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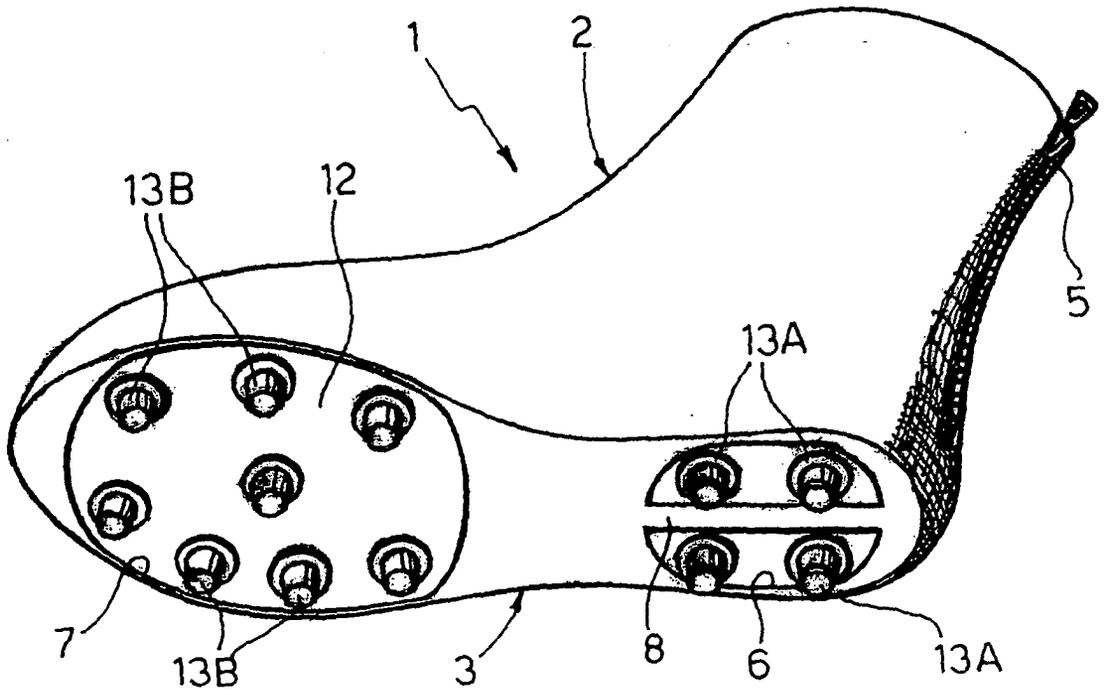
(54) Removable overshoe for sport footwear having studs, namely football footwear

(57) A removable overshoe (1) for a shoe having a sole provided with studs (13A, 13B) comprises an upper portion (2) and a lower portion (3); the lower portion (3) is provided with openings (6, 7) so as to let the studs (13A, 13B) protrude outside the overshoe (1). At least one of said openings (6, 7) has such a size as to let a portion of the sole (12) having several studs (13A, 13B) point directly outside the overshoe (1), and is got across by a connection element (8) extending between two different areas of the lower portion (3).

Fig. 2



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Description

[0001] The present invention relates to an overshoe for footwear having an upper and a sole provided with studs, namely football shoes, said overshoe comprising:

- an upper portion, which can cover the upper of a corresponding shoe and surround at least a portion of the user's leg, and
- a lower portion, which can lean at least partly onto the shoe sole,

in the upper portion a passage being defined, through which the overshoe can be fitted onto and taken off the shoe worn by the user, in the lower portion openings being defined so as to let the studs protrude outside the overshoe.

[0002] An overshoe as referred to above for football footwear is known from document DE-A-29 18 338. In such solution the overshoe basically has the shape of a sock consisting of several parts seamed one to the other, designed to surround the football boot completely; the lower portion of the overshoe has a plurality of holes, whose number corresponds to the number of studs associated with the foot sole.

[0003] In the prior-art document mentioned above, the shoe studs are removable and accordingly have each a threaded portion, designed to be screwed into a corresponding female screw integrated into the sole; a washer-like intermediate flange is further defined in each stud, which flange separates the aforesaid threaded portion from the remaining portion of the corresponding stud; when the overshoe is fitted onto the shoe, circular areas of its lower portion delimiting the aforesaid holes are placed between the sole and the flanges of the studs clamped in the respective female screws; the lower portion of the overshoe is thus locally blocked in position.

