

(19)



(11)

EP 4 104 695 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
21.12.2022 Bulletin 2022/51

(51) International Patent Classification (IPC):
A41D 1/04 ^(2006.01) **A41D 27/28** ^(2006.01)
A44B 19/24 ^(2006.01)

(21) Application number: **22178573.6**

(52) Cooperative Patent Classification (CPC):
A41D 1/04; **A41D 27/285**; **A44B 19/24**; A41D 3/00;
A41D 2300/33

(22) Date of filing: **13.06.2022**

(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

(71) Applicant: **UAB It Is Future**
27105 Vilnius (LT)

(72) Inventor: **PODERIS, Vytautas**
10255 Vilnius (LT)

(74) Representative: **Pranevicius, Gediminas**
Law firm IP Forma
Uzupio g. 30
01203 Vilnius (LT)

(30) Priority: **15.06.2021 LT 2021531**

(54) **VENTILATING PROTECTIVE JACKET**

(57) The invention relates to ventilating clothing, in particular to a ventilating jacket, which can be used by athletes, such as motorcyclists, cyclists, etc., and by other professions whose activities require protection from the sun, wind or rain, while ensuring effective ventilation of the jacket. The back area of the ventilating jacket has a rectangular ventilation opening, occupying most of the back area, covered by a cover that can be opened and

closed with cords that control two zippers, installed on opposite side edges of the cover, by which the cover is connected to the jacket. The ventilation opening of the jacket is opened by pulling the ends of the cords in the back pocket of the jacket. The ventilation opening is closed by pulling the opposite ends of the cords in the front pockets of the jacket.

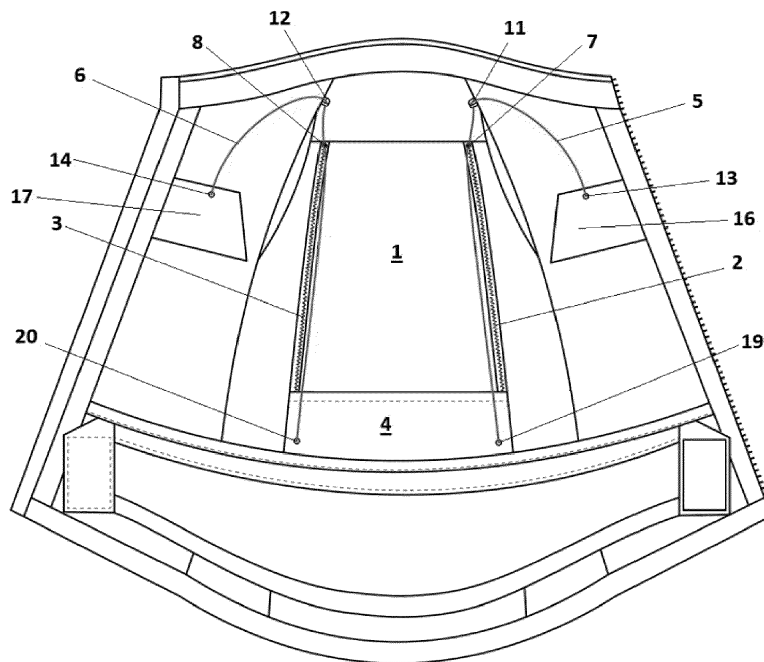


Fig. 3

EP 4 104 695 A1

Description

FIELD OF THE INVENTION

[0001] The invention relates to ventilating clothing, in particular to a ventilating jacket, which can be used by athletes, such as motorcyclists, cyclists, etc., and by other professionals whose activities require protection from the sun, wind or rain, while ensuring effective ventilation of the jacket.

PRIOR ART

[0002] There are many references in the patent literature to ventilated clothing for the protection of its wearer from heat, wind and/or rain. Typically, such garments, including jackets and full-body suits, are made of wind-proof and waterproof upper fabric, and therefore often have ventilation systems of various designs. Their purpose is to ventilate the air gap between the wearer's body and the jacket so that the wearers of such clothes feel comfortable and are protected from excessive amounts of heat and moisture accumulated under the jacket.

