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(54) **Boots**

(57) A boot (2) excellently comfortable to wear is provided. The boot (2) has a sole (4) and an upper (6). The upper (6) has an inner layer (11) and an outer layer (12). The inner layer (11) contains a sponge layer (20). The sponge layer (20) is a polymer molded product containing closed cells. The outer layer (12) is a polymer molded product that does not contain a cell. The inner layer (11) is partially covered with the outer layer (12). The upper (6) has a first exposed portion (14) and a second exposed portion (16). The first exposed portion (14) is a region which corresponds to a front side of an ankle of a wearer and is a region where the inner layer (11) is exposed. The second exposed portion (16) is a region which corresponds to a calf of the wearer and is a region where the inner layer (11) is exposed.

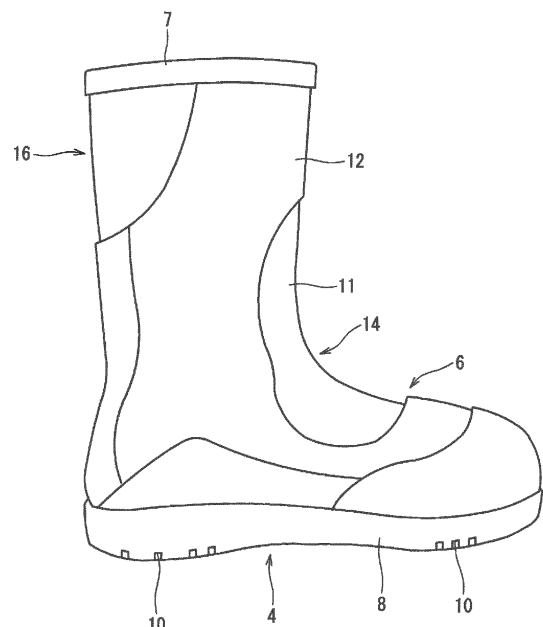


FIG. 1

Description

[0001] The present invention relates to boots that are worn by an angler and the like.

[0002] Boots are used in fishing. A boot includes a main body and a lining. For the main body, a rubber such as a natural rubber or a synthetic resin such as polyvinyl chloride is used. The lining is joined to an inner surface of the main body. The lining facilitates to slide of a foot at the time of putting on and taking off the boot. It is easy to put on and take off the boots including linings.

[0003] Fishing is often done on a slope such as a rocky shore or a wharf. An angler keeps standing on the same foothold for a long time. At this time, the boots locally press the feet of the angler. The pressure may cause the angler to feel pain in the feet. The angler sometimes walks over a long distance for the purpose of moving from one place to another. When the angler walks, the feet may rub against the boots. The rubbing may cause the angler to feel pain in the feet.

[0004] Some boots have sponge used as the linings. Sponge has a high cushioning property. The pain in the feet can be relieved by the sponge. The lining has excellent heat insulation properties. The boots having the linings are excellent in heat retainability. These boots are preferably used in fishing in the winter season.

[0005] An angler sometimes crouches halfway through during fishing. In doing so, the angle at the front side of an ankle (namely, the angle between the foot and the shin) becomes small. In this position, the region of the boot, which corresponds to the front side of the ankle, is bent. The bending causes a restoring force to occur to the boot. The restoring force presses the ankle of the angler. The angler who wears the boots may feel uncomfortable during crouching.

[0006] When the angler takes off the boots, the heels rub against the region of the boots, which correspond to the calves. The rubbing hinders the action of taking off the boot of the angler. The angler cannot easily take off the boots.

[0007] An object of the present invention is to provide boots which are excellently comfortable to wear. Another object of the present invention is to provide boots which can easily be taken off.

[0008] A boot according to the present invention includes a sole, and an upper. The upper has an inner layer, and an outer layer that is stacked on a part of a surface of the inner layer. The outer layer is not present in a region corresponding to a front side of an ankle of a wearer, or a calf of the wearer.

[0009] Preferably, the inner layer preferably has a polymer molded product containing cells. The outer layer preferably has a polymer molded product that does not contain a cell.

[0010] The inner layer may be formed by a plurality of members being joined. A joint portion of one member and another member adjacent to the one member is preferably covered with the outer layer.