[0004] Such an arrangement is not of comfortable use since studs have to be removed or at least partially unscrewed whenever the overshoe has to be fitted on or taken off; in practice, therefore, the overshoe can hardly be put on or taken off correctly when the shoe is worn by the user. Similar problems, though less annoying, would arise in case the user, in his desire to avoid removing or unscrewing the studs every time, fitted the overshoe onto the shoe when its studs are already tightly screwed; here again it would however be necessary to match exactly every stud with a corresponding hole of the lower portion of the overshoe.

[0005] In the light of the above, the present invention aims at making a new overshoe as referred to above, which is actually removable, i.e. which can be easily and rapidly fitted on and taken off, of comfortable use and of higher usefulness.

[0006] These and further aims, which shall be more evident in the following, are achieved according to the present invention by an overshoe as referred to above, characterized in that, when the overshoe is fitted onto the shoe, at least a first one of the openings of the lower portion can let a corresponding portion of the sole having several studs point directly outside the overshoe, the first opening being got across by a connection element or bridge extending between two different areas of the lower portion.

[0007] Thus, the opening or openings can receive a corresponding plurality of studs and the presence of the bridge prevents the overshoe from taking incorrect positions on the shoe when it is fitted thereon; this enables to put on and take off the overshoe rapidly and easily.

[0008] Preferably, the opening which the bridge gets across is defined in the rear zone of the lower portion of the overshoe, and is designed to receive all the studs present in the rear area of the shoe sole, said bridge extending basically in the same direction of longitudinal extension as the lower portion or as the sole. Thus, when the overshoe is pulled upwards by the user to be put on, the bridge prevents the stud opening from taking an incorrect position, i.e. from "slipping" on the shoe heel area.

[0009] The lower portion of the overshoe preferably includes also a second opening defined in the front foot area, designed to receive all the studs present in the front portion of the sole; assuming that the number of studs present in the front portion is usually larger than the number of those present in the rear portion of the sole, the second opening has a larger passage section than the first opening; also the second opening can be got across by at least a corresponding bridge.

[0010] The lower portion of the overshoe can be made of the same material as the upper portion, which is preferably thermally insulating, water-repellent, perspiring and elastic. The lower portion can be made of a different material, if required, for instance at least partly made of rubber or a similar anti-abrasion material.

[0011] Preferred features of the invention are listed in the appended claims, which are an integral and substantial part of the present description.

[0012] Further aims, characteristics and advantages of the present invention shall become evident from the following description and from the accompanying drawings, provided as a mere explicative non-limiting example, in which:

- Figure 1 is a schematic perspective view of an overshoe according to the invention, fitted onto a corresponding football shoe of first type, the latter being worn by a user;
- Figure 2 is a perspective view from below of the overshoe of Figure 1;
- Figures 3 and 4 are plan views from below of two possible execution variants of the lower portion of the overshoe of Figure 1;
- Figures 5, 6 and 7 are plan views from below of three further possible execution variants of the lower portion of the overshoe according to the inven-

tion.

[0013] In Figures 1 and 2 number 1 globally refers to an overshoe made according to the present invention, designed to be used with a sports shoe having a sole provided with studs. The overshoe 1 should basically protect from cold, water and moisture sports shoes generally designed for being used in summertime, or anyway in favorable weather conditions.

[0014] The overshoe 1 is particularly designed for use on football footwear; to this purpose, in Figure 1 number 10 globally refers to a football shoe, manufactured as known per se and comprising an upper portion or upper 11, for instance made of leather, and a respective sole 12 made of synthetic material; as in known technique, the shoe 10 comprises a first group of studs 13A placed in the rear or heel area of the sole 12, and a second group of studs 13B placed in front or front foot area of the sole 12; in the case shown by way of example, the sole 12 has thirteen studs, namely four rear studs 13A and eight front studs 13B.

[0015] The overshoe 1 comprises an upper portion 2 and a lower portion 3, the second one being associated with the first one with any known means, for instance by seaming; the upper portion 2 can consist of several components seamed or anyhow assembled one to the other.

