

(19)



(11)

EP 4 548 798 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
07.05.2025 Bulletin 2025/19

(51) International Patent Classification (IPC):
A45B 3/00 (2006.01) **A45B 9/00** (2006.01)
A45B 9/02 (2006.01)

(21) Application number: **24207372.4**

(52) Cooperative Patent Classification (CPC):
A45B 9/00; A45B 3/00; A45B 9/02;
A45B 2009/002; A45B 2009/007; A45B 2009/025;
A45B 2200/05; A45B 2200/055

(22) Date of filing: **18.10.2024**

(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 ME MK MT NL
NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
GE KH MA MD TN

(27) Previously filed application:
31.10.2023 ES 202331937 U

(71) Applicant: **Tapias Oller, Jordi**
08022 Sarrià-Sant Gervasi Barcelona (ES)

(72) Inventor: **Tapias Oller, Jordi**
08022 Sarrià-Sant Gervasi Barcelona (ES)

(30) Priority: **31.10.2023 ES 202331937 U**

(74) Representative: **Sánchez Paulino, Francisco**
Javier
Madre de dios N23 10J
47011 Valladolid (ES)

(54) **ACCESSORY FOR TREKKING POLES**

(57) The purpose of this invention is an accessory for trekking poles, which makes it possible to link two trekking poles together, so that when the user moves one of them forward, the other moves backward. It comprises

adjustable fastening means (1), configured to be secured on the handle (2.1) of a trekking pole (2), comprising securing means (3) designed to secure a connecting element (4) between both poles (2).

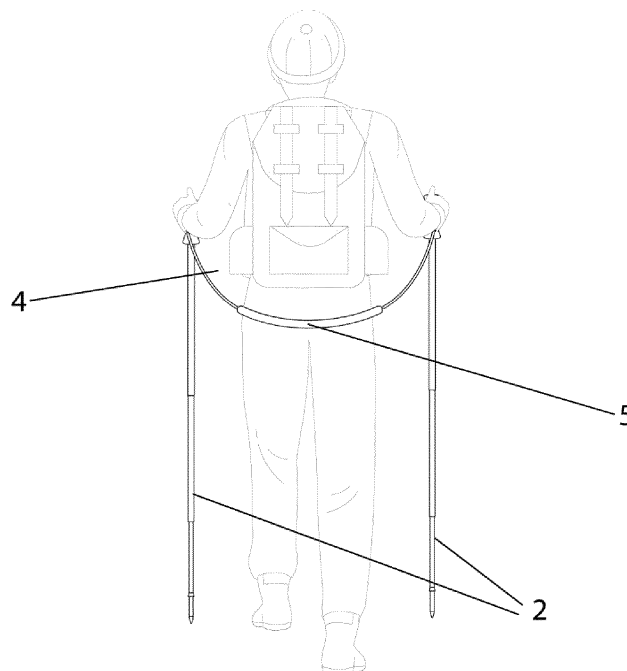


FIG. 1

EP 4 548 798 A1

Description

[0001] The purpose of the invention, as the title indicates, is an accessory for trekking poles, that allows the linking of two trekking poles together enabling one pole to automatically move forward while the other moves backward. This is an innovation that, within the current techniques, provides advantages that were unknown until now.

[0002] This invention is characterised by the special functional and constructive characteristics of the elements that make up the device. They all work together to create an accessory for trekking poles, that interconnects two trekking poles with each other, which move in such a way that when one advances, the other retreats.

TECHNOLOGY SECTOR

[0003] Therefore, this invention falls within the field of trekking accessories.

INVENTION BACKGROUND

[0004] Trekking is an activity that involves walking long distances over varied terrain, such as mountains, trails or forests. During this practice, the most used muscles are those of the legs, especially the quadriceps, glutes and calves. These muscles are subjected to significant stress due to climbing and descending slopes, as well as the need to maintain balance on uneven terrain.

[0005] The limitation of being able to train more muscles than usual during this practice is an important aspect to take into account. Although this physical activity is excellent for strengthening and toning certain muscle groups, it is important to remember that trekking is not specifically designed to train the entire body.

[0006] While trekking can be an excellent way to exercise these muscle groups, the rest of the body should not be neglected. It is important to remember that training should be balanced and cover all muscle groups to avoid imbalances and possible injuries.

