



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
09.02.2011 Bulletin 2011/06

(51) Int Cl.:
A45F 5/02 (2006.01)

(21) Application number: **09166677.6**

(22) Date of filing: **29.07.2009**

(84) Designated Contracting States:
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 SE SI SK SM TR
Designated Extension States:
AL BA RS

• **Engström, Petra**
192 48, SOLLENTUNA (SE)
• **Falcone-Borg, Louise**
192 77, SOLLENTUNA (SE)

(71) Applicant: **Snickers Workwear AB**
191 29 Sollentuna (SE)

(74) Representative: **Somlo, Tommy**
AWAPATENT AB
P.O. Box 11394
404 28 Göteborg (SE)

(72) Inventors:
• **Akhavan, Sergio**
114 20, STOCKHOLM (SE)

(54) **A tool holder arrangement and a method of arranging a tool or a tool storing device to the tool holder arrangement**

(57) The invention discloses a tool holder arrangement (40) comprising a carrier (1), such as a garment, a securing element (4) arranged to the carrier (1), and a strap (5) fixed to the carrier (1) at a first location of fixation (7) and at a second location of fixation (6), wherein said securing element (4) is at least partly covered by said strap (5). Said securing element (4) is spaced at a first distance from said first location of fixation (7) and at a second distance from said second location of fixation (6), wherein said first distance is shorter than said second distance. Furthermore, a method of arranging a tool or a tool storing device (8) to said tool holder arrangement being disclosed.

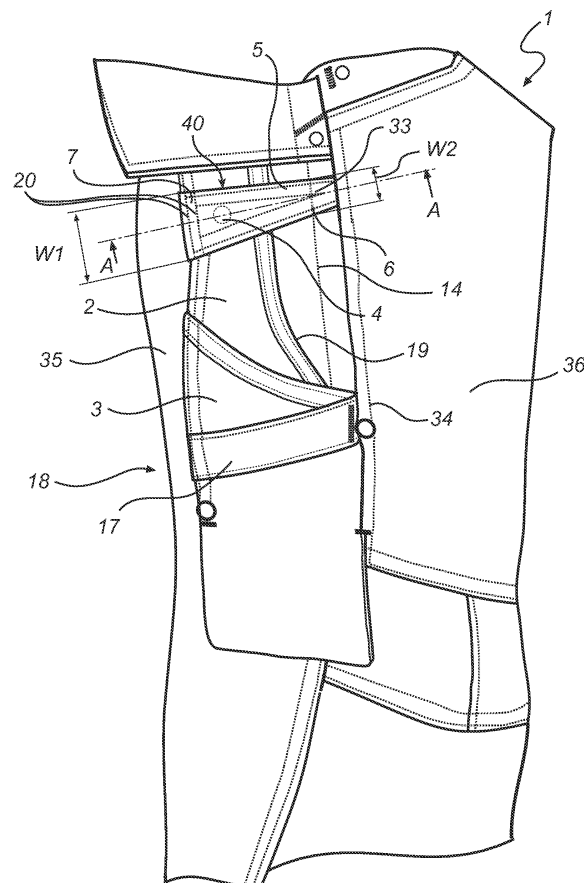


Fig. 3

Description

Field of the Invention

[0001] The present invention relates to a tool holder arrangement comprising a carrier, such as a garment, a securing element arranged to the carrier, and a strap fixed to the carrier at a first location of fixation and at a second location of fixation, wherein said securing element is at least partly covered by said strap. Furthermore the present invention relates to a method of arranging a tool or a tool storing device to said tool holder arrangement.

Technical Background

[0002] Work wear such as trousers and vests are used daily by craftsmen and building construction workers such as carpenter, roofers etc. It is common practise to arrange pockets, straps and other fasteners to the work wear to enable tools to be stored and carried around when not used. The tool should suitably be easy to access and easy to release from its location. Today, there are for example knives stored in a knife holder, which may be arranged to a button on the work wear. The button penetrates through an opening in the knife holder and the knife and its holder are in this way secured on the work wear. A strap may be arranged to cover the button to prevent the button from accidentally scratching or otherwise damaging surfaces of adjacent structures such as walls, doors, ledges, etc. This is illustrated in Fig. 1. However, it has been noticed that during the process of taking the knife out from its holder, the holder is starting to rotate around the button, which affects the release of the knife.

[0003] Therefore there is still a need for a tool holder, which enables stability when releasing a tool from its storing position.

Summary of the Invention

[0004] The object of the present invention is to provide a tool holder arrangement that overcomes the above drawback.

[0005] The invention is based on the insight that a protective covering strap may be given additional functions. In particular, the inventors have realized that a protective covering strap may also be used to stabilize a tool when being released from a button or other securing element.

[0006] Hence, the invention according to claim 1 discloses a tool holder arrangement comprising a carrier, such as a garment, a securing element arranged to the carrier, and a strap fixed to the carrier at a first location of fixation and at a second location of fixation, wherein said securing element is at least partly covered by said strap. Said securing element is spaced at a first distance from said first location of fixation and at a second distance from said second location of fixation, wherein said first

distance is shorter than said second distance. By having the securing element offset, i.e., closer to one of said locations of fixation, it becomes easier to slide an object such as a tool or tool storing device under the strap. In fact, this allows relatively thick portions of the object to be slid under the strap, such as pivotable locking parts which may be arranged to pinch the strap, whereby the object, which is going to be arranged to the securing element, becomes more stable in use, i.e. prevented from rotating around the securing element. Furthermore, by having the securing element closer to one location of fixation, it is possible to arrange other tools next to the object which is being attached to the tool holder arrangement. This may also stabilize the object.