[0016] As can be inferred in particular from Figure 1, the upper portion 2 is designed to wrap up completely the upper 11 of the shoe 10, as well as at least part of the leg G of the football player wearing it; the lower portion 3, conversely, is designed to be in contact at least partially with the sole 12, and in particular with some areas of the sole 12 where the studs 13 are not present.

[0017] In the upper portion 2 a passage 4 is defined for inserting the shoe 10 into the overshoe 1, or better for introducing or fitting the latter onto the shoe already worn by the user, just like a sock. The upper portion 2 is equipped with a zip-fastener 5, through which the passage 4 can take a widened configuration, so as to put on and take off the overshoe 1 easily, and a narrow configuration, so as to keep said overshoe adhering onto the shoe and the leg G. The zip-fastener 5 can be replaced by other equivalent opening/closing means, such as a Velcro system or press studs; the position of the zip-fastener 5 or of the means replacing it can be different from the one shown by way of example in Figures 1 and 2.

[0018] According to an important feature of the invention, in the lower portion 3 at least two openings are defined, whose size is such as to allow a corresponding plurality of studs 13A, 13B to protrude from the overshoe 1. In the case shown by way of example in Figure 2, two openings are provided for, one in the rear area and the other one in the front area of the lower portion 3; the rear opening, referred to with 6, receives all studs 13A, whereas the front opening, referred to with 7, receives all studs 13B; each opening 6, 7 is delimited by a corresponding edge of the lower portion 3 resting onto the sole 12; also the intermediate area of the lower portion, which basically extends between the openings 6 and 7, can lie or adhere on a corresponding sole portion.

[0019] The fact that the openings 6 and 7 house each a group of several studs 13A, 13B simplifies and helps overshoe insertion, thus avoiding the aforesaid problems related to the prior art.

[0020] The rear opening 6 is got across by a connection! element or bridge 8, which extends between two different areas of the lower portion 3, spaced away one from the other, in the same direction of longitudinal extension as the lower portion 3 or as the sole 12. As can be seen, the bridge 8 extends basically in the middle of the opening 7, so as to pass in the free space between two pairs of studs 13A.

[0021] As was said, the overshoe 1 is designed to be fitted on by a user onto the shoe 10 just like a sock; in said light, the main function of the bridge 8 is to avoid that the rear portion of the opening 6 can slip upwards, beyond the sole 12 and then on the heel of the shoe 10, when said overshoe is pulled up to be put on.

[0022] The overshoe 1 according to the invention can be used for instance when football players warm up on the field, and worn by players sitting on the bench, who have already done warming-up exercise. When sent to the field, players can take off the overshoe 1 rapidly, the latter being easily and rapidly removable, as was explained above. The use of the overshoe 1 under these circumstances keeps feet at body temperature, i.e. warm especially in winter time. Another important function of the overshoe 1 is to prevent water or moisture from being absorbed by the shoe 10, which would increase its weight and damp the player's feet, reducing his/her performance and comfort. In said light, the material used for making the overshoe 1, or at least the material or materials used for making the upper portion 2 is preferably suitable for keeping feet at body temperature. The upper portion 2 can comprise to said purpose an outer fabric and an inner lining, between which a thermally insulating material is arranged, for instance an expanded polyurethane foam, such as moltoprene.

[0023] The material or materials used for making the outside of the upper portion 2, and if necessary, of the lower portion 3, are preferably water-repellent, so as to ensure not only a reduction of the weight of the shoe 10 when the field is wet, but also to keep feet dry, improving players' comfort and consequently performance. To said purpose the upper portion 2 can comprise a fabric made of elasticized polyamide, made water-repellent on surface. The fact that broad areas of the sole 12 point directly towards the outside of the overshoe 1 through the openings 6, 7 does not jeopardize features of watertightness and moisture-tightness, considering that current soles as referred to are made of synthetic material, and are therefore water-repellent and per se already sufficiently waterproof.

[0024] Preferably, moreover, at least the upper portion 2 is made of perspiring materials so that during ac-

tivity no condensate builds up between the shoe 10 and the overshoe 1, which would be absorbed by the upper 11 and transmitted to the user's feet, wetting them. In order to avoid such risk, all materials used are perspiring (except the lower portion 3, when wholly made of rubber or other synthetic anti-abrasion material).