[0007] Regarding the present state of technology, it is important to note that, although various designs for trekking poles and accessories are known, none possess identical or similar structural and technical characteristics to those featured in the invention described in this document.

EXPLANATION OF THE INVENTION

[0008] The invention is an accessory for trekking poles designed to link two trekking poles together. As the poles are joined together, when the user moves one of them forward, the other moves backward. This invention provides optimal support during the practice of this sporting activity.

[0009] When using trekking poles, different muscles are used, but above all the triceps, responsible for elbow

extension and the dorsal muscles, predominate. To a lesser extent, the deltoid and biceps muscles are also involved. The latter is mainly responsible for lifting the pole due to its weight.

[0010] The proposed connection of the trekking poles involves greater engagement of the muscle groups involved in arm elevation and elbow flexion, specifically the biceps and shoulder muscles, such as the deltoids, as, in this case, the elevation of the pole with elbow flexion and arm elevation occurs with greater intensity due to the connection mechanism between the two poles.

[0011] The advantage is twofold; on the one hand, it allows for a reduction in the load on the leg muscles, thereby decreasing the risk of injury, and it increases the workload of the upper body, primarily the biceps and deltoids. This makes trekking with poles a more complete and safe exercise.

[0012] Specifically, what the invention proposes, as noted above, is an accessory for trekking poles comprising adjustable fastening means, designed to be secured on the handle of a trekking pole. These fastening means comprise securing elements designed to secure a connecting element linking the two poles.

[0013] The configuration of these fastening and securing means guarantees high stability and resistance, which translates into greater safety for the user. In addition, its adjustable design allows it to adapt to different sizes and models of trekking poles.

[0014] The accessory for trekking poles comprises a protector designed to be placed at the user's lower back, allowing the connecting element to slide along it. The purpose of this protector is to shield the user from the friction generated by the connecting element against the body, while facilitating its movement, preferably occupying the width of the user.

[0015] Depending on the manner in which the invention is carried out, it is possible for the connecting element to be detached from the fastening means and remain free. In technical terms, the connecting element is a fundamental part of this device, since it allows the connection between the two poles. However, depending on how it is designed, it may be necessary to separate it from the fastening means to perform a specific task. In addition, the connecting element is adjustable in length to provide greater customisation and adjustment possibilities for the user.

[0016] Likewise, depending on how the invention is implemented, the protector may be attached to or detached from the user's body. The protector is an accessory used to safeguard the user's body. In some cases, it is necessary for this protector to adhere to the body to fulfil its function. At other times, however, it must be easily detachable from the body.

[0017] Unless otherwise specified, all technical and scientific terms used in this document carry their customary meaning as understood by a person skilled in the relevant field of this invention. When using this invention, processes and materials similar or equivalent to those

described may be used.

BRIEF DESCRIPTION OF THE DRAWINGS

[0018] For the sake of completeness and to enhance comprehension of the invention's features within this description, integral and accompanying figures have been included. The figures are for illustrative purposes and are not limiting. They represent the following:

Figure 1 is a representation of the trekking pole accessory being used by a user viewed from the back.

Figure 2 is a perspective representation in detail of a handle (2.1) of a trekking pole (2) with the trekking pole accessory being used.

PREFERRED USE OF THE INVENTION

[0019] In view of the aforementioned drawings, a preferred, but non-limiting use of the proposed invention, which consists of an accessory for trekking poles, is described below.

[0020] As can be seen in the figures, the accessory for trekking poles, comprises an adjustable fastening means (1), configured to be secured on the handle (2.1) of a trekking pole (2), comprising securing means (3) configured to secure a connecting element (4) between both poles (2).

[0021] On the other hand the accessory for trekking poles, comprises a protector (5) designed to be placed on the user's back, to protect from the friction of the connecting element (4) against the user's body and facilitate its movement.

[0022] Depending on the use, the connecting element (4) is adjustable in length and can be detached from the securing means (3). Likewise, the protector (5) can be attached to and detached from the user's body.

[0023] Having sufficiently described the nature of this invention, as well as how to use it, further explanation is not considered necessary for any expert on the subject to understand its scope and benefits. It is also noted that, within its essential nature, the device may be implemented in other ways which differ from the one described by way of example. The protection sought shall equally apply in these cases, provided that its fundamental principal is not altered, changed or modified.