[0003] Many solutions have been developed to solve this problem. For example, Japanese Patent Application No. JP2020111850 describes a ventilating motorcycle jacket with a trapezoidal ventilation opening in the back.

[0004] The disadvantage of the present invention is that the motorcyclist cannot open and close the ventilation openings while driving the motorcycle. To do this, he must stop and take off his jacket.

[0005] Another embodiment of a ventilating motorcycle jacket is described in Japanese Patent JP4181516. It describes a motorcyclist's jacket with two elongated downward-pointing rectangular vents on the back, fitted on the left and right sides, which can be opened and closed by appropriate strips controlled by handles fitted in the cut-outs at the front of the jacket. The handles can move up and down along the cut-outs, at the same time moving the opening-closing strips and, at the same time, opening or closing the ventilation openings.

[0006] This variant of the ventilation of the motorcyclist's jacket is advantageous in that the ventilation openings can be controlled without removing the jacket. However, it is believed that two narrow strip-shaped vents in the back may not be sufficient to ensure effective ventilation of the jacket, especially in hot weather.

SUMMARY OF THE PRESENT INVENTION

[0007] The ventilating jacket described in the present invention differs from the prototypes in that it has a rectangular ventilation opening in the back area occupying most of the back area, covered by a cover that can be opened and closed with cords that control two zippers by which the cover is attached to the jacket fitted at opposite sides of the cover. To open the vent, the wearer of the jacket has to pull the ends of the cords in the back

pocket of the jacket. To close the vent, the wearer of the jacket has to pull the opposite ends of the cords in the pockets on the front of the jacket.

[0008] Because the cords are tied to the zippers, pulling the cords also pulls on the cover zippers, which either open or close the vent on the jacket. The ventilation system of this design allows it to be operated without removing the jacket.

10 DESCRIPTION OF DRAWINGS

[0009] The invention will now be described in more detail with reference to the accompanying drawings, in which:

Fig. 1 is a back view of the ventilating jacket;
Fig. 2 is a front view of the ventilating jacket;
Fig. 3 is an unfolded view of the ventilating jacket from the inside.

20 DETAILED DESCRIPTION OF THE INVENTION

[0010] Protective jackets are usually made of wind-proof and waterproof material, so very often they are equipped with ventilation openings to maintain the optimal temperature inside the jacket and to protect the wearer of the jacket from overheating. As shown in Fig. 1, which is a rear view of a ventilating jacket, the ventilating jacket of the present invention has a rectangular ventilating opening, occupying most of the back area, covered by an outer cover 1 made of the same material as the jacket.

[0011] The cover 1 is fastened to the jacket by zippers 2 and 3, which are arranged on opposite - left and right - side edges of the cover 1, connecting the cover 1 with the jacket. The zippers 2 and 3 are arranged so that they can be opened from the top down, at the same time unfastening the cover 1 of the jacket's ventilation opening. The opened and lowered down cover 1 can be hidden in the back pocket 4 of the jacket.

[0012] The opening and closing of the cover 1 is effected by two cords 5 and 6 which are fixed at their midpoints to the ends 7 and 8 of the zippers 2 and 3, as shown in Fig. 2 and 3. The first ends 9 and 10 of the cords 5 and 6, pierced through loops 11 and 12 above the zippers 2 and 3, are led through openings 13 and 14 into the front pockets 15 and 16 of the jacket, and the second ends 17 and 18 of the cords 5 and 6 are led through the openings 19 and 20 in the back pocket 4 of the jacket below the zippers 2 and 3 into the back pocket of the jacket 4.

