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(54) **SAFETY FOOTWEAR**

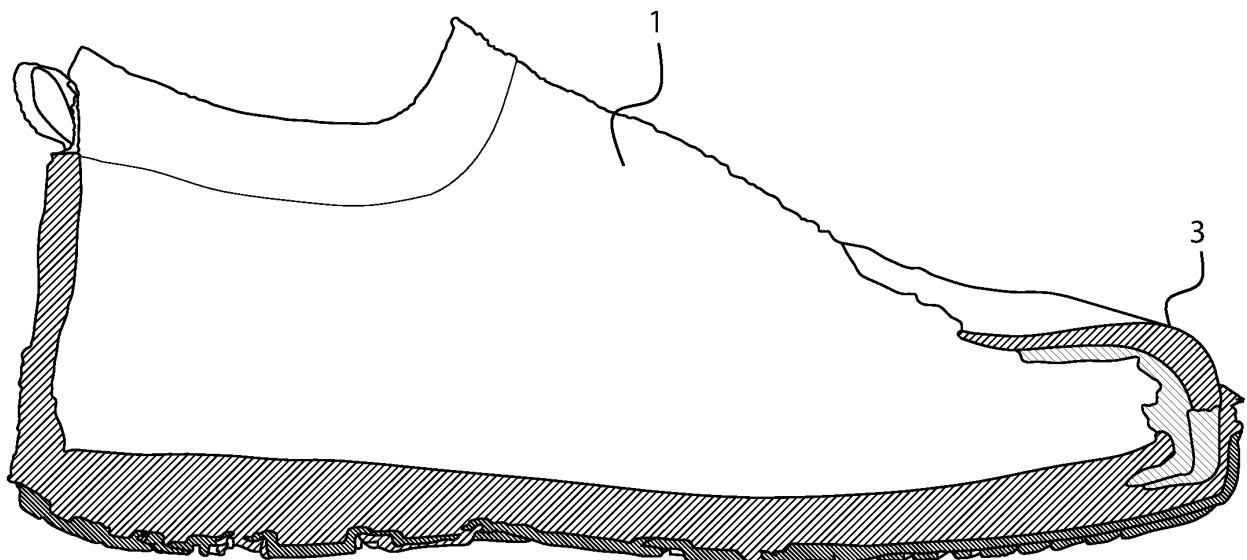
(57) The present invention refers to a safety footwear, comprising in particular an upper having a sock-shaped liner.

According to the invention, the safety footwear (10)

comprises an upper (2) and a reinforced toe (3), characterized in that said upper (2) comprises an inner lining (1) shaped like a sock, adapted to be fitted.

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Fig. 2



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Description

[0001] The present invention refers to a safety footwear, comprising in particular an upper having a sock-shaped liner.

[0002] As is known, there are various types of footwear having an upper which includes a sock or which is itself at least in part configured as a sock; such types of footwear are known for their particular comfort and for their capacity of supporting the foot, especially in sports. In fact, in the field of sports equipment, footwear comprising an upper whose inner lining is configured as a sock, or in which the inner lining of the upper comprises at least a portion that is fitted like a sock, are well known. For example, in a sport shoe with an upper having an internal lining configured as a sock, such internal lining presents an upper portion, protruding from the remaining part of the upper, made of an elastic fabric suitable for adhering perfectly to the user's ankle. These types of liners confer therefore a good support of the foot during physical activity and allow great flexibility of movement.

[0003] By deviating from the field of sports shoes, however, and in particular by looking at a very distant technical field, the one of accident prevention shoes, it is known that for many types of manual and/or physical jobs, the use of accident prevention equipment is required by law, in particular, the use of safety footwear.

[0004] These types of known safety footwear, unlike sports footwear, have little wearability, since they are very rigid in order to ensure the required protection, and this certainly constitutes a drawback perceived by the user.

[0005] Another drawback of these known types of safety footwear consists in the fact that they are unable to maintain a good and constant adherence of the foot, especially in the case of twisting or bending thereof.

[0006] A further drawback of these known types of safety footwear consists in the fact that they are generally made of very heavy fabrics, having both an internal lining and an external upper, which makes these shoes not very practical to wear, and, above all, confers them poor comfort when they are worn.

[0007] The aim of the present invention is to provide a safety footwear, which solves the technical problem described above, obviates the drawbacks and overcomes the limits of the prior art, being comfortable and at the same time allowing to protect the user's foot from impacts and/or dangers.

[0008] Within the scope of this aim, an object of the present invention is to provide a safety footwear approved in particular with ISO 20345: 2011 and similar standards.