Claims

1. Accessory for trekking poles, **characterised in that** it comprises an adjustable fastening means (1), configured to be secured on the handle (2.1) of a trekking pole (2), comprising securing means (3) configured to secure a connecting element (4) between both poles (2).

2. Accessory for trekking poles, according to the preceding claim, **characterised in that** it comprises a protector (5) designed to be placed on the user's back, to protect from the friction of the connecting element (4) against the user's body and to facilitate its movement.

3. Accessory for trekking poles, according to the preceding claim, **characterised in that** the protector (5) is attached to and detaches from the user's body.

4. Accessory for trekking poles, according to any of the preceding claims, **characterised in that** the connecting element (4) is detachable from the securing means (3).

5. Accessory for trekking poles, according to any of the preceding claims, **characterised in that** the connecting element (4) is adjustable in length.

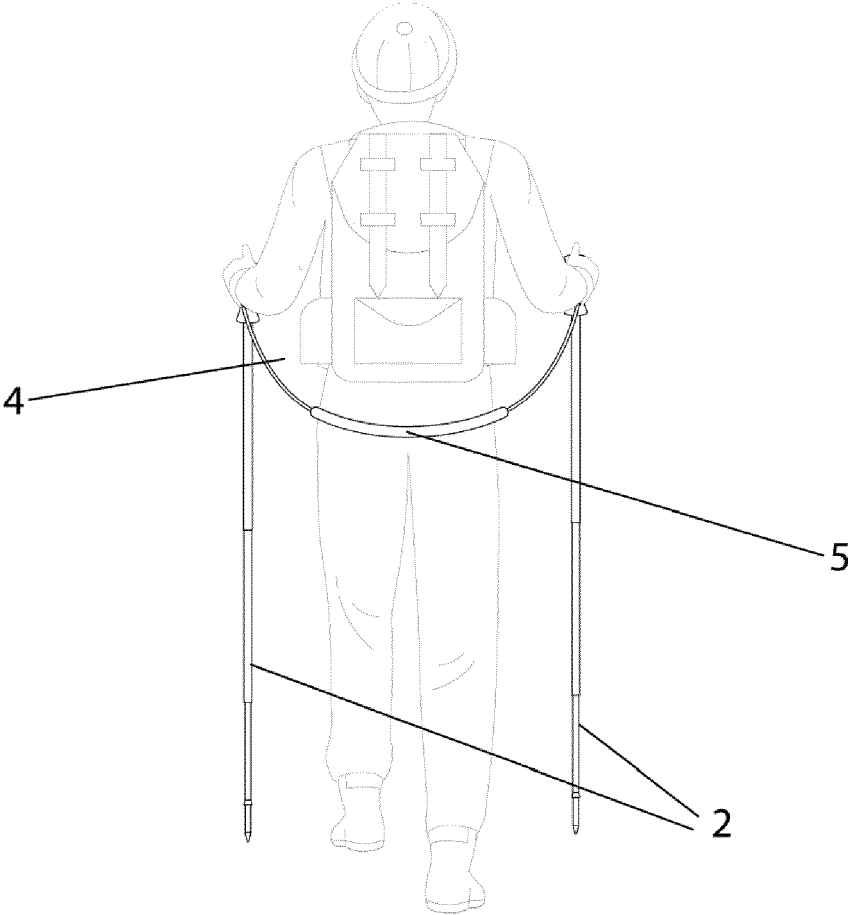


FIG. 1

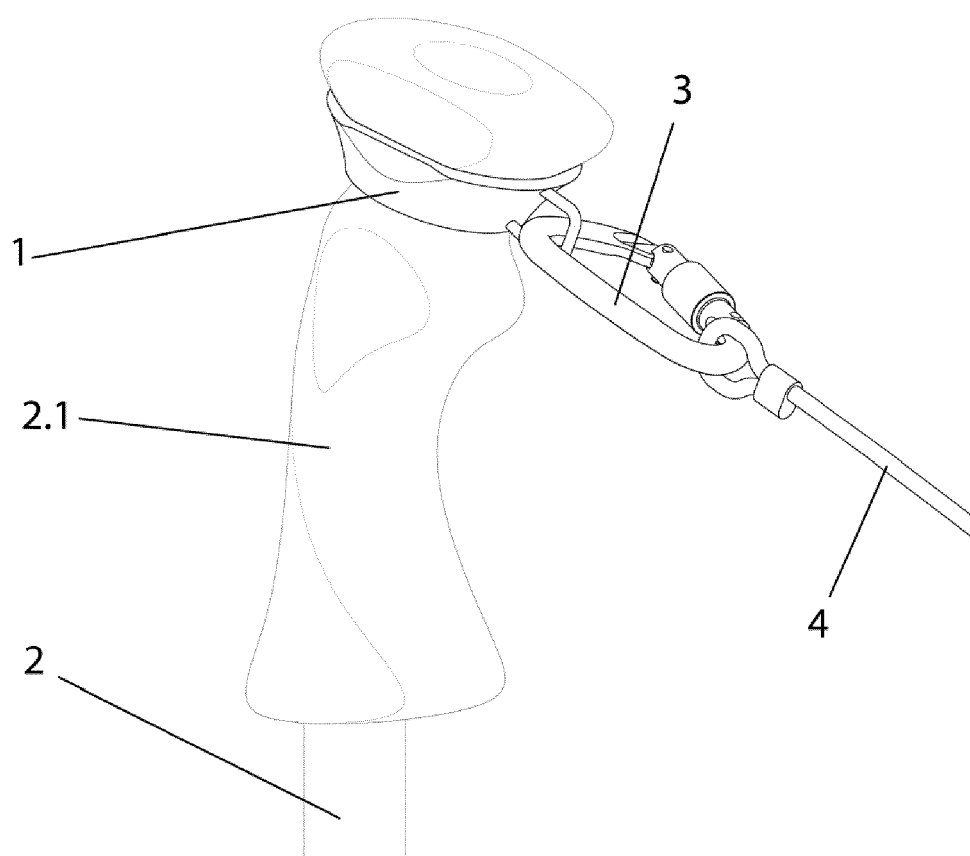


FIG.2



EUROPEAN SEARCH REPORT

Application Number

EP 24 20 7372

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	IT 2021 0002 9426 A1 (LORENZINI NADIA [IT]; MUSURUANA CAMILLA [IT]; TASSELLI SIMONE [IT]) 22 May 2023 (2023-05-22) * page 2, line 5 - line 11 * * page 8, line 8 - page 22, line 8; figures *	1 - 5	INV. A45B3/00 A45B9/00 A45B9/02