[0013] To lower the jacket ventilation cover 1 and expose the ventilation opening, the wearer must pull down the ends 17 and 18 of the cords 5 and 6 in the back pocket 4 of the jacket. Since the cords 5 and 6 are fixedly attached to the ends 7 and 8 of the zippers 2 and 3 by their midpoints, pulling down the ends 17 and 18 of the cords 5 and 6 pierced through the openings 19 and 20 will also

move down the heads 7 and 8 of the zippers 2 and 3, thus opening the zippers 2 and 3, and together with them the cover 1, thus exposing the ventilation opening of the jacket. The lowered cover 1 will be hidden in the back pocket 4 of the jacket.

5

[0014] To raise the jacket cover 1 and close the ventilation opening, the wearer of the jacket must pull down the ends 9 and 10 of the cords 5 and 6 in the front pockets 15 and 16 of the jacket. As the cords 5 and 6 are pierced through the loops 11 and 12, arranged above the upper ends of the zippers 2 and 3, by pulling the ends 9 and 10 of the cords 5 and 6 down, the midpoints of the cords fixed to the heads 7 and 8 of the zippers 2 and 3 will rise up, and together with them - the ventilation cover 1, thus covering the ventilation opening of the jacket.

10

15

[0015] The jacket of the described construction has the advantage of enabling the wearer to control the ventilation of the jacket, i.e. open or close the ventilation opening on the back of the jacket without pulling off the jacket.

[0016] The ventilation opening of the jacket is internally covered with a mesh material under the cover 1, which is not an object of the present invention and is not shown in the figures for the sake of clarity of construction.

20

25

Claims

1. A ventilating protective jacket made of a wind and waterproof material having a ventilation opening in the back area, a ventilation opening cover and means for opening and closing the cover, **characterized in that** the ventilation opening cover (1) has two side zippers (2, 3), separately connecting the cover (1) to the jacket, controlled by two opening-closing cords (5, 6) of the zippers (2, 3), fixed to the ends (7, 8) of the zippers (2, 3) of the cover (1) by their midpoints, wherein the first ends (9, 10) of the cords (5, 6) pierced through the loops (11, 12) arranged above the zippers (2, 3) are led through openings (13, 14) into the front pockets (15, 16) of the jacket, and the second ends (17, 18) of the cords (5, 6) are led into the back pocket (4) of the jacket through the openings (19, 20) below the zippers (2, 3).