[0009] Another object of the invention is to provide an approved safety footwear that is both comfortable and lightweight and has excellent hold of the foot.

[0010] A further object of the invention is to provide a safety footwear that is capable of giving the widest guarantees of reliability and safety in use.

[0011] Another object of the invention is to provide a safety footwear that is easy to manufacture and economically competitive when compared to the prior art.

[0012] The aim set forth above, as well as the mentioned objects and others that will appear more clearly hereinafter, are achieved by a safety footwear comprising an upper and a reinforced toe characterized by the fact that the upper comprises an inner lining configured as a sock, suitable for being fitted.

[0013] Further features are provided in the dependent claims.

[0014] Additional features and advantages will become more apparent from the description of a preferred, but non-exclusive, embodiment of a safety footwear, illustrated by way of non-limiting example with the aid of the accompanying drawings, in which:

figure 1 is a side elevation view of an embodiment of a safety footwear, according to the invention;

figure 2 is a partially sectioned side view of the footwear of figure 1 which highlights in particular the inner lining configured as a sock.

[0015] With reference to the aforementioned figures, the safety footwear, indicated globally with reference number 10, comprises an upper 2 and a reinforced toe 3.

[0016] In particular, the upper 2 comprises an inner lining 1 configured as a sock, suitable for being fitted, and to which the reinforced toe 3 results connected, for example by stitching, to said inner lining 1.

[0017] Furthermore, such sock-shaped inner lining 1 is sewn to the upper 2 which can be injected or glued to the sole.

[0018] Advantageously the upper 2 and the lining 1 are of the same material.

[0019] Furthermore, the material of the inner lining 1 and of the upper 2 is a breathable material.

[0020] In particular, the inner "sock" lining 1 is in semi-elasticized material in order to improve the fit of the footwear, by improving the adherence to the foot of the wearer.

[0021] In addition, the height of the inner lining 1 of the upper 2 or the height of the upper 2 can vary from just below the malleolus to its total coverage.

[0022] For example, as illustrated in figure 1, the inner lining 1 configured as a sock has a greater height than the upper 2. In the illustrated example, in fact, the inner lining 1 configured as a sock ends at the top just below the user's malleolus while the upper 2 ends at a lower level. The configuration as a sock of the inner lining 1 in fact allows that, in the upper portion, the lining does not need to be supported by the upper 2, such inner lining 1 adhering itself directly to the user's ankle.

[0023] The functioning of the safety footwear is clear and evident from what has been described and it is clear how the inclusion of an inner lining configured as a sock allows reducing the thickness and rigidity of the shoe while guaranteeing a good protection and hold of the foot.

An internal lining configured as a sock allows in fact fitting the foot in a more adherent way and therefore allowing a better hold of the foot, while maintaining the overall shoe less rigid and of reduced thickness, at least in the upper area of the same, around the ankle of the user.

[0024] In practice, it has been observed that the safety footwear according to the present invention performs its task and achieves the set objects since it allows to provide good stability to the foot.

[0025] Another advantage of the safety shoe, according to the invention, lies in the fact of protecting the foot according to the required standards and at the same time being highly comfortable.

[0026] A further advantage of the safety shoe, according to the invention, lies in the fact that it can be light, which makes it suitable for use in hot weather.

[0027] The safety footwear thus conceived is susceptible to several modifications and variations, all falling within the scope of the inventive concept.

[0028] Moreover, all the details can be replaced by technically equivalent elements.

[0029] In practice, the materials used, as long as compatible with the specific use, as well as the dimensions and the contingent shapes, can be of any type according to the requirements.

[0030] The present invention has been described, for illustrative but not limitative purposes, according to its preferred embodiments, but it is to be understood that variations and/or modifications may be made by an expert in the field, without thereby departing from the relative scope of protection, as defined in the appended claims.

Claims

1. Safety footwear (10) comprising an upper (2) and a reinforced toe (3), **characterized in that** said upper (2) comprises an inner lining (1) shaped like a sock, adapted to be fitted.

2. Safety footwear (10) according to claim 1, **characterized in that** said inner lining (1) and said upper (2) are of the same material.

