



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
09.12.2015 Bulletin 2015/50

(51) Int Cl.:
A62B 35/00 (2006.01) A62B 35/04 (2006.01)

(43) Date of publication A2:
30.04.2014 Bulletin 2014/18

(21) Application number: **13190838.6**

(22) Date of filing: **11.12.2006**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

(71) Applicant: **Checkmate Limited**
Sheerness
Kent ME12 1PZ (GB)

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
06820485.8 / 2 091 615

(72) Inventor: **Dawson, Brian**
Carrickfergus, Co Antrim BT38 8QL (GB)

(74) Representative: **Dummett Copp LLP**
25 The Square
Martlesham Heath
Ipswich IP5 3SL (GB)

(54) **Fall arrest harness**

(57) The present invention relates to a fall arrest harness for persons working at height, and in particular a fall arrest harness for reducing the risk of suspension trauma. The fall arrest harness comprises a pair of leg straps (12,13) for encircling the thighs of a wearer, a first and a second shoulder strap (5,4), a lanyard connection member (18) separately connected to the shoulder straps via one or more extension straps (16,17), and a rear section that extends between the leg straps and the shoulder straps. The rear section has a seat portion (2) and a back portion (3). The first and second shoulder straps extend from, respectively, left and right side regions of the seat portion (2) and over left and right shoulders to an upper region of the back portion (3). The lanyard connection member (18) is releasably attachable to the back portion (3) at a dorsal position by releasable securing means (21,22) and is detached from the back portion (3) when a tensile force applied to the lanyard connection member (18) exceeds a predetermined threshold. In the event of a fall the lanyard connection member (18) separates from the back portion, causing the one or more extension straps (16,17) and the lanyard connection member (18) to move automatically to a sternal suspension position to suspend the wearer from both shoulder straps in a supine position with the weight of the wearer being borne by the seat portion (2) and the back portion (3) of the rear section and being transferred to the lanyard connection member (18) via both shoulder straps and the one or more extension straps (16,17) with none of the weight being transferred by the leg straps.

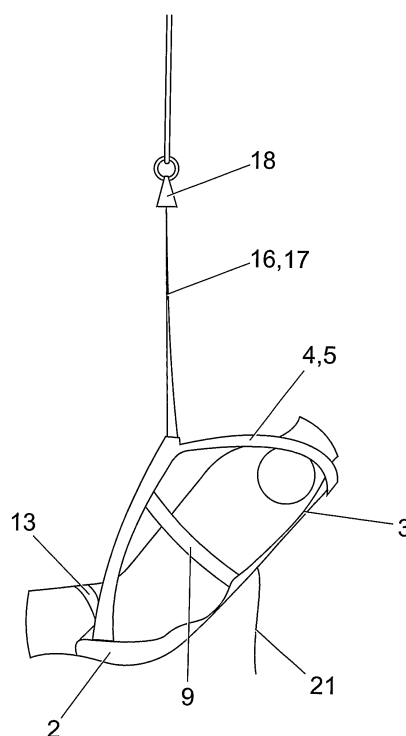


Fig. 5



EUROPEAN SEARCH REPORT

Application Number
EP 13 19 0838

5

10

15

20

25

30

35

40

45

50

55

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|--|--|----------------------------------|---|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
| A | US 2006/169534 A1 (GREEN SHERRY J [US]) 3 August 2006 (2006-08-03) * figure 1 * * paragraphs [0007], [0061] - [0062], [0065], [0070], [0078] * ----- | 1-15 | INV. A62B35/00 A62B35/04 |
| A | US 6 374 946 B1 (PETZL PAUL [FR] ET AL) 23 April 2002 (2002-04-23) * figures 5-11 * * column 2, line 57 - column 3, line 39 * ----- | 1-15 | |
| A | FR 2 743 303 A1 (SUP AIR [FR]) 11 July 1997 (1997-07-11) * figures 1-2,4 * * page 4, lines 13-19 * * page 7, lines 1-5 * ----- | 1-15 | |
| | | | TECHNICAL FIELDS SEARCHED (IPC) |
| | | | A62B |
| The present search report has been drawn up for all claims | | | |
| Place of search | | Date of completion of the search | Examiner |
| The Hague | | 4 November 2015 | Paul, Adeline |
| 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 | | | |

2

EPO FORM 1503 03/82 (P04C01)

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

EP 13 19 0838

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.

04-11-2015

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|----------------------------|---------------------|
| US 2006169534 A1 | 03-08-2006 | US 2006169534 A1 | 03-08-2006 |
| | | US 2012018248 A1 | 26-01-2012 |
| US 6374946 B1 | 23-04-2002 | CA 2313944 A1 | 16-01-2001 |
| | | DE 60020780 D1 | 21-07-2005 |
| | | DE 60020780 T2 | 16-03-2006 |
| | | EP 1068880 A1 | 17-01-2001 |
| | | ES 2242591 T3 | 16-11-2005 |
| | | FR 2796297 A1 | 19-01-2001 |
| | | JP 2001054580 A | 27-02-2001 |
| | | US 6374946 B1 | 23-04-2002 |
| FR 2743303 A1 | 11-07-1997 | NONE | |