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(54) **Sports shoe, particularly for skiing**

(57) A sports shoe (26), particularly suitable for skiing, having an outer supporting structure and an innerboot (21) which has, in a front region, two lateral flaps (23,24). The innerboot (21) has at least one band (29) of nonrigid or elastic material which mutually connects the flaps at least at the foot instep region (27) and at part of the region in front of the tibia (28).

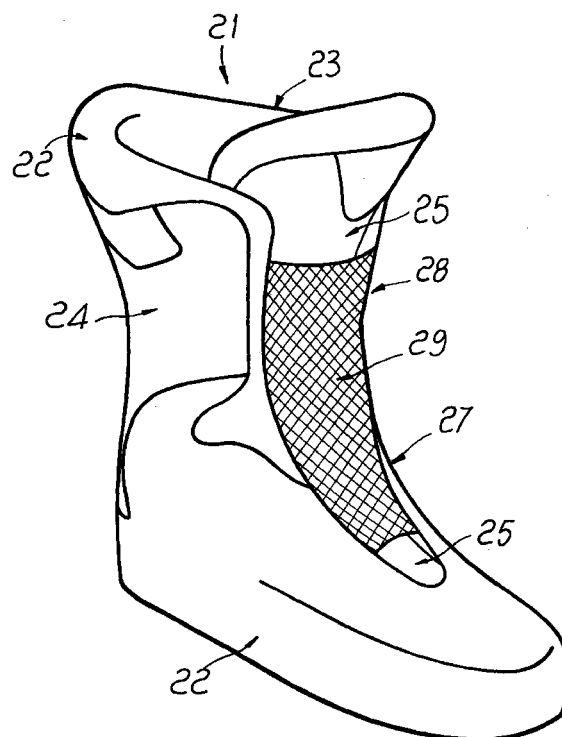


Fig. 3

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Description

[0001] The present invention relates to a sports shoe, particularly for skiing.

[0002] Currently, the commercially most widespread ski boots are composed of an outer supporting structure, constituted by a shell and a quarter which are mutually rotatably connected in the malleolar region, an innerboot and a system of fastening levers.

[0003] The shell and the quarter are produced with an overlapping flap method, since said components have, in a front region, a longitudinal opening forming a first flap and a second flap.

[0004] Said flaps of the shell and of the quarter support the fastening lever system and mutually overlap when the boot closes.

[0005] A conventional innerboot, shown in Figure 1, is substantially constituted by a main body 2, which wraps around the foot and part of the calf and also has a longitudinal front opening, defining a first flap and a second flap, respectively designated by the reference numerals 3 and 4, and by a tongue 5, arranged in the front region between the two flaps 3 and 4 of the main body.

[0006] In the front part of the innerboot 1, in front of the tongue 5, a band of nonrigid or elastic material, designated by the reference numeral 6, is connected to the first flap 3 and to the second flap 4, at the level of the foot instep, and is designed to prevent the escape of the tongue 5 from the main body 2, while the foot is being inserted in the boot.

[0007] During the insertion of the foot in the boot, the user has to apply considerable force to the flaps of the innerboot, so as to produce, as shown in Figure 2, an opening which is sufficient to insert the foot in the boot.

[0008] The main drawback of this conventional boot occurs in this very step, in which a third flap 7 and a fourth flap 8, which are part of the quarter, become interposed between the tongue 5 and said first flap 3 and second flap 4 of the innerboot 1.

[0009] This situation is very uncomfortable for the user, because, first of all, it interferes with the insertion of the foot in the shoe and, secondly, it requires an additional operation for adjusting the boot before closing it and then using it.

[0010] The aim of the present invention is to solve the above-cited problems, eliminating the drawbacks of the prior art, by providing a device which allows to obtain an easier insertion of the foot in the boot, avoiding the interposition of said third and fourth flaps between the parts that constitute the innerboot.

[0011] Within the scope of this aim, an important object is to provide sports shoe which allows to perform said insertion simply and rapidly, reducing the number of actions to be performed in the present operation.