[0025] It is further evident that the material or materials used are elastic, so as to enable the overshoe 1 to be rapidly put on and taken off, and so that the latter sufficiently adheres both to the shoe 10 and to the leg G, though without limiting movements of players' feet. This can be achieved using anisotropic elasticized materials. The material used for the upper portion 2 is further preferably thin, light and with a "seizing" surface, so as to grant a good sensitivity to players.

[0026] The lower portion 3 can be made of different materials depending on the use of the overshoe 1. For instance, in the case shown in Figure 2, the lower portion 3 is wholly made of highly elastic vulcanized rubber, so as to better resist abrasion if the overshoe has to be used for long periods, for instance during a football match and/or on particularly hard fields. If the overshoe 1 is designed to be used only when warming-up on the field and when sitting on the bench, the lower portion 3 can be made with the same material or materials used for the upper portion.

[0027] Figures 3 and 4 show execution variants of the overshoe 1, in which the lower portion 2 is made of different materials. In particular, number 3A refers to a main or basic portion of the portion 3, made of the same elastic material as the upper portion 3 of the overshoe 1, in which the openings 6, 7 and the bridge 8 are defined; a heel 3B and a point 3C, both made of rubber or other anti-abrasion material, are then transferred onto the main portion 3A, for instance by over-moulding.

[0028] In the case of the variant shown in Figure 3, the front opening 7 is got across by two corresponding bridges 100 made of the same material as the point 3C, which start from said point and end on corresponding opposite areas of the longitudinal edge of the opening 7. The presence of one or more bridges 100 getting across the front opening 7 enables to further improve a correct positioning of the lower portion 3 and of the overshoe 1 as a whole.

[0029] The openings 6 and 7 have such a size and shape as to enable to use the overshoe 1 on most existing football boots; this means that the overshoe 1 according to the embodiments of Figures 1-4 can be for instance conveniently used also on football boots having a total of only six studs, or studs having a different arrangement as the one shown, provided that they are grouped in a rear and a front series. In further possible embodiments, the lower portion 3 can also have a global shape dedicated for specific shoes having studs. To said purpose, Figures 5, 6 and 7 show some variants of the overshoe 1, designed to be used on football boots with six studs.

[0030] In the case shown in Figure 5, the lower portion 3 is provided with a bridge 100 getting across the front opening 7 in a basically longitudinal direction; in the case shown in Figure 6, conversely, the front opening 7 is got across by two bridges 100 crossing each other, one extending in longitudinal direction and the other one in transversal direction with respect to the sole 12. Eventually, as in the case shown in Figure 7, the front opening is got across by one bridge 100, which extends transversally with respect to the longitudinal development of the sole 12.

[0031] Obviously, though the basic idea of the invention remains the same, construction details and embodiments can widely vary with respect to what has been described and shown, however without leaving the framework of the present invention as defined in the appended claims.

[0032] The bridge or bridges 8, 100 provided for could be made of a material differing from the rest of the lower portion; for instance, the latter could be made mainly of the same material as the upper portion 2 and the bridge or bridges made of over-moulded rubber, or made of a stiffer material or fabric than the rest of the portion 3, and seamed onto the latter.

[0033] If necessary, at least an end of one or more bridges could be integral with the upper portion 2, provided that said bridge extends between two different areas of the lower portion 3.

Claims

1. Removable overshoe for footwear having an upper and a sole provided with studs, namely football shoes, said overshoe (1) comprising

   - an upper portion (2), which can cover the upper (11) of a shoe (10) and surround at least a portion of a leg (G) of a shoe (10) user, and
   - a lower portion (3), which can lean at least partially onto the sole (11) of the shoe (10),

   in the upper portion (2) a passage (4) being defined, through which the overshoe (1) can be fitted onto and taken off the shoe (10) worn by the user, in the lower portion (3) openings (6, 7) being defined so as to let the studs (13A, 13B) protrude outside the overshoe (1), **characterized in that** at least a first one of said openings (6, 7) can let a respective portion of the sole (12) having several studs (13A, 13B) point directly outside the overshoe (1), the first opening (6) being got across by a connection element or bridge (8, 100) extending between two different areas of the lower portion (3).

2. Overshoe according to claim 1, **characterized in that** the first opening (6) is defined in a rear zone of the lower portion (3).