[0007] Advantageously, said securing element may comprise an attachment portion to enable attachment to said carrier and a securing portion, projecting from said carrier, wherein the whole securing portion is located within half the distance from said first location of fixation to said second location of fixation. This to make sure that the securing portion of the securing element is arranged at different distances from the locations of fixation.

[0008] The carrier may comprise a first main carrier portion, and a second carrier portion, which is smaller than said first main carrier portion, arranged on said first main carrier portion, wherein said securing element is arranged on said second carrier portion and wherein, at the first location of fixation, said strap is arranged on at least said second carrier portion and, at said second location of fixation, the strap is arranged on said first main carrier portion in such a way that the strap extends over said second carrier portion.

[0009] Advantageously, said first main carrier portion is part of a garment and said second carrier portion is a pocket on said part of said garment. It is an advantage to place the different parts of the tool holding arrangement on a pocket and letting the strap protrude over the pocket. The pocket is often placed in an appropriate position on the trousers, when it comes to the handling of the parts, which are going to be placed in the pocket. This position is also an appropriate position for the tool holding arrangement.

[0010] The ratio of said first distance to said second distance may be 0.9-0.1, suitably 0.5-0.1. The first distance may be 5-40mm, suitably 10-30mm or for instance 10-15mm. The second distance may be 50-100mm, suitably 60-90mm, or for instance 65-80mm.

[0011] Suitably, said strap may have a length between said first location of fixation and said second location of fixation which is 1-20% longer, suitably 8-12% longer than the distance between said first location of fixation and said second location of fixation. By having the strap longer than the distance between the first location of fixation and the second location of fixation it is easier to slide a tool or a tool storing device through the strap in order to arrange it to the securing element and it also makes it possible to arrange another tool next to the tool or the tool storing device which may be arranged to the

tool holder arrangement.

[0012] Said strap may have a width at said first location of fixation which is 35-55mm, suitably 40-50mm. This width has been found suitable for receiving commercially available knife holders with pivotable locking parts. This width does not only allow the pivotable locking part to be easily slid under the strap, but also to effectively pinch the strap afterwards when the locking part is closed. Said strap may have a width at said second location of fixation which is 10-55mm, suitably 15-35 mm. This width also facilitates that sliding of a tool or tool storing device under the strap.

[0013] Suitably, said securing element may comprise an attachment portion to enable attachment to said carrier and a securing portion, projecting from said carrier, wherein said securing portion comprises at least one flange. By having a flange as a securing portion an ordinary button, for example a jeans rivet button may be used. Ordinary jeans rivet buttons are easy to fasten and cost effective.

[0014] As indicated above, the tool holder arrangement described above may be used in combination with a tool or a tool storing device which comprises an attachment recess, adapted to be engaged by said securing element and a pivotable locking part, which has a closed position in which it covers another part of the tool or tool storing device, and an open position in which said another part is uncovered, and said pivotable locking part is adapted to pinch said strap between said locking part and said another part of said tool or said tool storing device.

[0015] A method of arranging a tool or a tool storing device to said tool holder arrangement may comprises the following steps:

- sliding a tool or a tool storing device through said strap, said tool or tool storing device comprising
 - o an attachment recess adapted to be engaged by said securing element and
 - o a pivotable locking part, which has a closed position in which it covers another part of the tool or tool storing device, and an open position in which said another part is uncovered,
- arranging said tool or tool storing device to said securing element by engaging said attachment recess of said tool or said tool storing device with said securing element,
- pivoting said locking part over said strap into said closed position.

[0016] By arranging a tool storing device with these features on the tool holder arrangement the tool storing device is extra secured and stabilized to the tool holder arrangement which makes it easier to release the tool from the tool storing device when it is needed. Similarly, a tool with these features is also extra secured and stably arranged to the tool holder arrangement.

[0017] Generally, all terms used in the claims are to

be interpreted according to their ordinary meaning in the technical field, unless explicitly defined otherwise herein. All references to "a/an/the [element, device, component, means, step, etc]" are to be interpreted openly as referring to at least one instance of said element, device, component, means, step, etc., unless explicitly stated otherwise. The steps of any method disclosed herein do not have to be performed in the exact order disclosed, unless explicitly stated.

[0018] Other objectives, features and advantages of the present invention will appear from the following detailed disclosure, from the attached dependent claims as well as from the drawings.

Brief Description of the Drawings

[0019]

Fig. 1 shows a pocket area according to prior art.

Fig. 2 shows a pair of work wear trousers with a pocket area having a tool holder arrangement according to at least one example embodiment of the invention. Fig. 3 shows an enlarged view of the pocket area in fig. 2.

Fig. 4 shows cross-section A-A in fig. 3.

Fig. 5 shows the tool holder arrangement in combination with a tool storing device which is attached to the securing element of the tool holder arrangement. Fig. 6 shows cross-section B-B in fig. 5.

Fig. 7 shows the tool holder arrangement and the tool storing device in fig. 5 with the tool storing device also attached to the strap of the tool holder arrangement.