[0012] Another object is to provide a sports shoe which is structurally simple and has low manufacturing

costs.

[0013] These and other objects, which will become better apparent hereinafter are achieved by a sports shoe, particularly for skiing, having an outer supporting structure and an innerboot which has, in a front region, two lateral flaps, characterized in that it comprises at least one band of nonrigid or elastic material which mutually connects said flaps at least at the foot instep region and at part of the region in front of the tibia.

[0014] Further characteristics and advantages of the invention will become better apparent from the following detailed description of a particular embodiment, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

Figure 1 is a perspective view of the innerboot of a conventional ski boot;

Figure 2 is a top view of a conventional ski boot;

Figure 3 is a perspective view of the innerboot according to the invention;

Figure 4 is a top view of the innerboot of the invention;

Figure 5 is a perspective view of a further embodiment of the invention.

[0015] With reference to Figures 3 and 4, the reference numeral 21 designates an innerboot, constituted by a main body 22, which has a front opening defining a first flap 23 and a second flap 24, and can be closed by means of a tongue, designated by the reference numeral 25, which is stitched at one end inside said innerboot 21, proximate to its tip.

[0016] Said innerboot can be, for example, inserted in a ski boot designated by the reference numeral 26.

[0017] Above said tongue 25, at the region 27 of the foot instep and at the region 28 in front of the tibia, there is a band, designated by the reference numeral 29, which is constituted by nonrigid or elastic material and is laterally connected to the first flap 23 and to the second flap 24.

[0018] Said band 29 is formed monolithically and covers at least one portion of each one of said regions 27 and 28 or their entire extent.

[0019] Figure 4 shows that, since said band 29 affects the foot instep region 27 and the region 28 in front of the tibia, a third flap and a fourth flap of the quarter of said ski boot 26, designated by the reference numerals 30 and 31 respectively, rest on said band during the opening of the boot.

[0020] Operation is thus as follows: with reference to Figure 4, it can be seen that since said band of non-rigid or elastic material 29 affects the foot instep region 27 and the region 28 in front of the tibia, when the foot is inserted in the boot the third and fourth flaps of the quarter are also moved mutually apart by the opening of the first and second flaps and of the tongue 25. This allows to increase the free region for the access of the foot, without having to act manually in order to open the

third and fourth flaps.

[0021] It has thus been found that the invention has achieved the intended aim and objects, by providing a shoe for skiing in which the insertion of the foot therein is not hindered by the possible interposition of the third and fourth flaps of the quarter at the opening provided at the front of the innerboot.

[0022] The sports shoe according to the invention is susceptible of numerous modifications and variations, within the scope of the appended claims.

[0023] Thus, for example, it is possible to achieve the same aim by using multiple bands, as in the case of the embodiment shown in Figure 5, comprising two bands: a first band, designated by the reference numeral 132 and arranged in the foot instep region 127, and a second band, designated by the reference numeral 133 and arranged in the region 128 in front of the tibia, both bands being arranged above a tongue 125.

[0024] Said first and second bands are constituted by the same nonrigid or elastic material and both are connected laterally to a first flap 123 and to a second flap 124 of the main body 122 which belongs to an innerboot designated by the reference numeral 121.

[0025] The operation and the advantages of this variation are the same achieved by the previously described embodiment.

[0026] The materials used, as well as the dimensions that constitute the individual components of the invention, may of course be the most pertinent according to specific requirements.

[0027] The disclosures in Italian Patent Application No. TV99A000099 from which this application claims priority are incorporated herein by reference.

[0028] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A sports shoe, particularly for skiing, having an outer supporting structure and an innerboot which has, in a front region, two lateral flaps, characterized in that it comprises at least one band of non-rigid or elastic material which mutually connects said flaps at least at the foot instep region and at part of the region in front of the tibia.
2. The shoe according to claim 1, characterized in that said at least one band, laterally connected to said first and second flaps of said innerboot, is formed in one or more parts which are arranged so as to partly or fully cover said foot instep region and said region in front of the tibia.