3. Overshoe according to claim 1 or 2, **characterized in that** the bridge (8) extends across the first opening (6) substantially in the same direction of longitudinal extension as the lower portion (3).

4. Overshoe according to claim 1, **characterized in that** at least a second one of said openings (7) can let a corresponding portion of the sole (12) having several studs (13A, 13B) point directly outside the overshoe (1), the passage section of the second opening (7) being preferably larger than the one of the first opening (6).

5. Overshoe according to claim 4, **characterized in that** the second opening (7)

- is defined in a front zone of the lower portion (3), and/or
- is got across by at least a connection element or bridge (100) extending between at least a first and a second area of the lower portion (3).

6. Overshoe according to claim 5, **characterized in that** the bridge (8, 100) getting across at least one between said first and second opening (6, 7) extends substantially in the same direction of longitudinal extension as the lower portion (3) in a substantially transversal direction with respect to the direction of longitudinal extension of the lower portion (3).

7. Overshoe according to claim 5, **characterized in that** at least one between said first and second opening (6, 7) is got across by at least two connection elements or bridges (100), where in particular each one of the two bridges (100) extends between two respective different areas of the lower portion (3) or the two bridges (100) start from a same area (3C) of the lower portion.

8. Overshoe according to claim 1, **characterized in that** the lower portion (3) is made at least partly with a material differing from the one or ones the upper portion (2) is made of and/or at least one between the upper portion (2) and the lower portion (3) is made of several different materials.

9. Overshoe according to claim 1, **characterized in that** the upper portion (2) is associated with opening/closing means (5), so as to allow said passage (4) to take a widened configuration and a narrow configuration.

10. Overshoe according to claim 1, **characterized in that** at least the upper portion (2) is thermally insulating and/or comprises an outer cover and an inner lining, where in particular an inter-space is defined between the outer cover and the inner lining, said inter-space containing in particular a thermally insulating materials, such as an expanded polyurethane foam.

11. Overshoe according to claim 1, **characterized in that** the upper portion (2)

- is at least partly water-repellent, comprising in particular a polyamide fabric made water-repellent on its surface, and/or
- is made at least partly with a perspiring material, and/or
- is at least partly made of an elastic material, namely an anisotropic elasticized material.

12. Overshoe according to claim 1, **characterized in that** the upper portion (2) and the lower portion (3) are made of a same material.

13. Overshoe according to claim 1, **characterized in that** the lower portion (3) is at least partly made of rubber or other anti-abrasion material, or the lower portion (3) is made of the same material as the upper portion (2), namely an elasticized material, and comprises additional parts (3B, 3C) made of rubber or other anti-abrasion material, where the additional parts (3B, 3C) comprise at least one between a heel element (3B) and a point element (3C) of the lower portion (3).

14. Overshoe according to claim 1, **characterized in that** the bridge (8, 100)

- is made of a same material as at least one between the upper portion (2) and the lower portion (3), and/or
- is made of a first material and the rest of the lower portion (3) is made of a second material.

15. Overshoe according to claim 1, **characterized in that** the lower portion (3) is wholly made of rubber or other anti-abrasion material and integrates at least the bridge (8, 100) of the first opening (6, 7).

