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(72) Inventor: **Moron, Garcia Ivan**
26580 Arnedo (La Rioja) (ES)

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(74) Representative: **Villamor Muguerza, Jon**
Gran Via 81
Planta 5.a, Dpto 9
E-48011 Bilbao (Vizcaya) (ES)

(71) Applicant: **Calzados Hergar, S.A.**
E-26580 Arnedo, (La Rioja) (ES)

(54) **Manufacturing process for a moccasin type shoe**

(57) The invention relates to a manufacturing process for a moccasin type shoe. Compared to the classic manufacturing process according to which, in the first place, the upper is integrally manufactured on one hand and the sole is molded on the other, with the process of the invention in a first operative phase only the lower perimetric area of the upper (3) is obtained in the absence of the classic vamp (9) corresponding to the area of the

instep, such that this upper and integral opening of the upper allows fixing it by means of a machined seam to the part forming the sole (1), the manufacture of the upper subsequently being concluded by means of incorporating the mentioned vamp (9) with a sewing maneuver which can also be carried out in a machined manner. The constructive process of the shoe is thus considerably sped up, with the subsequent reduction of costs for such process.

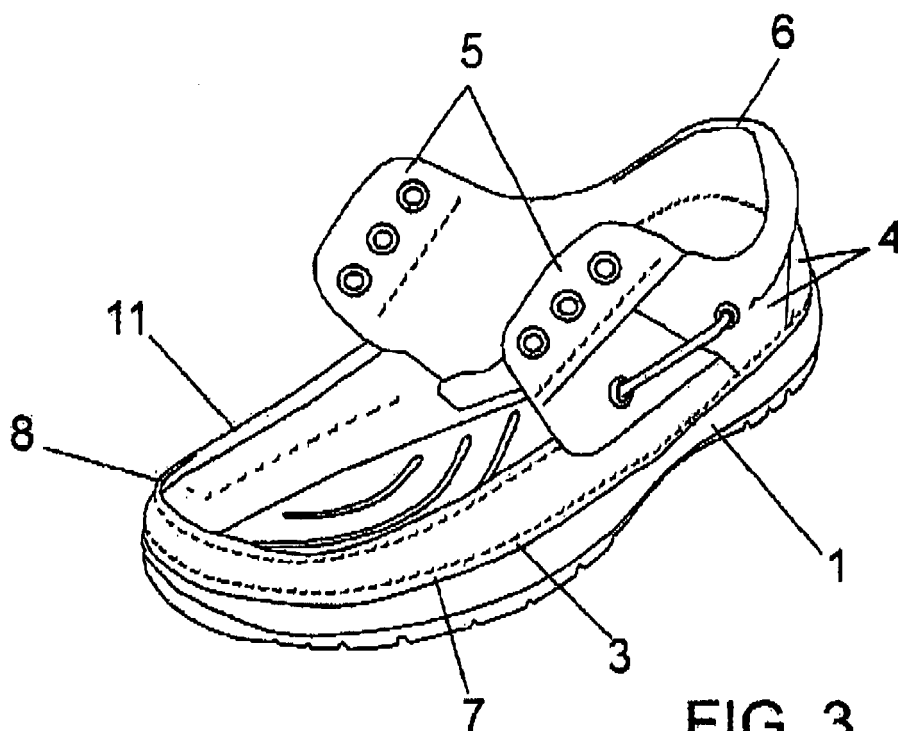


FIG. 3

Description

Object of the invention

[0001] The present invention relates to a novel manufacturing process for a "moccasin" type shoe, the purpose of which process is to reduce the costs in the constructive process thereof.

[0002] More specifically, the object of the invention is that, in the event of using both mechanical and manual sewing, a savings of material in the toe cap is achieved in parallel with a simplification of the actual process, and all this with a substantially higher level of comfort for the shoe.

[0003] The invention is thus comprised in the shoe manufacturing field.

Background of the Invention

[0004] As is known, moccasin type shoes are characterized by having an upper in which there is established a wide opening for the access of the foot, said upper being formed in a perimetric band which in the rear half of the shoe defines the mentioned opening, and which in the front half receives by means of a seam a vamp completing said opening.

[0005] The upper of a shoe of this type is currently made by means of sewing the different parts participating therein, and once said upper is completely finished, it is fixed to the complementary sole, generally obtained by means of injection molding based on an elastomeric material.