3. The shoe according to claims 1 and 2, characterized in that said at least one band, by affecting the foot instep region and the region in front of the tibia, also keeps a third flap and a fourth flap of the quarter mutually spaced when the foot is inserted in the boot.

4. The sports shoe according to claim 1, characterized in that it comprises a first band and a second band made of nonrigid or elastic material which mutually connect said first and second flaps respectively at the foot instep region and at a front region of the tibia.

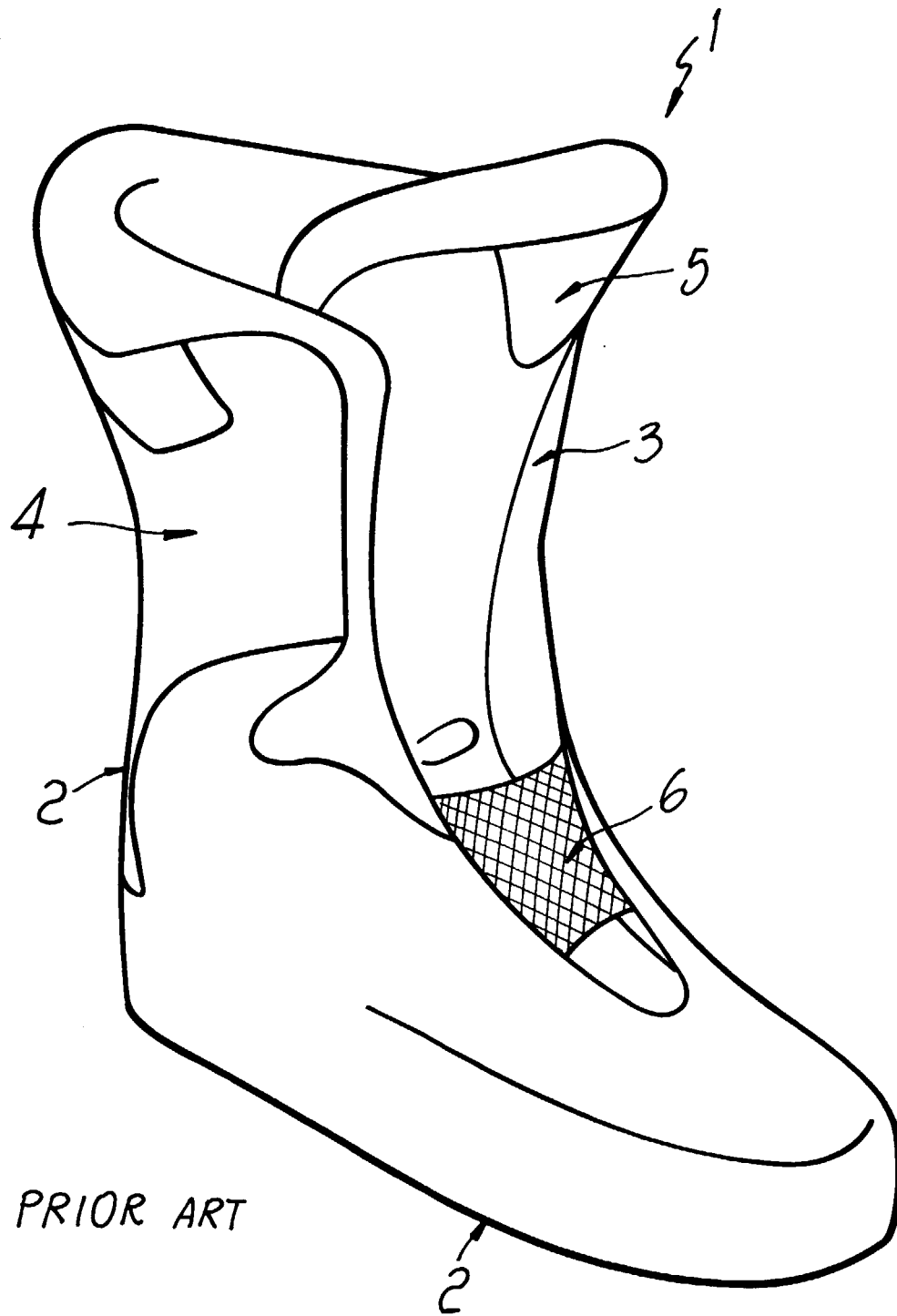
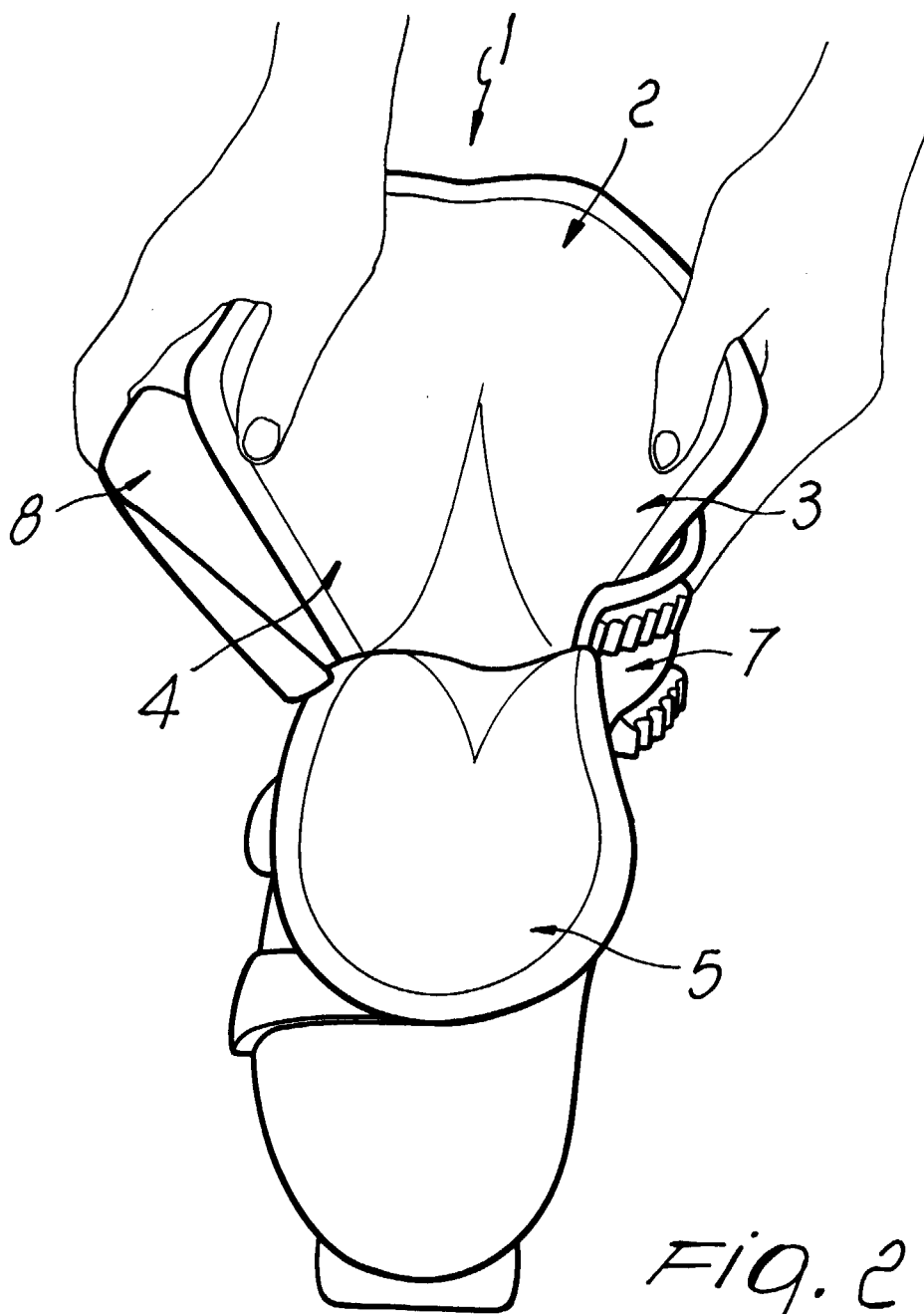