Fig. 1

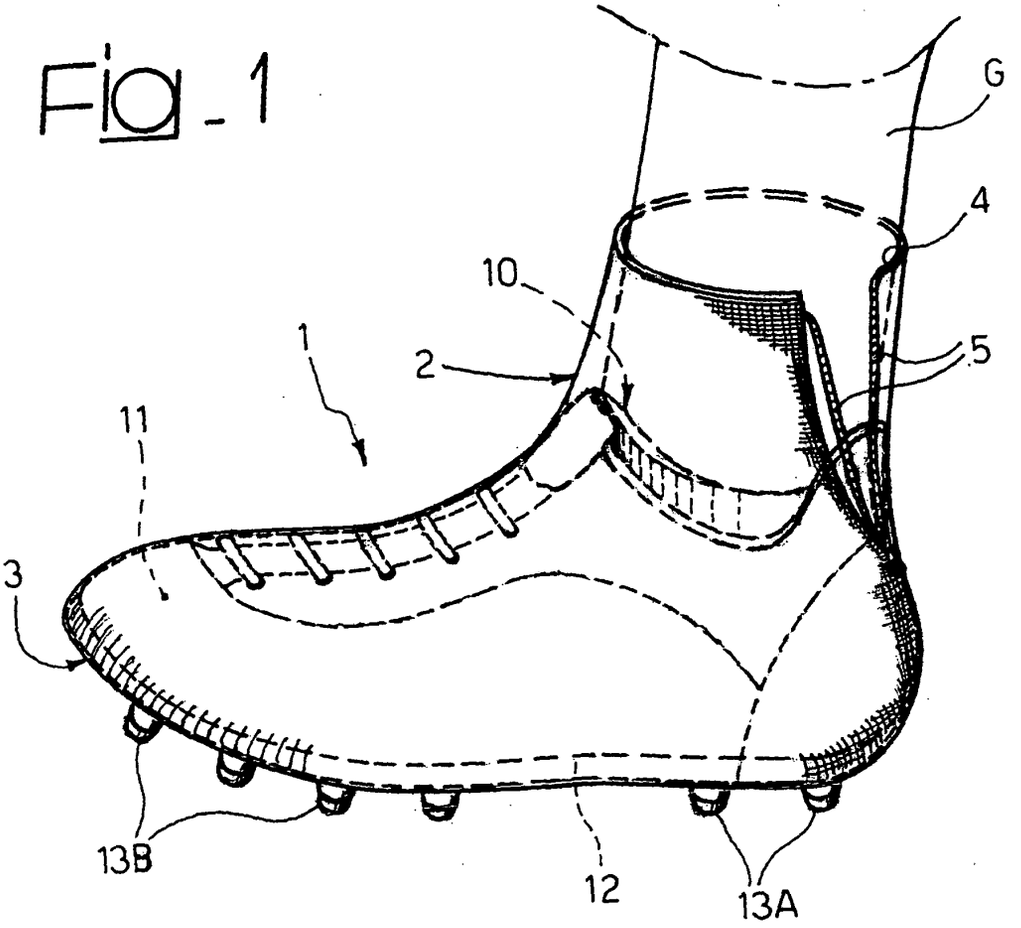

Fig. 2

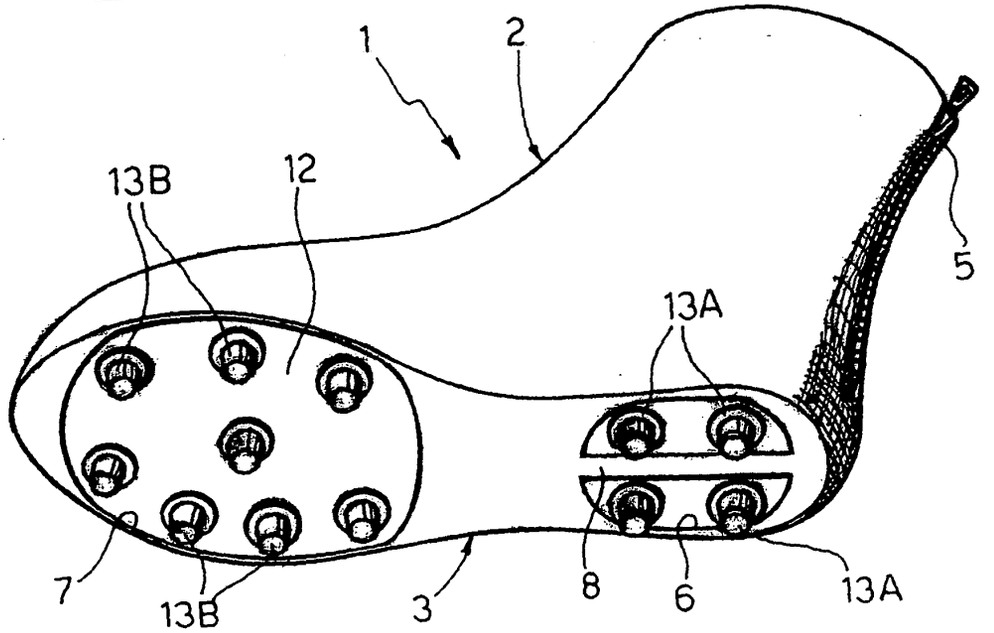