Fig. 8 shows the tool holder arrangement according to at least a second example embodiment of the invention in combination with a tool storing device which is attached to the tool holder arrangement by being attached to the securing element and the strap of the tool holder arrangement.

[0020] All the figures are highly schematic, not necessarily to scale, and they show only parts which are necessary in order to elucidate the invention, other parts being omitted or merely suggested.

Detailed Description of the Drawings

[0021] The above, as well as additional objects, features and advantages of the present invention, will be better understood through the following illustrative and nonlimiting detailed description of example embodiments of the present invention, with reference to the appended drawings, where the same reference numerals will be used for similar elements.

[0022] Fig. 1 shows prior art. It shows a part of a pair of work wear trousers 1 with pockets 22, 23. The first pocket 22 is arranged to the trousers 1. The second pocket 23 is arranged on the first pocket 22. An ordinary jeans

button rivet 24 (shown as a dashed outline) is arranged on the first pocket 22. The button 24 is covered by a strap 25. The strap 25 is fastened on both sides of the pocket 22. The first pocket 22 has a pocket opening 29. The opposite end 30 of the pocket 22 is closed. One end of the strap 25 is fixed at said opposite end 30 to form a first location of fixation 27 and the other end of the strap 25 is fixed at the pocket opening 29, to form a second location of fixation 26. The strap 25 is on both sides fixed on the pocket 22 by a seam, which may be the same seam as the one attaching the pocket 22 to the trousers 1. The button 24 is arranged in the middle between the two locations of fixation 26, 27, i.e. the length L1' between the centre of the button 24 and the first location of fixation 27 and the length L2' between the centre of the button 24 and the second location of fixation 26 is the same. A knife holder, which stores a knife, is usually attached to the button 24 (not shown).

[0023] Fig. 2 shows a carrier exemplified as a pair of work wear trousers 1 with a pocket area 18.

[0024] Fig. 3 shows a close-up of the pocket area 18 on the trousers 1 in fig 2, with a tool holder arrangement 40. The tool holder arrangement 40, which will be described in more detail hereinafter, comprises a carrier 1, here the trousers 1 and part of the pocket area 18, a securing element 4 and a strap 5 covering the securing element 4 (shown as a dashed circular line).

[0025] The pocket area 18 is arranged to the backside part 35 of a pair of work wear trousers 1 close to the front side part 36, to avoid that the person using the trousers sits on the parts, which may be stored in the pockets in the pocket area 18. The backside part 35 is connected to the front side part 36 by a seam 34. The pocket area 18 comprises two pockets 2, 3. The first pocket 2 is arranged to the backside part 35 and the second pocket 3 is arranged on said first pocket 2. On the second pocket 3 a band 17 is attached, which may be used to prevent tools, which are being arranged to the tool holder arrangement 40, from swinging back and forth when the trousers are being used.

[0026] The above may also be described as follows: The carrier 1, i.e. the trousers 1, which is part of the tool holder arrangement 40 comprises a first main carrier portion 35, i.e. here the backside part 35 and a second carrier portion 2, i.e. here a pocket 2, which is smaller than the first main carrier portion 35. The first main carrier portion 35 is not limited to be the backside part 35 of the trousers, it may for example be the front side part 36 when the carrier is a pair of trousers. It shall also be noted that the carrier 1 may, as an alternative, only comprise one portion, for example the main carrier portion or the second carrier portion.

[0027] Further, the carrier 1 is not limited to be a pair of work wear trousers, it may be a vest, a bag, a toolbox or anything which is suitable to be part of the tool holder arrangement. However, hereinafter the carrier 1, the main carrier portion 35 and the second carrier portion 2 will be referred to as a pair of trousers 1, the backside

part 35 and the first pocket 2, therefore they have been given the same reference numbers.

[0028] The first pocket 2 is so designed that it has a pocket depth in the leg direction of the trousers. However, a pocket opening 19 is arranged in the direction towards the front side part 36 of the trousers. The pocket 2 has also depth direction in the opposite direction of the pocket opening, i.e. in the backside part 35 direction. However, this depth is essentially smaller than the pocket depth in the leg direction. It shall be noted that the pocket is not limited to have this design.

[0029] On the first pocket 2 is a securing element 4 arranged, here in the form of an ordinary jeans rivet button. Hereinafter the securing element 4 will only be referred to as button 4. The button 4 has a mushroom shape, where the foot and the head are protruding from the pocket. However, the securing element is not limited to be a jeans rivet button or a button at all. It may be any kind of securing element appropriate for the application. Suitably, it has an attachment portion 42 (see fig. 4), here it is part of the foot, which attaches the securing element to the pocket 2 and a securing portion 41, (see fig. 4) here the head. The securing portion 41 may for example be a flange or several flanges protruding from the foot in such a way that the securing element gets a T-shape or L-shape instead of a mushroom shape or a quick snap securing element. The securing element may be made of metal or plastic or any other material suitable for the application. As an alternative, the securing element may be a recess into which a protruding part on the object, which is going to be arranged to the tool holder arrangement 40 may engage. The button is not limited to be attached to a pocket, it may be arranged anywhere on the trousers. Furthermore, in addition to the above described securing element, the carrier, such as a pair of trousers, may have other securing elements as well. For instance, at another location of the trousers a securing element may even be attached to another strap, in such a way that the element is facing the trousers.