[0006] More specifically, the part forming the sole incorporates an upper perimetric flange to which the also perimetric and lower edge of the upper is adapted, which flange is first fixed by means of an adhesive and is then definitively fixed by means of an also perimetric seam line, which seam line must be carried out manually considering the difficulty involved in accessing the area close to the toe.

[0007] This seam logically involves a considerable participation of labor, with the subsequent and also considerable repercussion that this involves at the level of costs in the manufacture of the shoe.

Description of the Invention

[0008] The manufacturing process proposed by the invention fully and satisfactorily solves the problems set forth above, allowing to considerably speed up the manufacturing process, with the subsequent coats savings that this involves.

[0009] To that end and more specifically, the invention consist of partially assembling the upper of the shoe, i.e., assembling and fixing the parts forming the lower perimeter of said upper, leaving the vamp corresponding to the instep area unassembled, such that the absence of said vamp allows sewing the rest of the upper to the sole

extremely quickly and simply.

[0010] Once this lower and perimetric area of the upper has been fixed to the sole, the manufacture of the upper is concluded with the incorporation thereto of the repeatedly mentioned vamp by means of the also corresponding seam.

[0011] Material in the toe cap is saved with the process of the invention, since the entire lower part is eliminated, therefore preventing the adhesion to the outsole as it will thus be adhered to the sole edge or to the sides.

[0012] In parallel, a higher flexibility is achieved, or in other words, the rigidity caused by the classic arch effect upon joining the two parts of the shoe, outsole and upper, is prevented.

[0013] The weight of the shoe is also reduced upon substituting the insole and the middle sole, eliminating rubber from the sole, all of this being substituted with an insole of two densities in its manufacturing process.

[0014] As has been indicated above, the arch effect is eliminated, whereby the savings are considerable at the level of both material and labor costs.

Description of the Drawings

[0015] To complement the description being made and with the aim of aiding to better understand the features of the invention according to a preferred practical embodiment thereof, a set of drawings is attached as an integral part of said description in which the following has been depicted with an illustrative and non-limiting character:

Figure 1 shows, according to a perspective view, the sole intended to form part of a moccasin type shoe manufactured according to the process of the invention.

Figure 2 shows, also according to a perspective view, the result of the first phase of the manufacturing process, in which the lower perimetric area of the upper of the shoe is obtained.

Figure 3 shows, also according to a perspective view, the result of the following operative phase of the process, in which the partial upper obtained in the previous phase is fixed to the sole.

Figure 4 finally shows the following operative phase of the process of the invention, in which the vamp or part corresponding to the instep, completing the upper of the shoe, is added to the assembly of Figure 3.

Preferred Embodiment of the invention

[0016] The sole intended to form part of a moccasin type shoe is observed in the indicated figures, especially in Figure 1, which sole is formed as a one-piece body (1) obtained by means of injection molding based on an elastomeric material or the like, which sole can adopt any configuration according to any design line, and which, according to the process of the invention, incorporates

an upper perimetric flange (2) intended to fix the sole and upper by means of a seam, as will be seen below.

[0017] After manufacturing the sole (1) and making the different parts participating in the upper of the shoe, in a first operative phase of the process the upper is partially obtained, based on the lower perimetric fringe thereof, in which there participate the strip (3) affecting the area of the sole and the area of the waist, the heelpiece (4) and the flaps with eyelets (5) intended to receive the closing shoelace for the opening (6) of the shoe, this partial portion of the upper being fixed to the sole (1) by means of adapting the perimetric edge of the former to the flange (2) thereof, fixing with adhesive and subsequently by means of a perimetric seam (7), as observed in Figure 3.

[0018] In this operation of fixing the lower perimetric area of the upper (3-4) to the sole (1), which as has been stated above can be carried out in a completely machined manner as the seam (7) is established on an easily and directly accessible line, the fixing of the inner covering (8) which will participate in the lining of the shoe can be fixed simultaneously.

[0019] From the situation shown in Figure 3, the manufacture of the shoe ends with the adaptation to the upper edge of the strip (3), covering the area of the waist, of the vamp (9) provided with a raised edge (10) through which said vamp marginally folds over itself with the interposition of the free edge (11) of the strip (3) participating in the upper, with another seam line which can also be carried out in a machined manner due to its direct accessibility, although it will preferably be carried out manually, as conventionally occurs in moccasin type shoes, which seam line does not appear in the figures while in Figure 4, the most advanced of the process, the vamp (9) is shown still unfixed, but being evident that said seam line is located in correspondence with the holes (12) of the fold (10) of said vamp.