[0011] The boot in which the outer layer is not present in the region corresponding to the front side of the ankle of a wearer is excellently comfortable to wear. The boot in which the outer layer is not present in the region corresponding to the calf of the wearer can easily be taken off.

FIG. 1 is a front view showing a boot according to one embodiment of the present invention;

FIG. 2 is a partial sectional cutaway view showing the boot of FIG. 1;

FIG. 3 is a perspective view showing an inner layer of the boot of FIG. 1; and

FIG. 4 is a perspective view showing the inner layer of the boot of FIG. 1.

[0012] Hereinafter, the present invention will be described in detail based on a preferable embodiment with reference made to the drawings.

[0013] A boot 2 shown in FIGS. 1 and 2 is worn by an angler or the like. The boot 2 is for a left foot. A boot for a right foot has a shape mirror-symmetrical to the shape of the boot 2. The boot 2 has a sole 4, an upper 6 and an edging 7.

[0014] The sole 4 is formed of an outsole 8 and an insole (not shown). The outsole 8 contacts the ground. On a bottom surface of the outsole 8, a plurality of grooves 10 are formed. The grooves 10 restrain slip of the outsole 8 on a wet ground. The outsole 8 is formed from a cross-linked rubber composition. The outsole 8 may be formed from a resin composition.

[0015] The upper 6 has an inner layer 11 and an outer layer 12. The inner layer 11 is shown in FIGS. 3 and 4. The inner layer 11 corresponds to a foot and a shank of a wearer. The inner layer 11 is bag-shaped. The inner layer 11 has the shape similar to a shape of a sock.

[0016] The edging 7 covers an upper end of the upper 6. As shown in FIG. 2, the profile of the edging 7 is "U"-shaped. The edging 7 protects the inner layer 11 and the outer layer 12. The edging 7 is sewn onto the upper 6 by a thread. The edging 7 may be joined to the upper 6 by an adhesive. As a material of the edging 7, synthetic leather or artificial leather is provided as an example.

[0017] As is obvious from FIGS. 1 and 2, the inner layer 11 is partially covered with the outer layer 12. In other words, the outer layer 12 is stacked on a part of the inner layer 11. The outer layer 12 is joined to the inner layer 11 by an adhesive. Joining may be achieved by vulcanized adhesion. Joining may be achieved by fusion.

[0018] A part of the inner layer 11 is not covered with the outer layer 12. In other words, a part of the inner layer 11 is exposed. In the present embodiment, a region corresponding to a front side of an ankle of the wearer, and a region corresponding to the calf of the wearer, the inner layer 11 is exposed. In the present document, the region which corresponds to the front side of the ankle of the wearer and which is a region where the inner layer 11 is exposed is called first exposed portion 14. The region

which corresponds to the calf of the wearer and which is a region where the inner layer 11 is exposed is called second exposed portion 16. The first exposed portion 14 is surrounded by the outer layer 12. Whereas at an upper side of the second exposed portion, the outer layer 12 is not present. Accordingly, an upper end E (see FIG. 2) of the second exposed portion 16 is also an upper end of the inner layer 11.

[0019] As described above, in the first exposed portion 14, the outer layer 12 is not present. Accordingly, the first exposed portion 14 is flexible. When the wearer crouches, the first exposed portion 14 bends. The bending does not require a large force. When the wearer crouches, the first exposed portion 14 does not press the shank of the wearer. The boot 2 is excellently comfortable to wear.

[0020] As described above, the outer layer 12 is not present in the second exposed portion 16. Accordingly, the second exposed portion 16 is flexible. When the wearer takes off the boot 2, the second exposed portion 16 easily deforms. The deformation does not require a large force. The wearer can easily take off the boot 2.

[0021] As shown in FIG. 2, the inner layer 11 is formed of an inner jersey layer 18, a sponge layer 20, and an outer jersey layer 22. The inner jersey layer 18 is stacked on an inner surface of the sponge layer 20. The inner jersey layer 18 is joined to the sponge layer 20 by an adhesive. The outer jersey layer 22 is stacked on an outer surface of the sponge layer 20. The outer jersey layer 22 is joined to the sponge layer 20 by an adhesive.