[0030] As illustrated in the drawings, the button is covered by a strap 5. One end of the strap 5 is fastened to the pocket 2. It is arranged to the end, which is opposite the pocket opening 19, by a seam 20. Seam 20 is the same seam which is attaching the first pocket 2 to the backside part 35. This seam 20 forms the first location of fixation 7. The second end of the strap 5 is fastened in a second location of fixation 6 which is in the pocket opening 19 direction. The second location of fixation 6 is so positioned that the strap 5 extends over the pocket opening 19. Here, the second location of fixation 6 is at seam 14, which is a seam for decorative purposes. Seam 14 attaches here the strap to its second location of fixation 6 and is strengthened by a staggered seam 33 since at this position the fabric is only in one layer. The locations of fixation 6, 7 are however not limited to these positions. In order to make the strap 5 more stable, the strap 5 is extended and fastened also under the front side part 36 at the seam 34, which connects the backside part 35 with

the front side part 36. The button 4 is arranged between both locations of fixation 6, 7. However, the distance L_1 between the centre of the button 4 and the first location of fixation 7 and the distance L_2 between the centre of the button 4 and the second location of fixation 6 is different (see Fig. 4). The strap 5, which is tapered, has a width W_1 that is larger at the first location of fixation 7 than the width W_2 at the second location of fixation 6. The width W_1 at the first location of fixation 6 is here exemplified as 45mm. The width W_1 may however be larger or smaller, for instance anywhere between 35-55mm, suitably between 40-50mm. The width W_2 at the second location of fixation 6 is here exemplified as 25mm. It may however be wider or narrower, for instance anywhere between 10-55mm, suitably 15-35 mm.

[0031] Fig. 4 shows cross section A-A in fig. 3. The button 4 is arranged to the first pocket 2. The strap 5 is covering the button 4 and the strap 5 is arranged on both sides of the button 4. On one side the strap 5 is arranged to the pocket 2 and the backside part 35 by seam 20 forming the first location of fixation 7 and on the other side only to the backside part 35 by seam 33 forming the second location of fixation 6. The distance L_1 between the centre line X of the button 4 and the first location of fixation 7 and the distance L_2 between the centre of the button 4 and the second location of fixation 6 is different. The distance L_1 is shorter than the distance L_2 . The distance L_1 between the button 4 and the first location of fixation 7 and the distance L_2 between the button 4 and the second location of fixation 6 does not have to be measured at the centre line X of the button. It may be measured from the first or second location of fixation to the periphery of the head of the button or the periphery of the foot of the button. The distances may be measured at the shortest distance between the locations of fixation 6, 7 and the button 4. The distance, i.e. the first distance L_1 between the button 4 and the first location of fixation 7 is here exemplified as 15mm. However, the distance may be longer or shorter, for instance anywhere between 5-40mm, suitably 10-30mm or for instance between 10-15mm. The distance, i.e. the second distance L_2 between the button 4 and the second location of fixation 7 is here exemplified as 70mm. However, the distance may, for instance, be anywhere between 50-100mm, suitably 60-90mm or for instance between 65-80mm. The ratio of said first distance L_1 to said second distance L_2 may, for instance, be anywhere between 0.9-0.1, suitably 0.5-0.1.

[0032] Advantageously, the whole button 4 is arranged on one side of the centre line Y between the two locations of fixation 6,7. Or at least the mushroom head of the button i.e. the securing portion 41 of the button 4, is located within half the distance from the first location of fixation 7 to the second location of fixation 6. The length of the strap 5 between the first location of fixation 7 and the second location of fixation 6 is preferably longer than the total length of the distance between the first and the second location of fixation 7, 6. The strap 5 has a length

between said first location of fixation 7 and said second location of fixation 6 which is 1-20 % longer, suitably 8-12% longer than said distance between said first location of fixation 7 and said second location of fixation 6.

The strap, as here exemplified, is made by the same material as the trousers. However, as an alternative the material may be an elastic textile material or a plastic material.

[0033] Fig. 5 shows a part of the pocket area 18 with the tool holder arrangement 40 as described above. The button 4 is shown as a dashed circular outline. The strap 5 is covering the button 4 and is on one side arranged to the pocket 2 and the backside part by seam 20 forming the first location of fixation 7 and on the other side to the backside part by seam 33 at the seam 14 forming the second location of fixation 6. A tool storing device 8 is arranged to the button 4. The tool storing device 8 has a shaft 9 comprising a locking part 11 and an attachment recess 10, which is adapted to be engaged with the securing element. The locking part is a pivotable locking part attached to the top of the shaft 9 and it has a closed position in which it covers a part of the shaft 9 and an open position in which the whole shaft 9 is uncovered. Here, the tool storing device 8 is shown with the locking part 11 in an open position. The tool storing device 8 is a knife holder 8. However, instead of arranging a tool storing device to the button, it could as an alternative be a tool *per se* which has the same features i.e. a locking part and an attachment recess which is arrangeable on the button 4. The shaft 9 is slid through the strap 5. The attachment recess 10 is here exemplified as a round opening with a connected slot through which the button 4 is penetrating. However, the attachment recess 10 may take any suitable shape. The button 4 with its mushroom shape is inserted through the round opening 10 and the foot of the mushroom shaped button 4 is slid into the slot and thereby held by the button 4. I.e. when a person is wearing the trousers the knife holder 8 will hang on the button. The slot and the mushroom shaped head, i.e. the securing portion of the button 4 prevents the knife holder 8 to fall down. The locking part 11 which is arranged to the fastening shaft 9 through a hinge (not shown) enable the locking part 11 to be folded over the shaft 9 and fastened to the shaft through mutually matching fixing means 12, 13. The locking part 11 has snap-in attachment means 12 and the shaft 9 has recesses 13 into which the snap-in attachment means 12 may snap into. The locking part 11 is also slid through the strap 5 in order to enable the strap 5 to be pinched between the shaft 9 and the closing part 11 with aid of the snap-in attachment means when the locking part 11 is in its closed position. The width of the strap 5 is adapted to work with the locking part 11.