Fig. 1



PRIOR ART

Fig. 2

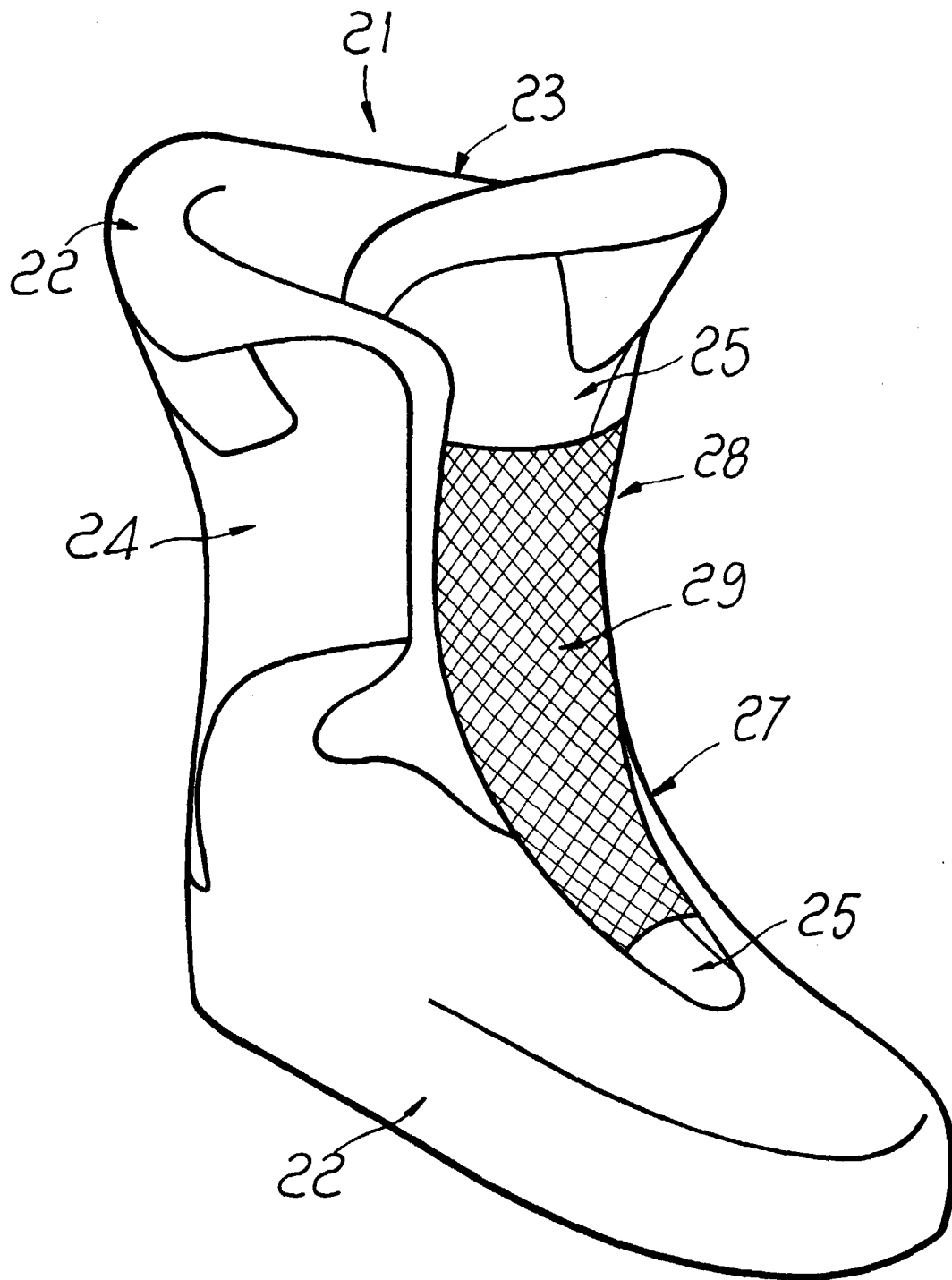


Fig. 3

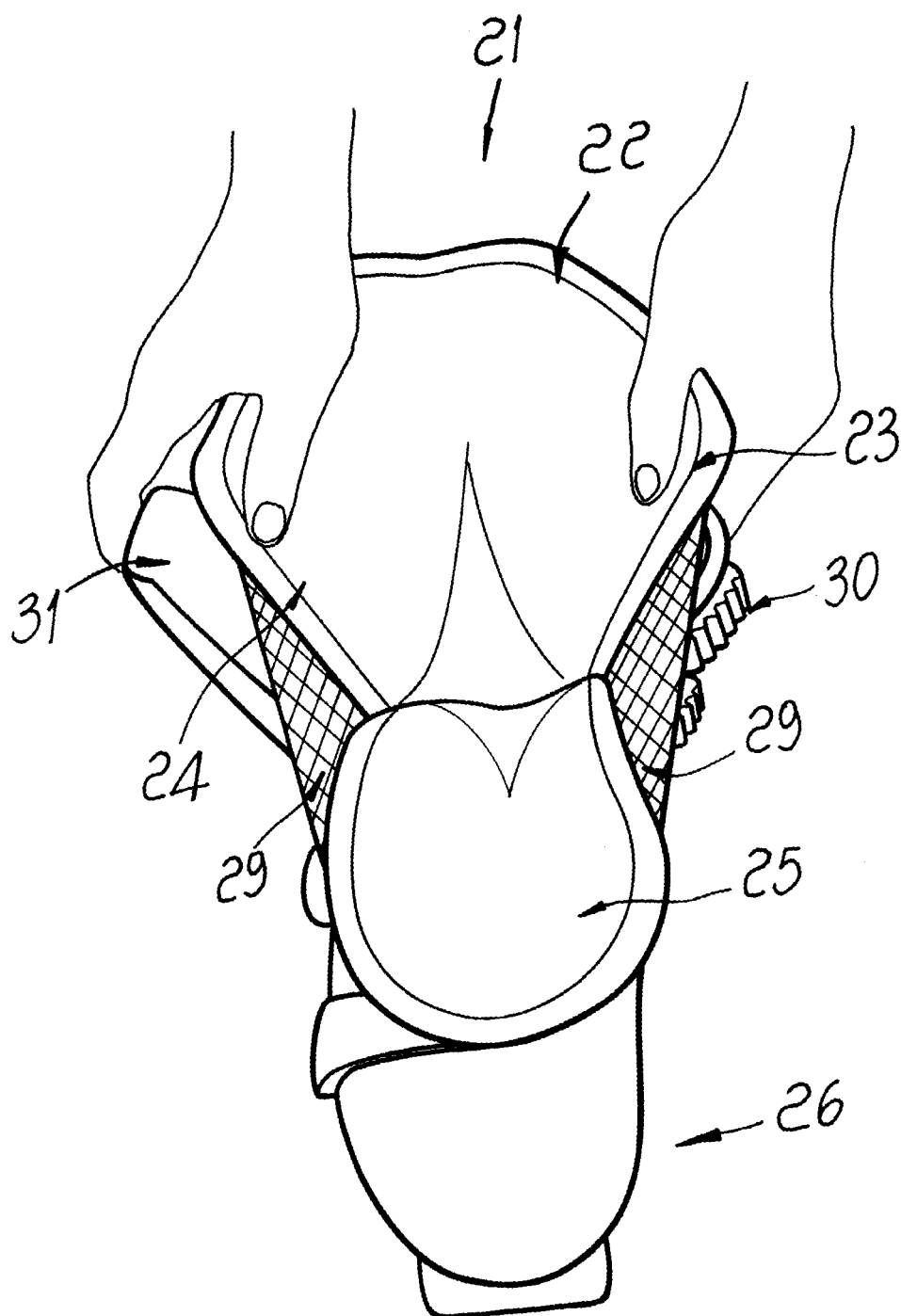
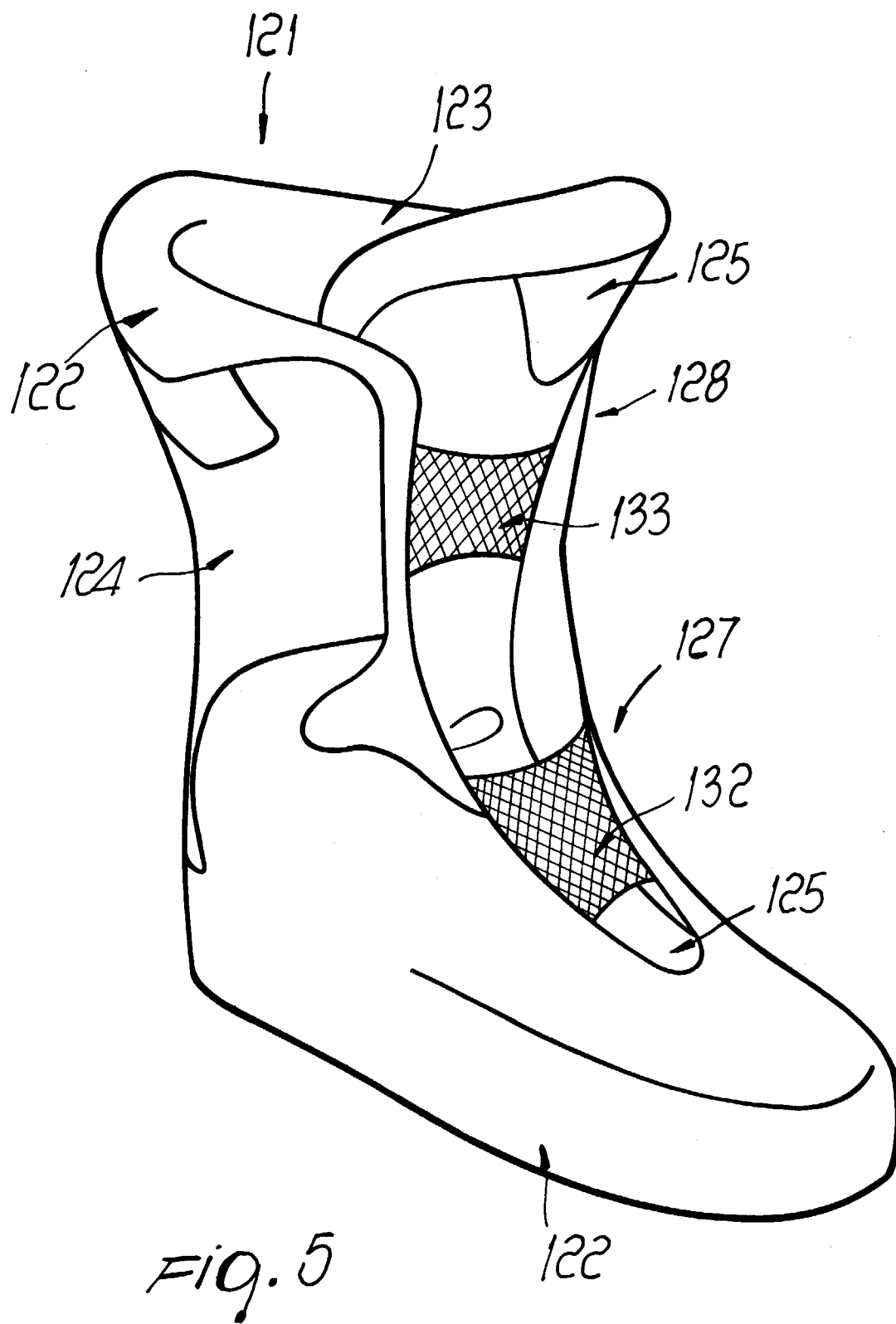


FIG. 4





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EUROPEAN SEARCH REPORT

Application Number
EP 00 11 8182

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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7) A43B
Place of search THE HAGUE		Date of completion of the search 6 December 2000	Examiner Claude1, B
CATEGORY OF CITED DOCUMENTS 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 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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 00 11 8182

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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