[0020] As deduced from the foregoing and has already been indicated above, the constructive process of the shoe is considerably sped up with the process of the invention, with the subsequent repercussion at the level of costs, which is substantially simplified, and all of this with machined seam lines improving the appearance of the shoe.

imetric flange (2) that the latter has, in a double fixing by means of an adhesive and a seam, then definitively manufacturing the upper by means of fixing to the lower and perimetric sector thereof the sector forming the vamp (9), as a result of a marginal fold (10) of the latter in which the upper edge (11) of the strip (3) participating in the lower and marginal sector of the upper corresponding to the sole of the shoe is housed.

2. The manufacturing process for a moccasin type shoe according to claim 1, **characterized in that** in the same operative phase of fixing the lower marginal strip (3) of the upper to the sole, the corresponding strip of material forming the inner lining (8) of the shoe is fixed to these elements.

Claims

1. A manufacturing process for a moccasin type shoe, in which there participates a sole obtained by means of injection molding based on an elastomeric material or the like, and an upper in which there participate a lower perimetric sector and a front-upper vamp on the area corresponding to the instep, **characterized in that** in a first operative phase the lower and perimetric part of the upper is manufactured by means of fixing the different parts integrating it by a seam, in order to then fix said lower perimetric area (3) of the upper to the sole (1) through the upper and per-