[0034] Fig. 6 is cross section B-B of fig. 5 showing how the mushroom shaped button 4 is penetrating through the attachment recess 10 in the shaft 9, with the strap 5 covering the button 4. The locking part is not shown in order to make easier to see how the button 4 is penetrat-

ing through the recess 10.

[0035] Fig. 7 shows how the knife holder 8 is secured to the strap 5 by pinching the strap 5 between the shaft 9 and the locking part 11 of the knife holder. The locking part 11 is in its closed position. By having this extra securing possibility the knife holder is more stably attached to the tool holder arrangement 40, which makes it easier to release the knife from its holder. By having the second location of fixation 6 at seam 14 the distance between the button 4 and the second location of fixation 6 is larger than the distance between the button 4 and the first location of fixation 7, which makes it possible to store another tool next to the knife. Here is for example a screwdriver 31 arranged next to the knife and held by the strap 5. By having the possibility to arrange another tool next to the knife holder 8, the knife holder may be further stabilized.

[0036] Fig. 8 shows again the tool holder arrangement 40 with the knife holder 8 arranged to the button 4 and held on the strap 5 by being pinched between the shaft 9 and the locking part 11 of the knife holder 8 when the locking part 11 is in its closed position. The first location of fixation 7 and the button 4 are arranged at the same position as described above. However, the second location of fixation 6 is here at seam 33, which is at the 34 seam connecting the backside part 34 to the front side part 36 of the trousers. I.e. this position means that the distance between the button 4 and the second location of fixation 6 at seam 34 is longer than the distance between the button 4 and the second location of fixation 6 at seam 14 described in fig. 7. By having the second fastening position at seam 34 the distance from the button 4 to the second location of fixation 6 is even longer, which makes it possible to store a larger tool next to the knife. Here is for example a hammer 32 arranged next to the knife and held by the strap 5. The strap 5 has a length between said first location of fixation 7 and said second location of fixation 6 which is longer than the distance between said first location of fixation 7 and said second location of fixation 6 in order to be able to slide the shaft of the knife holder into place and to be able to place articles next to the knife holder. It shall be noted that the parts of the tool holder arrangement 40 do not necessarily have to be arranged on the positions described above. For example the button does not necessarily have to be arranged on a pocket, it may be arranged on the carrier, i.e. here on any part of the trousers. The carrier does not have to be a pair of trousers, it may be a vest, bag, tool box etc as said before. The locations of fixation 6, 7 do not have to be arranged to the seams as described above etc nor does the strap have to be fixed to its locations of fixation by seams. It may for example be fixed by one or several rivets.

[0037] The invention has mainly been described above with reference to a few embodiments. However, as is readily appreciated by a person skilled in the art, other embodiments than the ones disclosed above are equally possible within the scope of the invention, as defined by

the appended patent claims.

