

(11) EP 4 124 255 A1

(12)

EUROPEAN PATENT APPLICATION

published in accordance with Art. 153(4) EPC

(43) Date of publication: 01.02.2023 Bulletin 2023/05

(21) Application number: 20896437.9

(22) Date of filing: 01.12.2020

(51) International Patent Classification (IPC): A43B 5/18 (2006.01)

(86) International application number: PCT/ES2020/070751

(87) International publication number: WO 2021/111023 (10.06.2021 Gazette 2021/23)

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

BA ME

Designated Validation States:

KH MA MD TN

(30) Priority: 03.12.2019 ES 201931072

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(54) FOOTWEAR ELEVATION DEVICE FOR MOTORCYCLISTS OR SIMILAR

(57) The present invention discloses a device to be used by motorcyclists, cyclists or the like, wherein said device makes it possible to keep the outside of the rider's foot higher by providing the necessary length in motor-bike stopping manoeuvres and thus achieving a significant improvement in the support and stability of the motorcyclist-motorcycle combination. The device comprises an over-outsole (2) which is arranged on top of the

sole of the wearer's footwear and extends between the metatarsal area and the distal phalanges of the foot, wherein the aforementioned over-outsole (2) has indentations (4) on part of its surface and allows the toe (3) of the device to be vertically adjusted with the over-outsole (2) and extends between the said toe (3) and the outer side (5) of the footwear.

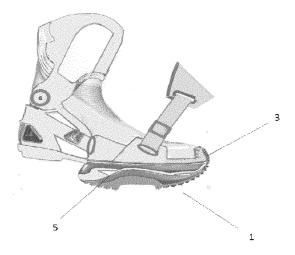


FIG 1

Object of the invention

[0001] The present invention refers to a novel device to be used by motorcyclists, cyclists or the like, wherein said device allows to keep the outside of the rider's foot higher, providing the necessary length and thus achieving an important improvement in the support and stability of the motorcyclist-motorcycle combination, as well as safeguarding the footwear of the motorcyclists, specifically against the rubbing that occurs when placing the footwear on the ground.

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Background of the invention

[0002] The device of the present invention is fitted to the wearer's footwear, allowing to have greater comfort when placing the leg at the moment in which the rider wishes to perform the stopping manoeuvre, as it fundamentally allows the leg to be raised with respect to its original position, giving greater length in the area of contact with the ground, and therefore providing greater stability to the motorcyclist-motorcycle combination.

[0003] In the state of the art there are devices which are incorporated into the footwear of the user of a motorbike or similar which allow the footwear of motorcyclists to be raised or safeguarded, specifically against the friction which occurs when they act on the gear lever of the motorbike. This is as described in the Spanish utility model ES1064879U, which discloses a footwear protector for motorcyclists consisting of a sleeve adaptable to the periphery of the footwear in the front area thereof, between the shank and the toe, specifically in correspondence with the area of incidence of said footwear on the gear lever, acting as a means of physical independence between both elements, that is, footwear and gear lever. The aforementioned sleeve is made of a resistant material, the one intended to come into contact with the gear lever, and a second sector which is elastically deformable that ensures the tight fit and stabilisation of the protector on the periphery of the footwear.

[0004] The utility model ES1021703U discloses a protector for motorcyclists' footwear, intended to prevent premature wear of the footwear due to rubbing or contact with the gearshift handlebars that a good number of motorbikes have when changing gears, characterised essentially in that it comprises an elastic and flexible band joined at its ends and that it is suitable for adapting to any motorcyclist's footwear. The band has a strip of leather or other highly wear-resistant flexible material on one part of its outer surface which, being attached to the band by stitching or similar, is placed on the upper part of the footwear so that it comes into contact with the aforementioned handle every time the rider uses it to change gear, thus protecting the footwear from any contact between the footwear and the aforementioned handle.

[0005] The difference of the present invention with re-

spect to the documents cited above is that these devices only protect the footwear with respect to the action on the lever and are not designed as elements that give length to the area of contact with the ground. As it can be seen in the drawings, the element is arranged on the toe of the footwear and the outer side of the footwear, and the over-outsole of the device has indentations which are specifically designed so as not to hinder the gear shifting and braking manoeuvres without reducing the safety in ground-support manoeuvres.