Fig.3

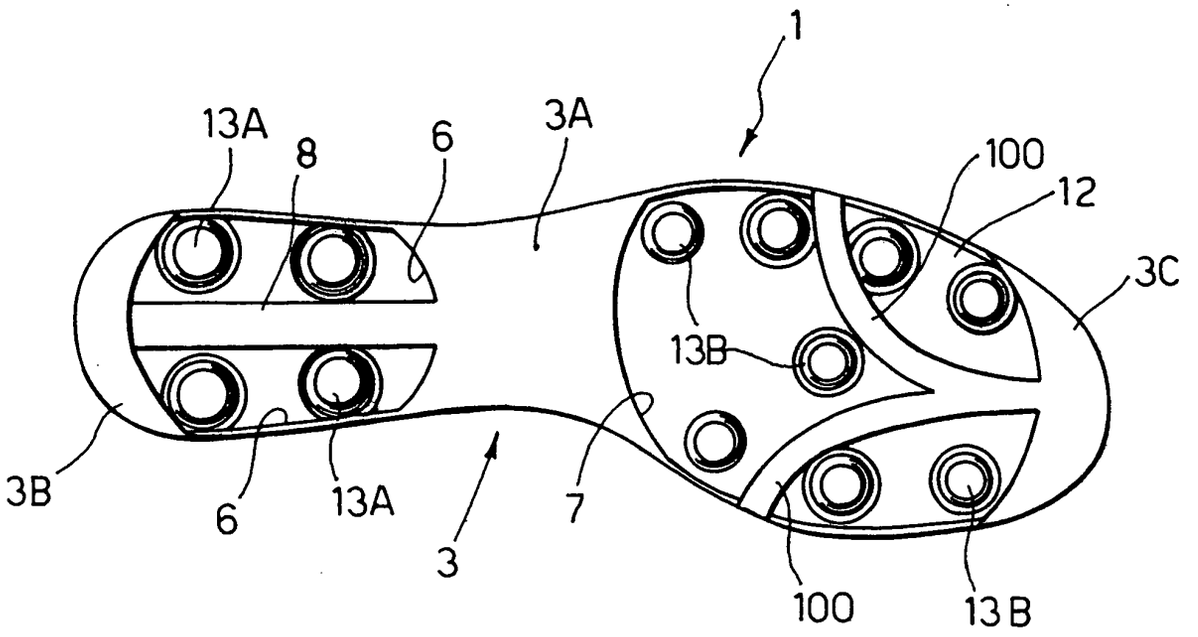
1
13A
8
6
3A
100
12
3C
13B
3B
6
13A
7
3
100
13B