Claims

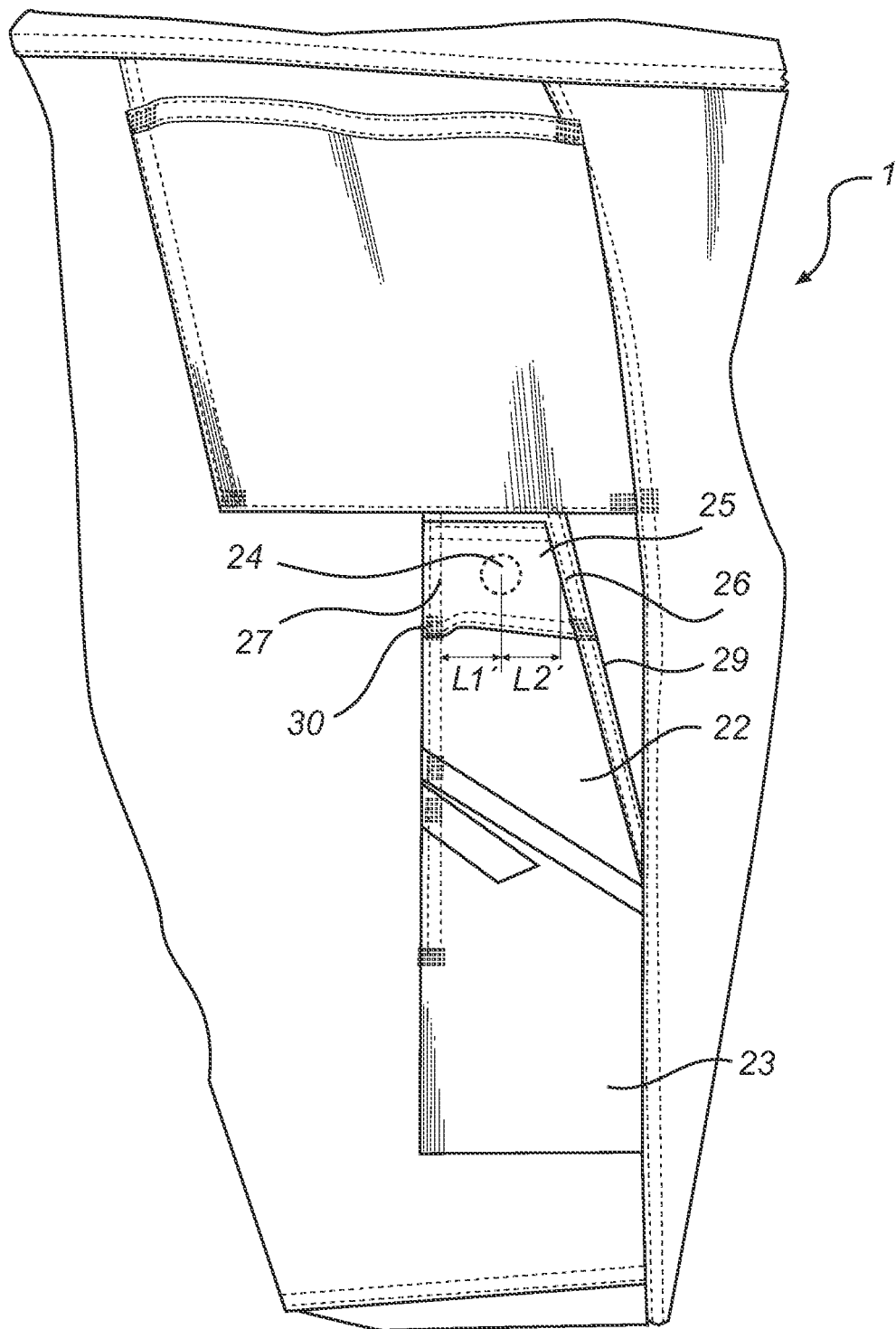
1. A tool holder arrangement (40), comprising a carrier (1), such as a garment, a securing element (4) arranged to the carrier (1), and a strap (5) fixed to the carrier (1) at a first location of fixation (7) and at a second location of fixation (6), wherein said securing element (4) is at least partly covered by said strap (5) **characterized in that** said securing element (4) is spaced at a first distance from said first location of fixation (7) and at a second distance from said second location of fixation (6), wherein said first distance is shorter than said second distance.
2. The tool holder arrangement (40) according to claim 1, wherein said securing element (4) comprises an attachment portion (42) to enable attachment to said carrier and a securing portion (41), projecting from said carrier (1), wherein the whole securing portion is located within half the distance from said first location of fixation (7) to said second location of fixation (6).
3. The tool holder arrangement (40) according to any one of the preceding claims, wherein said carrier (1) comprises a first main carrier portion (35), and a second carrier portion (2), which is smaller than said first main carrier portion (35), arranged on said first main carrier portion (35), wherein said securing element (4) is arranged on said second carrier portion (2) and wherein, at the first location of fixation (7), said strap (5) is arranged on at least said second carrier portion (2) and, at said second location of fixation (6), the strap (5) is arranged on said first main carrier portion (35) in such a way that the strap (5) extends over said second carrier portion (2).
4. The tool holder arrangement (40) according to any one of the preceding claims, wherein said first main carrier portion is part (35) of a garment (1) and said second carrier portion is a pocket (2) on said part of said garment (1).
5. The tool holder arrangement (40) according to any one of the preceding claims, wherein the ratio of said first distance to said second distance is 0.9-0.1, suitably 0.5-0.1.
6. The tool holder arrangement (40) according to any one of the preceding claims, wherein said first dis-

tance is 5-40mm, suitably 10-30mm or for instance 10-15mm.

7. The tool holder arrangement (40) according to any one of the preceding claims, wherein said second distance is 50-100mm, suitably 60-90mm, or for instance 65-80mm. 5
8. The tool holder arrangement (40) according to any one of the preceding claims, wherein said strap (5) has a length between said first location of fixation (7) and said second location of fixation (6) which is 1-20% longer, suitably 8-12% longer than the distance between said first location of fixation (7) and said second location of fixation (6). 10
15
9. The tool holder arrangement (40) according to any one of the preceding claims, wherein said strap has a width at said first location of fixation (7) which is 35-55mm, suitably 40-50mm. 20
10. The tool holder arrangement (40) according to any one of the preceding claims, wherein said strap has a width at said second location of fixation (6) which is 10-55mm, suitably 15-35 mm. 25
11. The tool holder arrangement (40) according to any one of the preceding claims, wherein said securing element (4) comprises an attachment portion (42) to enable attachment to said carrier and a securing portion (41), projecting from said carrier (1), wherein said securing portion comprises at least one flange. 30
12. The tool holder arrangement (40) according to any one of the preceding claims in combination with a tool or a tool storing device (8) which comprises an attachment recess (10), adapted to be engaged by said securing element (4) and a pivotable locking part (11), which has a closed position in which it covers another part (9) of the tool or tool storing device (8), and an open position in which said another part (9) is uncovered, and said pivotable locking part (11) is adapted to pinch said strap (5) between said locking part (11) and said another part (9) of said tool or said tool storing device (8). 35
40
45
13. A method of arranging a tool or a tool storing device (8) to said tool holder arrangement (40) according to anyone of the claims 1-11 comprises the following steps: 50
 - sliding a tool or a tool storing device (8) through said strap, said tool or tool storing device (8) comprising 55
 - o an attachment recess (10) adapted to be engaged by said securing element (4) and
 - o a pivotable locking part (11), which has a

closed position in which it covers another part (9) of the tool or tool storing device (8), and an open position in which said another part (9) is uncovered,

- arranging said tool or tool storing device to said securing element (4) by engaging said attachment recess of said tool or said tool storing device (8) with said securing element (4),
- pivoting said locking part (11) over said strap (5) into said closed position.