[0022] The sponge layer 20 is a polymer molded product containing closed cells. The sponge layer 20 is water-impermeable. The sponge layer 20 is flexible. The sponge layer 20 does not hinder the wearer to crouch. The sponge layer 20 has high cushioning properties. With the sponge layer 20, the pain of the wearer is relieved. The sponge layer 20 has high heat insulation properties. The sponge layer 20 contributes to heat retainability. From the viewpoints of the cushioning property and heat retainability, a thickness of the sponge layer 20 is preferably 2 mm or more, and especially preferably 3 mm or more. The thickness is preferably 10 mm or less, and is especially preferably 5 mm or less.

[0023] From the viewpoints of the cushioning property and heat retainability, an expansion ratio of the sponge layer 20 is preferably 1.5 times or higher, and is especially preferably 2.0 times or higher. From the viewpoint of strength, the expansion ratio is preferably 10 times or lower, and is especially preferably 8 times or lower. The expansion ratio is the ratio of the density of the molded product at the time of assuming that no cell is present, to the density of the sponge layer 20.

[0024] As the materials of the inner jersey layer 18 and the outer jersey layer 22, nylon and polyurethane are provided as examples. The inner jersey layer 18 and the outer jersey layer 22 protect the sponge layer 20. The inner jersey layer 18 further contributes to slide of a foot at the time of being put on and taken off. The inner jersey layer 18 and the outer jersey layer 22 have a high stretch-

ability. The inner jersey layer 18 and the outer jersey layer 22 do not inhibit the cushioning property by the sponge layer 20.

[0025] The outer layer 12 is a polymer molded product that does not contain cells. In the present embodiment, the outer layer 12 is formed from a cross-linked rubber composition. A typical base material rubber for the rubber composition is a natural rubber. The outer layer 12 may be formed from of a resin composition. A typical base material resin for the resin composition is polyvinyl chloride.

[0026] A hardness of the outer layer 12 is larger than a hardness of the inner layer 11. The outer layer 12 contributes to rigidity of the upper 6. Further, the outer layer 12 contributes to durability of the boot 2. The thickness of the outer layer 12 is preferably 0.3 mm to 3 mm inclusive.

[0027] The arrow H1 in FIG. 2 denotes the height of the first exposed portion 14. From the viewpoint of the wearer being not hindered to crouch, the height H1 is preferably 6 cm or more, and is especially preferably 8 cm or more. From the viewpoints of durability and heat retainability, the height H1 is preferably 16 cm or less, and is especially preferably 14 cm or less.

[0028] From the viewpoint of the wearer being not hindered to crouch, a surface area of the first exposed portion 14 is preferably 50 cm² or more, and is especially preferably 70 cm² or more. From the viewpoints of durability and heat retainability, the surface area is preferably 180 cm² or less, and is especially preferably 160 cm² or less.

[0029] What is denoted by an arrow H2 in FIG. 2 is the height of the second exposed portion 16. From the viewpoint of the wearer easily taking off the boot 2, the height H2 is preferably 8 cm or more, and is especially preferably 10 cm or more. From the viewpoints of durability and heat retainability, the height H2 is preferably 18 cm or less, and is especially preferably 16 cm or less.

[0030] From the viewpoint of the wearer easily taking off the boot 2, a surface area of the second exposed portion 16 is preferably 60 cm² or more, and is especially preferably 80 cm² or more. From the viewpoints of durability and heat retainability, the surface area is preferably 210 cm² or less, and is especially preferably 190 cm² or less.

[0031] As shown in FIGS. 3 and 4, the inner layer 11 has a front member 24, a rear member 26, an inside member 28, and an outside member 30. The inner layer 11 further has a first joint portion 32, a second joint portion 34, a third joint portion 36, a fourth joint portion 38, a fifth joint portion 40, a sixth joint portion 42 and a seventh joint portion 44.