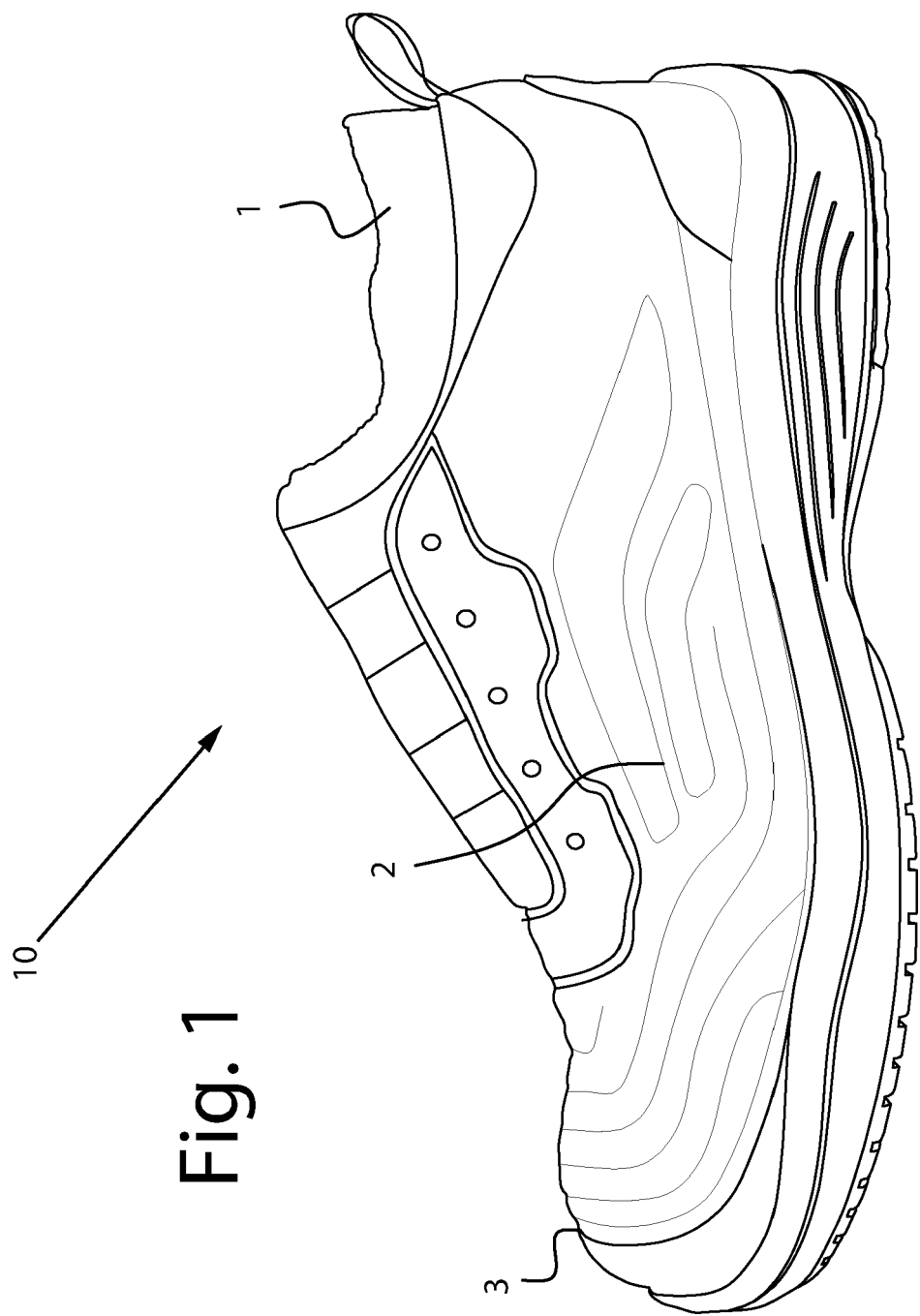
3. Safety footwear (10) according to claims 1 or 2, **characterized in that** said material of said inner lining (1) and of said upper (2) is a breathable material.