Prior Art

Fig. 1

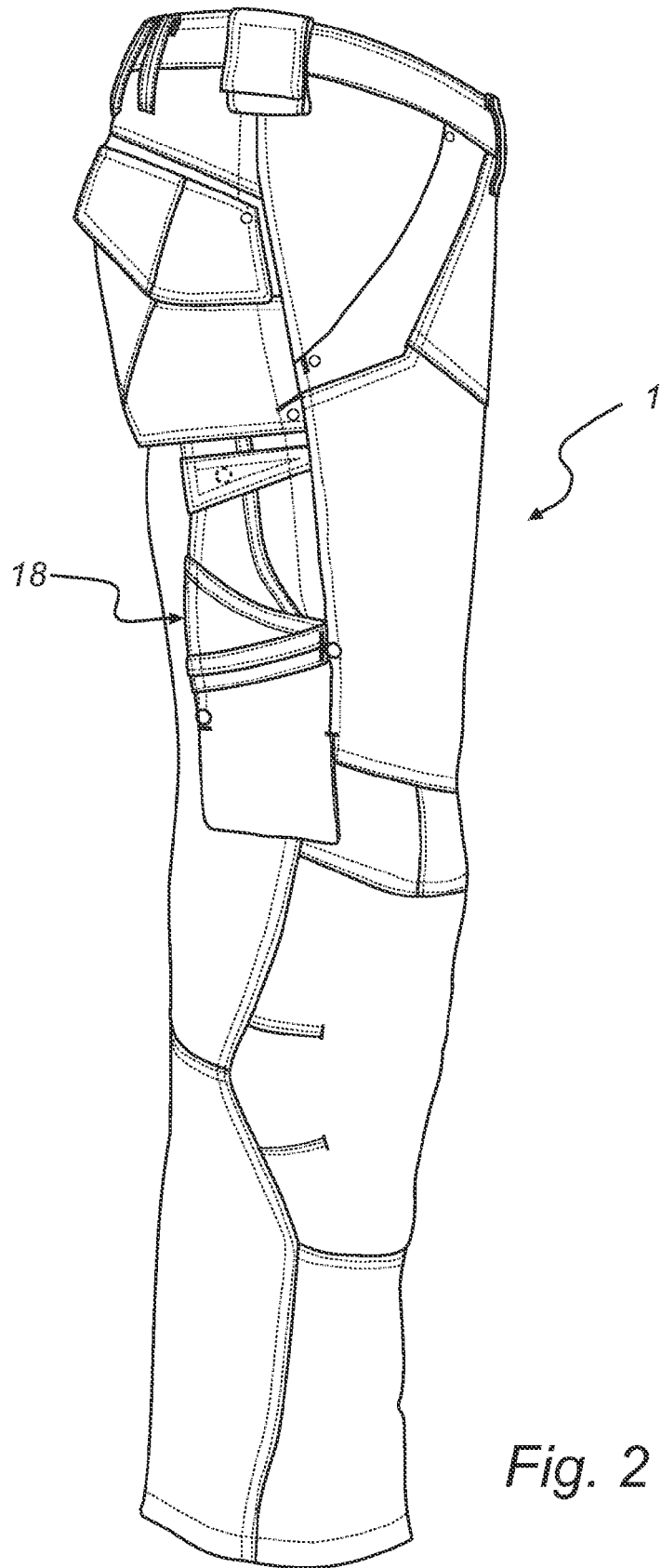


Fig. 2

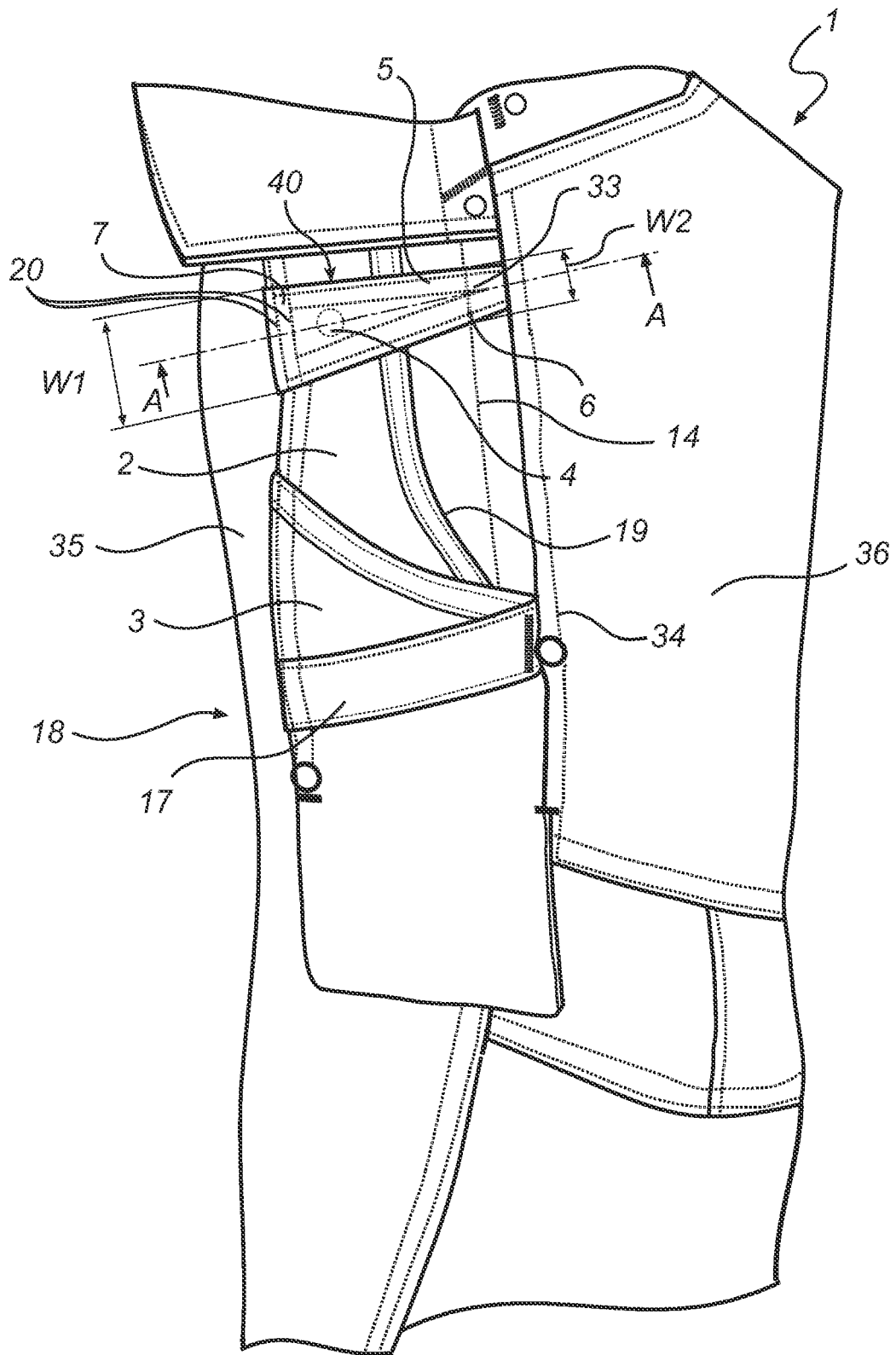