[0032] At the first joint portion 32, the inside member 28 and the outside member 30 are joined. At the second joint portion 34, the inside member 28 and the front member 24 are joined. At the third joint portion 36, the outside member 30 and the front member 24 are joined. At the fourth joint portion 38, the inside member 28 and the out-

side member 30 are joined. At the fifth joint portion 40, the inside member 28 and the outside member 30 are joined. At the sixth joint portion 42, the inside member 28 and the rear member 26 are joined. At the seventh joint portion 44, the outside member 30 and the rear member 26 are joined. At the respective joint portions, the adjacent members are joined to one another by stitching and an adhesive.

[0033] The respective joint portions are covered with the outer layer 12. Accordingly, in the first exposed portion 14, the joint portion is not present, and in the second exposed portion 16, the joint portion is not present, either. In the boot 2, the joint portions are not exposed. The boot 2 is excellent in external appearance and durability. The boot may have an upper in which a part of the joint portion is not covered with the outer layer.

[0034] Trousers may be attached to the boot 2, and a wader may be constructed.

[0035] The boot may include an upper that has the first exposed portion, and does not have the second exposed portion. The boot does not hinder the wearer to crouch.

[0036] The boot may include an upper that does not have the first exposed portion, but has the second exposed portion. The wearer can easily take off the boot.

[0037] The boots according to the present invention can be used in various fishing places.

List of reference signs

[0038]	30
2 BOOT	
4 SOLE	
6 UPPER	35
11 INNER LAYER	
12 OUTER LAYER	40
14 FIRST EXPOSED PORTION	
16 SECOND EXPOSED PORTION	
20 SPONGE LAYER	45
24 FRONT MEMBER	
26 REAR MEMBER	50
28 INSIDE MEMBER	
30 OUTSIDE MEMBER	55

Claims

1. A boot comprising, a sole; and an upper, wherein the upper has an inner layer, and an outer layer that is stacked on a part of a surface of the inner layer, and the outer layer is not present in a region corresponding to a front side of an ankle of a wearer, or a calf of the wearer.
2. The boot according to claim 1, wherein the inner layer has a polymer molded product containing cells, and the outer layer has a polymer molded product that does not contain a cell.
3. The boot according to claim 1 or 2, wherein the inner layer is formed by a plurality of members being joined, and a joint portion of one member and another member adjacent to the one member is covered with the outer layer.