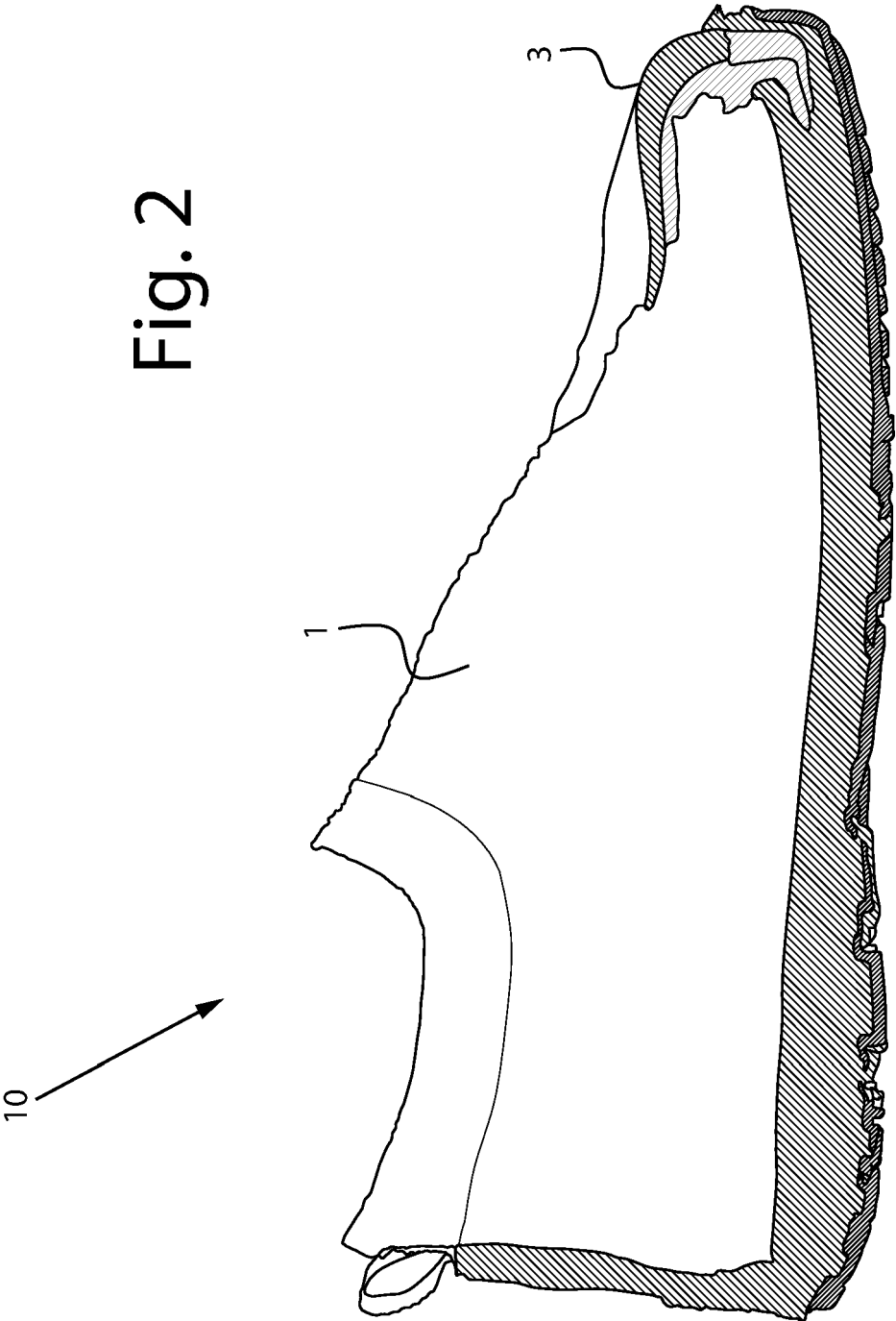
4. Safety footwear (10) according to one or more of the preceding claims, **characterized in that** said inner lining (1) is made of a semi-elasticized material.

5. Safety footwear (10) according to one or more of the preceding claims, **characterized in that** the height of said inner lining (1) of the upper (2) ranges between slightly below the malleolus, to the total coverage of the malleolus.

6. Safety footwear (10) according to one or more of the preceding claims, **characterized in that** it is protective and therefore approved according to ISO 20345: 2011 and similar standards.

7. Safety footwear (10) according to one or more of the preceding claims, **characterized in that** said inner lining (1), shaped like a sock, is sewn to said upper (2), said upper (2) being glued to the sole.







EUROPEAN SEARCH REPORT

 Application Number
EP 20 17 3096

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2009/013555 A1 (VITULLI PARDO [CA]) 15 January 2009 (2009-01-15) * paragraphs [0023], [0026]; claims; figures *	1-7	INV. A43B7/12 A43B7/14 A43B7/32 A43B13/18 A43B21/26 A43B17/16
A	EP 3 469 942 A1 (GARSPORT S R L [IT]) 17 April 2019 (2019-04-17) * paragraphs [0008], [0010], [0025], [0029]; figures *	1-7	
			TECHNICAL FIELDS SEARCHED (IPC)
			A43B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 27 August 2020	Examiner Chirvase, Lucian
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
ON EUROPEAN PATENT APPLICATION NO.

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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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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009013555	A1	15-01-2009	NONE
EP 3469942	A1	17-04-2019	NONE

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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82