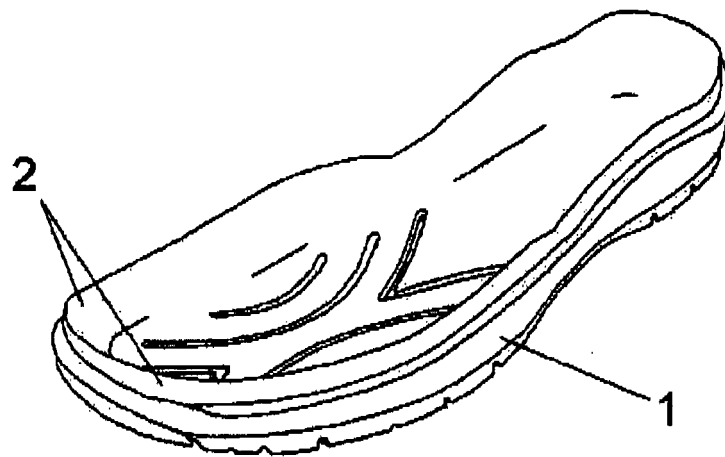


FIG. 1

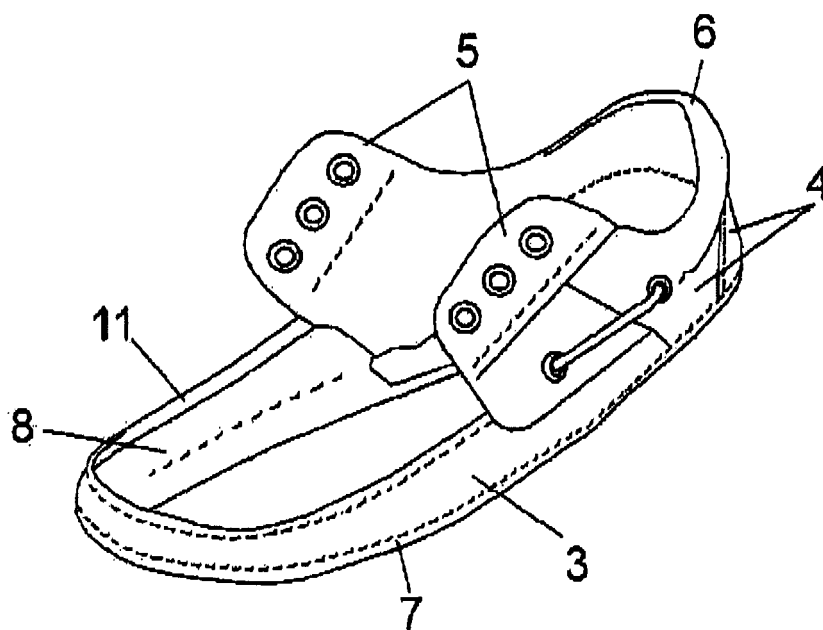


FIG. 2

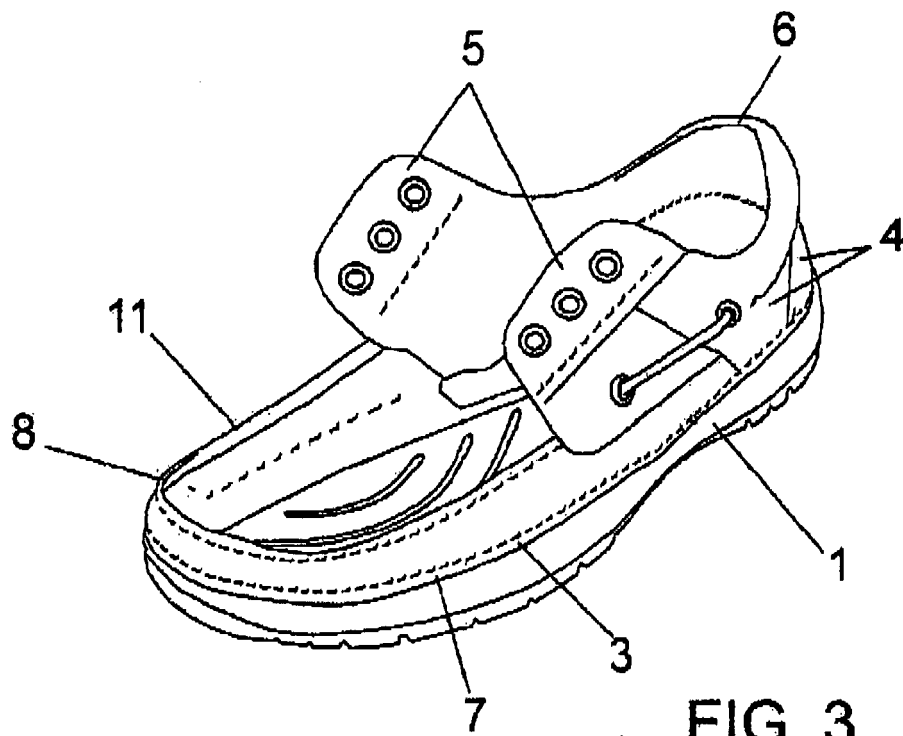


FIG. 3

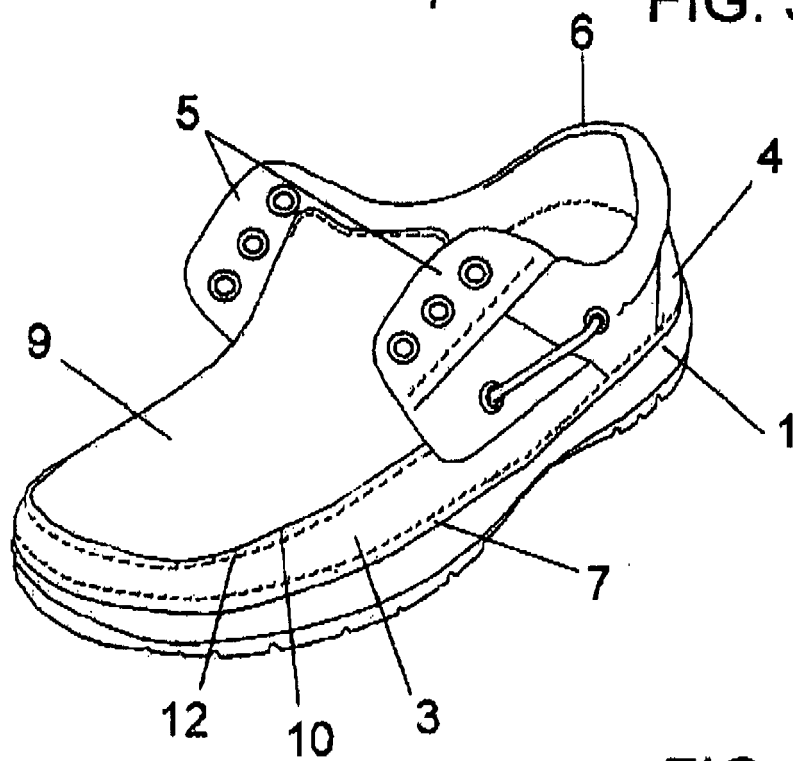


FIG. 4



EUROPEAN SEARCH REPORT

Application Number
EP 09 00 4868

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 21 July 2009	Examiner Cianci, Sabino
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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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 09 00 4868

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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