[0006] Document WO-A-01 35781 describes a footwear item of this type and, more particularly, a motorcycle boot, comprising: a first rigid member defining a body intended to receive the foot of a user and extending in an elongation direction; a second rigid member defining the leg of the boot intended to receive the leg of the user and extending substantially in an elevation direction; a joint connecting the body and the leg of the boot, the said joint allowing the rotation of the leg of the boot with respect to the body in a transverse direction substantially perpendicular to the elongation direction and the elevation direction, in order to allow the bending of the user's foot; stop means comprising a first element attached to the body and a second element attached to the leg of the boot which come into contact with each other to limit the rotation of the leg of the boot relative to the body in the transverse direction within an extreme range of rotation; damping means generating a torque in the transverse direction which opposes the approach of the first and second stop elements.

[0007] This item is included in the footwear and is not an independent element that is incorporated into the footwear, so the result is very robust footwear, which decreases the comfort to the user. The device of the present invention is fitted to the wearer's footwear allowing to have greater comfort when placing the leg at the time in which the rider wishes to perform the stopping manoeuvre. Therefore, the device satisfactorily solves the problem that the user has in manoeuvres where support with the ground or asphalt is necessary, thus improving the distance in the first contact zone without hindering the support of the foot on the footrest when the motorcyclist resumes their march.

45 Description of the drawings

[0008] In order to complement the description being made and for the purpose of encouraging a better understanding of the features of the invention, in accordance with a preferred example of the practical embodiment thereof, a set of drawings is attached as an integral part of said description, in which the following has been represented for illustrative and non-limiting purposes:

Figure 1.- shows a view of the upper part of the device (1) of the invention fitted to the footwear of a motor-cyclist, where it can be seen that the extension of the device (1) is between the toe (3) and the lateral

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end (5).

Figure 2.- shows a view of the lower part of the device (1) where the over-outsole (2) and the indentations (4) can be seen.

Preferred embodiment of the invention

[0009] The present invention discloses a device that allows to be used by motorcyclists or the like in motorbike stopping manoeuvres, wherein the device is fitted to the wearer's footwear allowing to have greater comfort when placing the leg at the moment in which the rider wishes to perform the stopping manoeuvre. This is due to the fact that it fundamentally raises the leg with respect to its original position giving greater length when touching the ground, and therefore providing greater stability to the motorcyclist-motorcycle combination. The device of the present invention avoids having to look for points of support in height such as kerbs, pavements, bollards, etc., to maintain the stability of the motorbike when stationary. [0010] The device (1) is incorporated as an over-outsole (2) of the wearer's footwear, in the forefoot area, starting in the metatarsal area and ending at the distal phalanges (toes), improving the distance to the ground of the rider in the first area of contact with the asphalt or ground, without hindering the support of the foot on the footrest, when the rider resumes their march. The overoutsole (2) has indentations (4) on part of its surface which are specifically designed so as not to hinder gear shifting and braking manoeuvres (pedal) without detracting from its main function.

[0011] The device (1) is fitted to the wearer's footwear by means of an end or toe (3) which is joined to the overoutsole (2) and which allows vertical adjustment of the toe (3) of the device to the over-outsole (2). It extends between the said toe (3) and the outer side (5) of the footwear, with a height of approximately 3 to 4 centimetres on the outer side area (5) of the wearer's foot.

[0012] The device (1) of the present invention makes it possible to improve the safety of the motorcyclist both in stopping manoeuvres and when stationary, as it provides better contact with the ground without the need to bend down, thus avoiding a fall. In addition, the device (1) is designed to be ergonomically integrated into the rider's foot regardless of the footwear used. In addition, it allows to change gear or brake without the additional element hindering the manoeuvre at any time on motor-bikes with manual gearboxes.

[0013] The design of the over-outsole (2) is bevelled and tapered to maximise ground contact surfaces and is made of a non-slip material to facilitate foot support in low-grip areas.