X	DE 20 2006 011024 U1 (FINKBEINER MARTIN [DE]; SCHWEIZER HARRY [DE]) 12 October 2006 (2006-10-12) * paragraphs [0002], [0003], [0027] - paragraph [0033]; figures *	1	
A	US 2009/312163 A1 (HERN JAMES L [US]) 17 December 2009 (2009-12-17) * figures *	2,3	
A	US 5 997 443 A (VAN BREEMS MARTINUS [US]) 7 December 1999 (1999-12-07) * figures *	1	
A	DE 41 02 498 A1 (SCHRECK MARIANNE [DE]; SCHRECK JOSEF [DE]) 30 July 1992 (1992-07-30) * figures *	1	TECHNICAL FIELDS SEARCHED (IPC) A45B
A	WO 2020/163487 A1 (THOMAS JOHN LESLIE [US]) 13 August 2020 (2020-08-13) * figures *	1	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 7 March 2025	Examiner van de Beek-Duijker
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	

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 24 20 7372

5

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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07 - 03 - 2025

10

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
IT 202100029426 A1	22-05-2023	-----	
DE 202006011024 U1	12-10-2006	NONE	

US 2009312163 A1	17-12-2009	NONE	

US 5997443 A	07-12-1999	US 5755644 A	26-05-1998
		US 5997443 A	07-12-1999

DE 4102498 A1	30-07-1992	DE 4102498 A1	30-07-1992
		DE 9100968 U1	18-04-1991

WO 2020163487 A1	13-08-2020	US 2020253343 A1	13-08-2020
		WO 2020163487 A1	13-08-2020

30

35

40

45

50

55

EPO FORM P0459

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