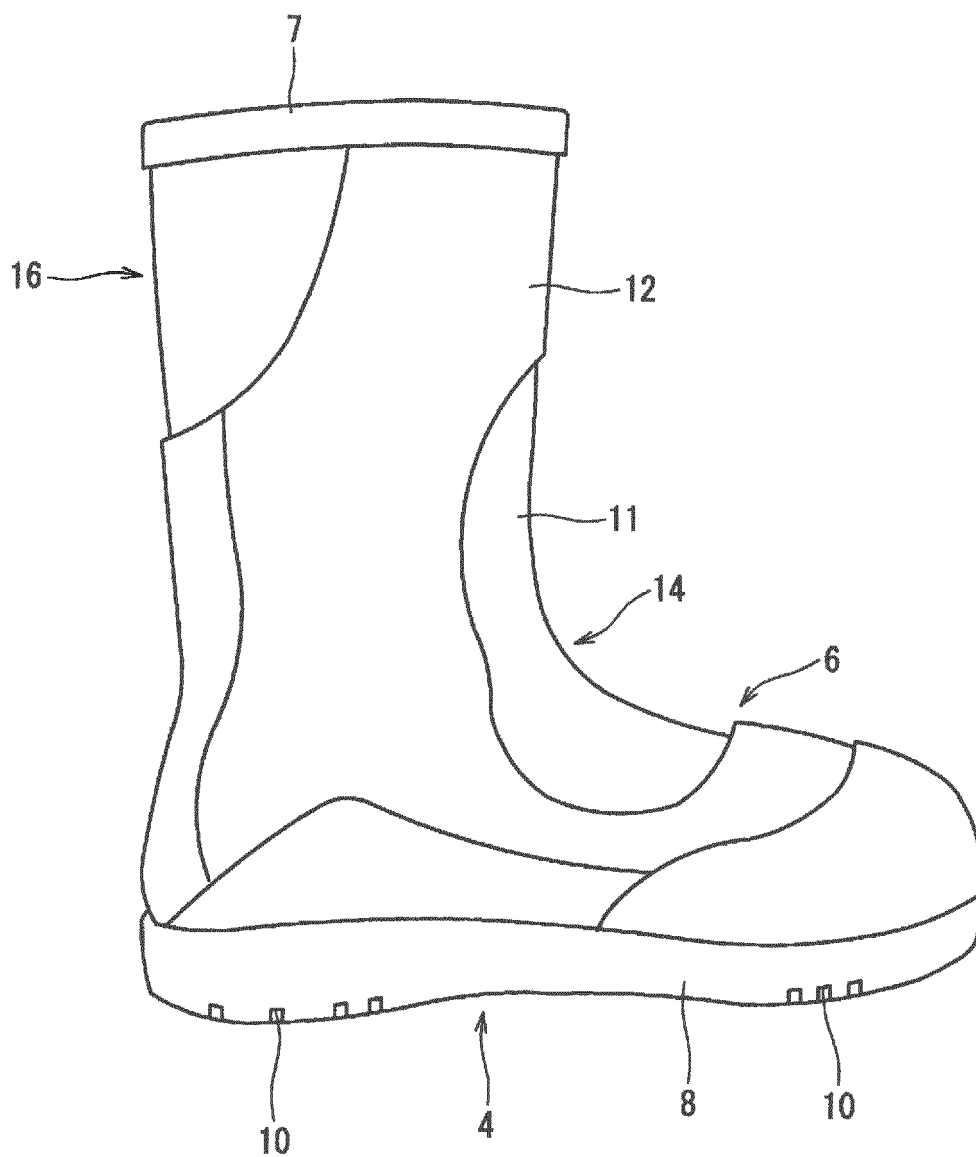


FIG. 1

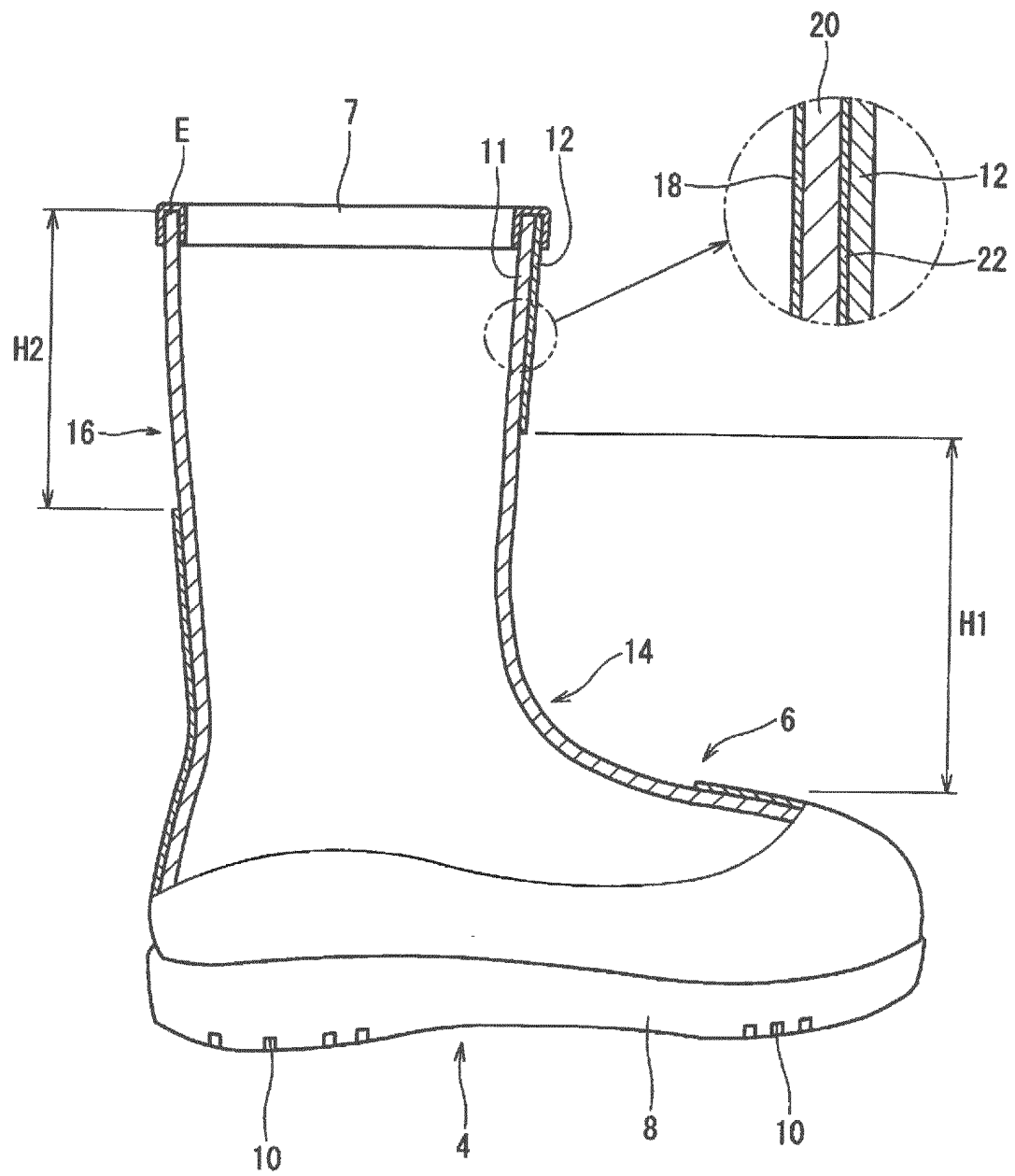


FIG. 2

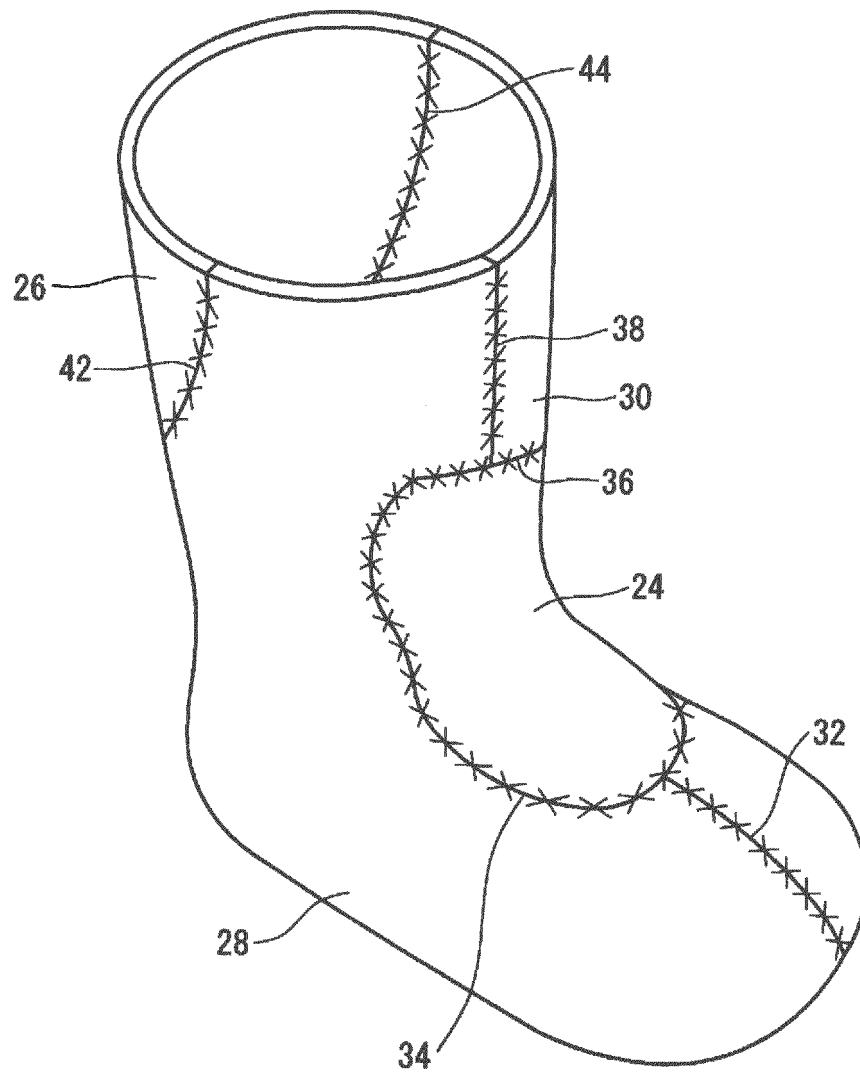


FIG. 3

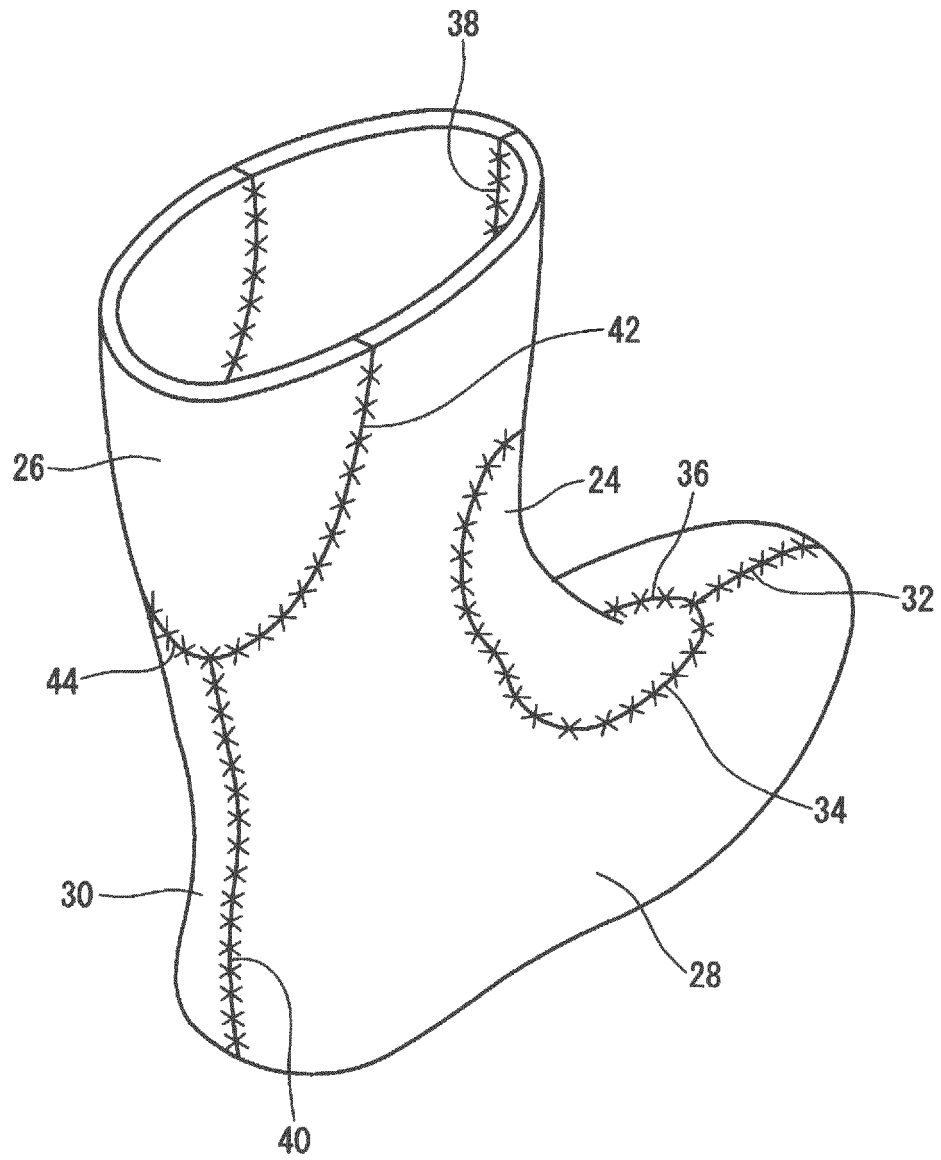


FIG. 4



EUROPEAN SEARCH REPORT

Application Number
EP 14 15 9053

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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		31 March 2015	Jones, Mark
CATEGORY OF CITED DOCUMENTS			
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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