Claims

1. Footwear lifting device for motorcyclists or the like,

characterised in that it comprises an over-outsole (2) which is arranged on the sole of the wearer's footwear and which extends between the metatarsal area and the distal phalanges of the foot, wherein the aforementioned over-outsole (2) has indentations (4) on part of its surface and allows the toe (3) of the device to be vertically adjusted with the overoutsole (2) and which extends between the said toe (3) and the outer side (5) of the footwear.

- 2. Footwear lifting device for motorcyclists or the like according to claim 1, **characterised in that** the device (1) is made of a plastic material.
- 3. Footwear lifting device for motorcyclists or the like according to claim 1, characterised in that the device (1) has a height of approximately 3 to 4 centimetres on the outer side area (5) of the wearer's footwear.
 - **4.** Footwear lifting device for motorcyclists or the like according to claim 1, **characterised in that** the overoutsole (2) is made of a non-slip material.

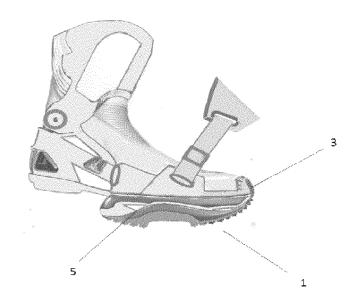


FIG 1

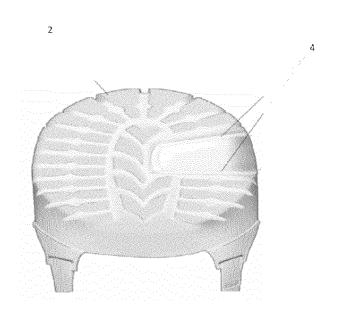


FIG 2

EP 4 124 255 A1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/ES2020/070751

5 A. CLASSIFICATION OF SUBJECT MATTER A43B5/18 (2006.01) According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED 10 Minimum documentation searched (classification system followed by classification symbols) A43B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched 15 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPODOC, INVENES, WPI C. DOCUMENTS CONSIDERED TO BE RELEVANT 20 Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. EP 1554943 A1 (JOLLY SCARPE S P A) 20/07/2005, Α 1-4 description; figures 1 - 18. US 2207091 A (FETTERLING HOWARD H ET AL.) 09/07/1940, A 1-4 25 description; figures 1 - 3. DE 3643057 A1 (BAYERISCHE MOTOREN WERKE AG) 30/06/1988, 1-4 A abstract WPI; figures 1 - 5. 30 US 2005278979 A1 (BRAMANI MARCO) 22/12/2005, 1-4 A description; figures 1 - 6. US D482514S S (WHITTINGTON PETER C) 25/11/2003, A 1-4 figures 1 - 8. 35 ☐ Further documents are listed in the continuation of Box C. See patent family annex. 40 Special categories of cited documents: later document published after the international filing date or "A" document defining the general state of the art which is not priority date and not in conflict with the application but cited to understand the principle or theory underlying the considered to be of particular relevance. earlier document but published on or after the international invention filing date document of particular relevance; the claimed invention document which may throw doubts on priority claim(s) or "X" 45 cannot be considered novel or cannot be considered to which is cited to establish the publication date of another involve an inventive step when the document is taken alone citation or other special reason (as specified) document referring to an oral disclosure use, exhibition, or "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the other means document is combined with one or more other documents, document published prior to the international filing date but such combination being obvious to a person skilled in the art later than the priority date claimed "&" document member of the same patent family 50 Date of the actual completion of the international search Date of mailing of the international search report 07/04/2021 (08/04/2021)Authorized officer Name and mailing address of the ISA/ J. Moreno Rodriguez OFICINA ESPAÑOLA DE PATENTES Y MARCAS Paseo de la Castellana, 75 - 28071 Madrid (España) Facsimile No.: 91 349 53 04 Telephone No. 91 3495556 55

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EP 4 124 255 A1

	INTERNATIONAL SEARCH REPORT Information on patent family members		International application No. PCT/ES2020/070751	
5	Patent document cited in the search report	Publication date	Patent family member(s)	Publication date
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EP 4 124 255 A1

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- ES 1064879 U [0003]
- ES 1021703 U [0004]

• WO 0135781 A [0006]