30

35

40

45

50

55

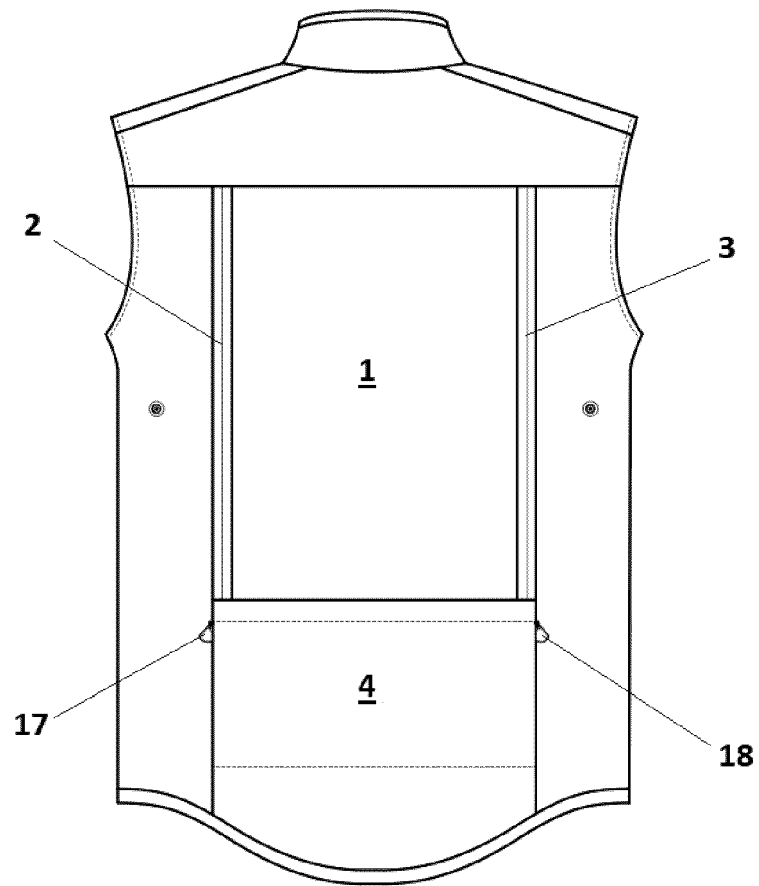


Fig. 1

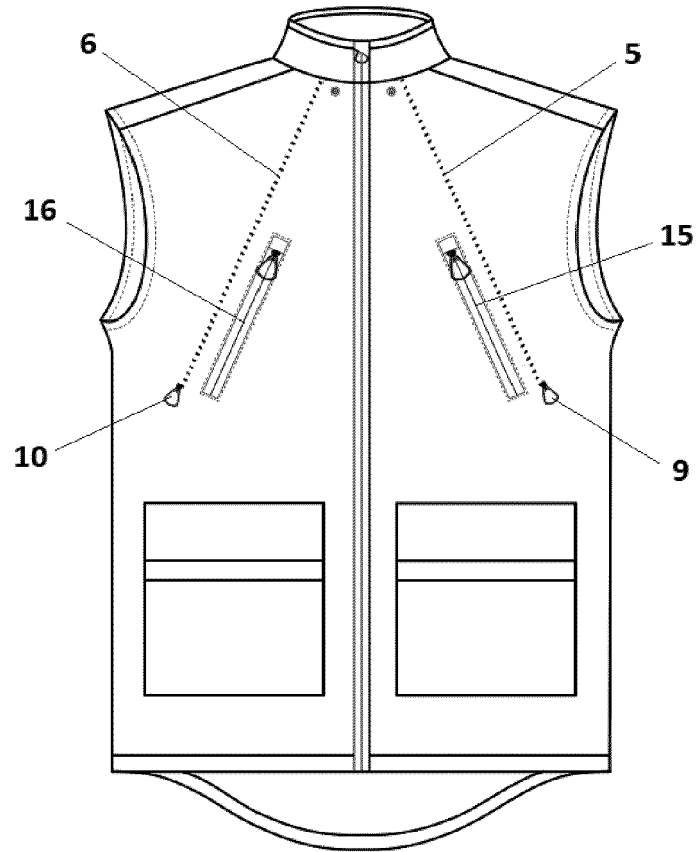


Fig. 2

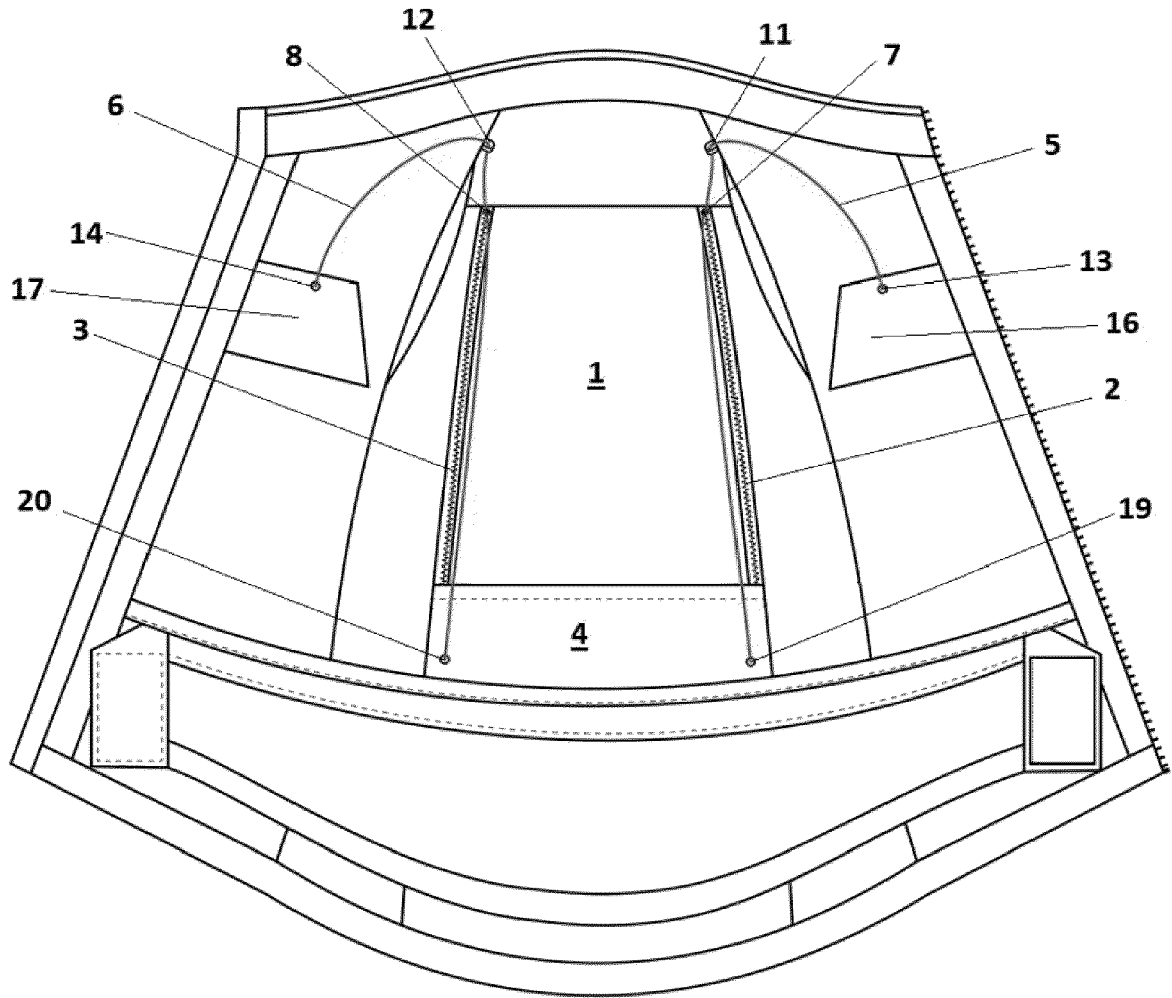


Fig. 3



EUROPEAN SEARCH REPORT

Application Number
EP 22 17 8573

5

DOCUMENTS CONSIDERED TO BE RELEVANT

10

15

20

25

30

35

40

45

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A, D	JP 2020 111850 A (GOLDWIN INC; GOLDWIN TECHNICAL CENTER KK) 27 July 2020 (2020-07-27) * figures 4a, 4b *	1	INV. A41D1/04 A41D27/28 A44B19/24
A	US 7 171 695 B2 (HARLEY DAVIDSON MOTOR CO INC [US]) 6 February 2007 (2007-02-06) * figures 1, 4 *	1	

50

55

1

The present search report has been drawn up for all claims

50

EPO FORM 1503 03.82 (P04C01)

Place of search The Hague	Date of completion of the search 30 September 2022	Examiner Krüger, Sophia
-------------------------------------	--	-----------------------------------

55

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 22 17 8573

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.

30-09-2022

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2020111850 A	27-07-2020	JP 6956754 B2 JP 2020111850 A	02-11-2021 27-07-2020
US 7171695 B2	06-02-2007	NONE	

EPO FORM P0459

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

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- JP 2020111850 B [0003]
- JP 4181516 B [0005]