Fig.4

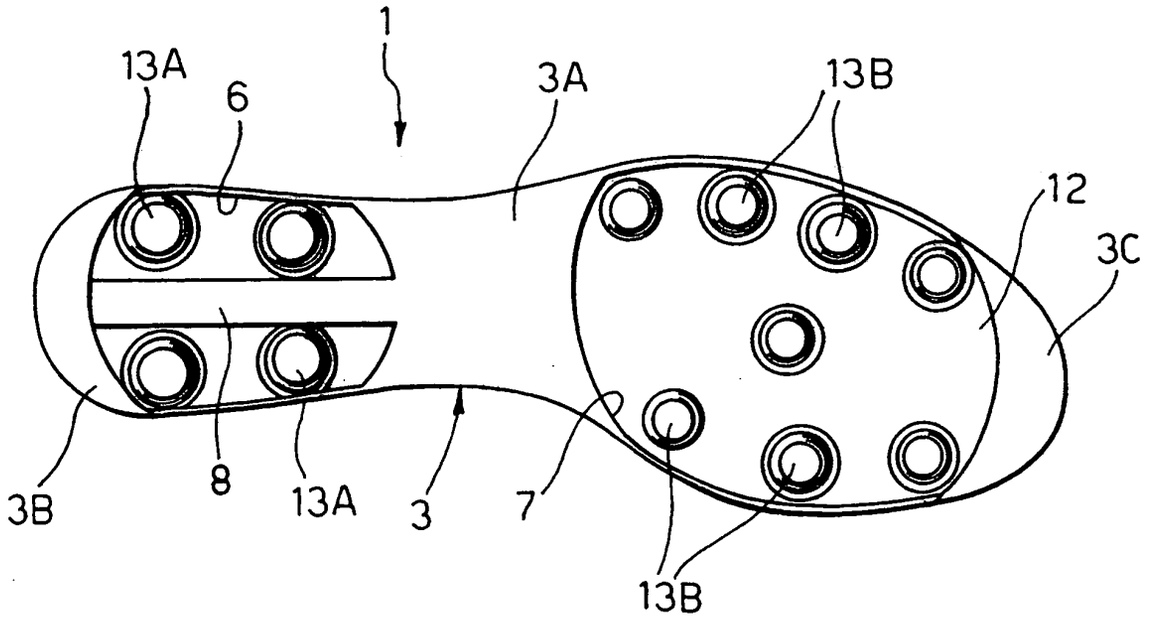
1
13A
6
3A
13B
12
3C
3B
8
13A
3
7
13B

Fig.5

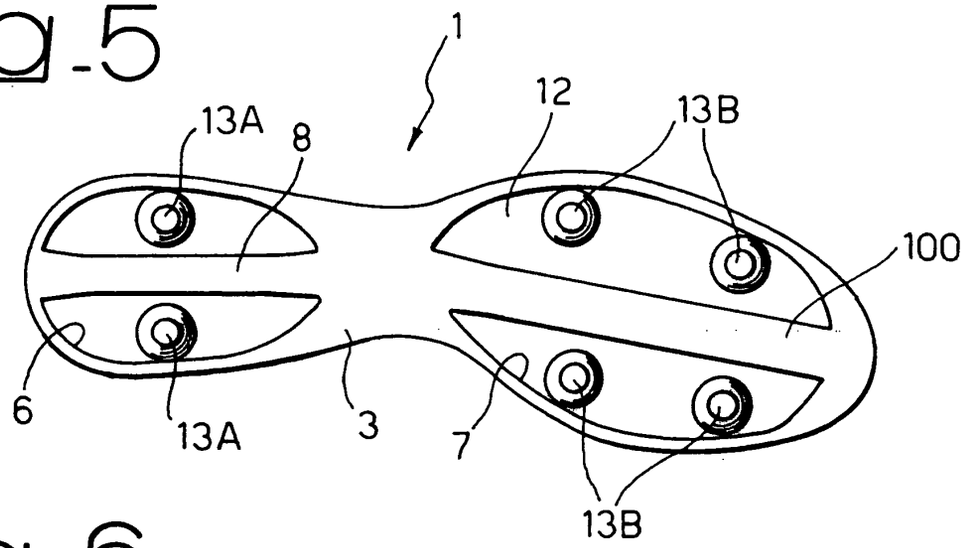

Fig.6

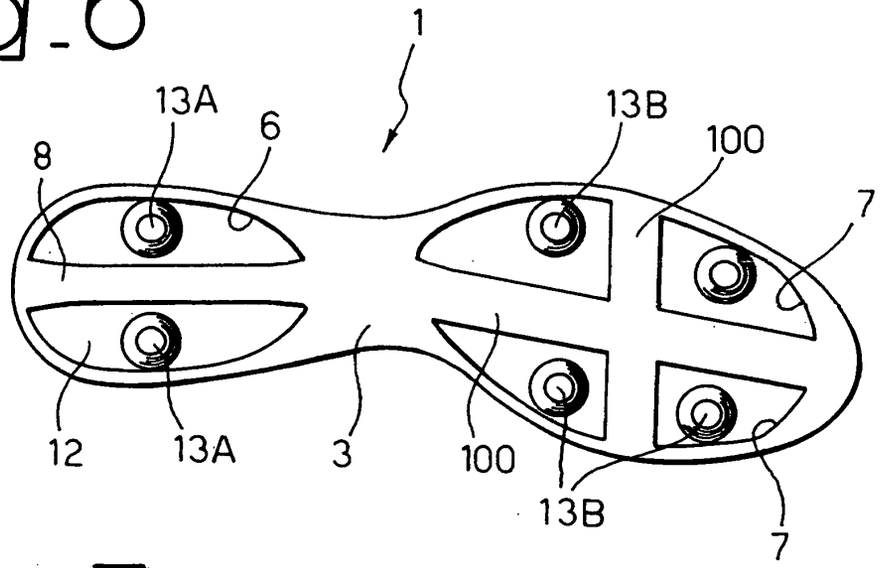

Fig.7