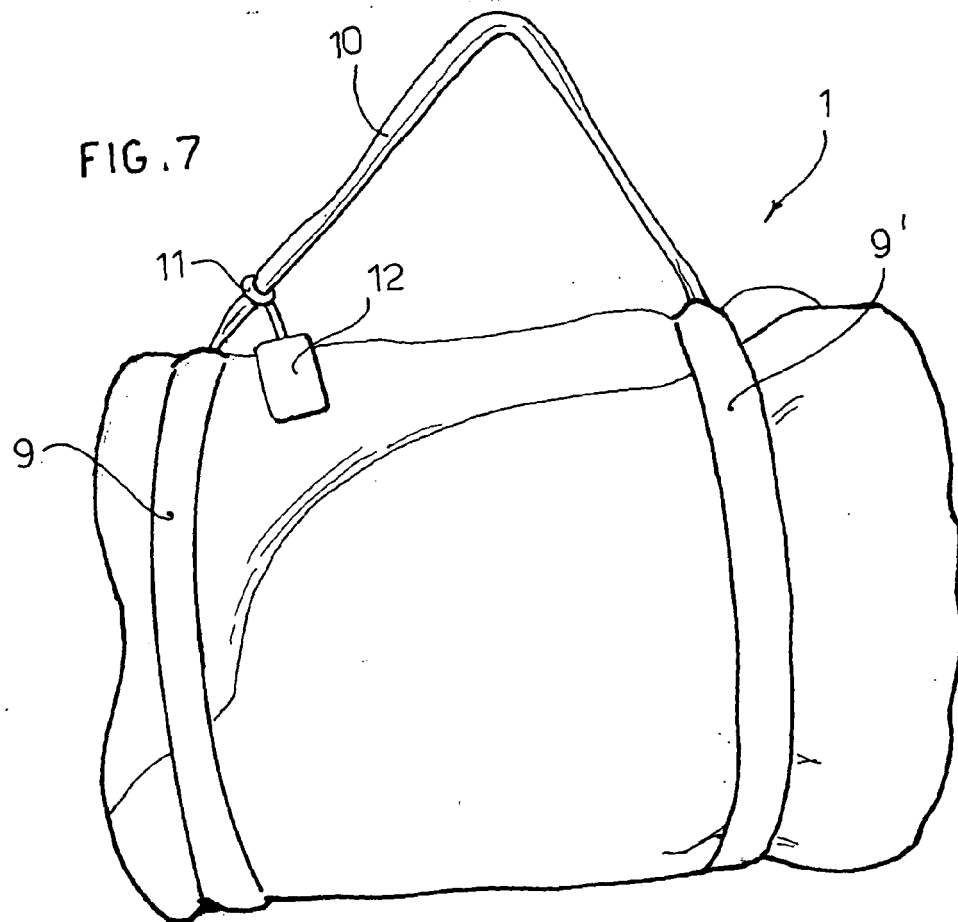
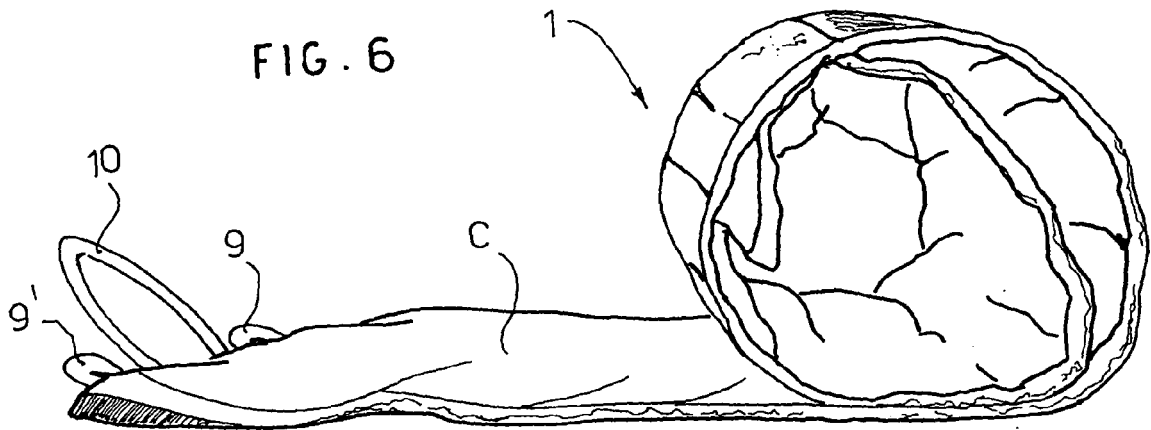


FIG. 5





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CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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