Fig. 3

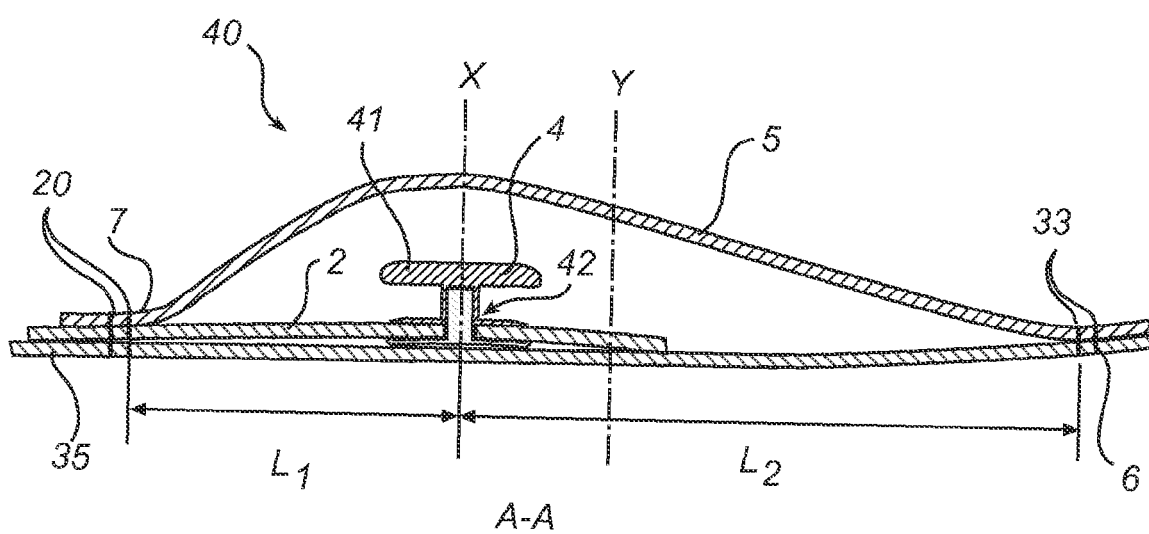
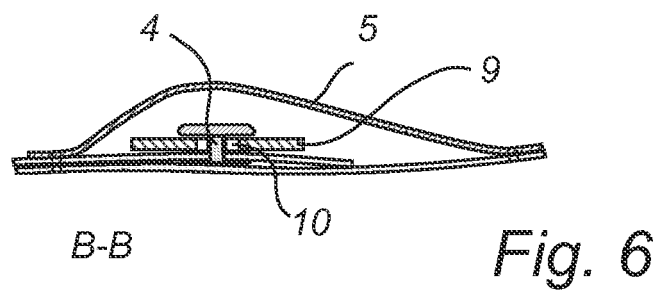
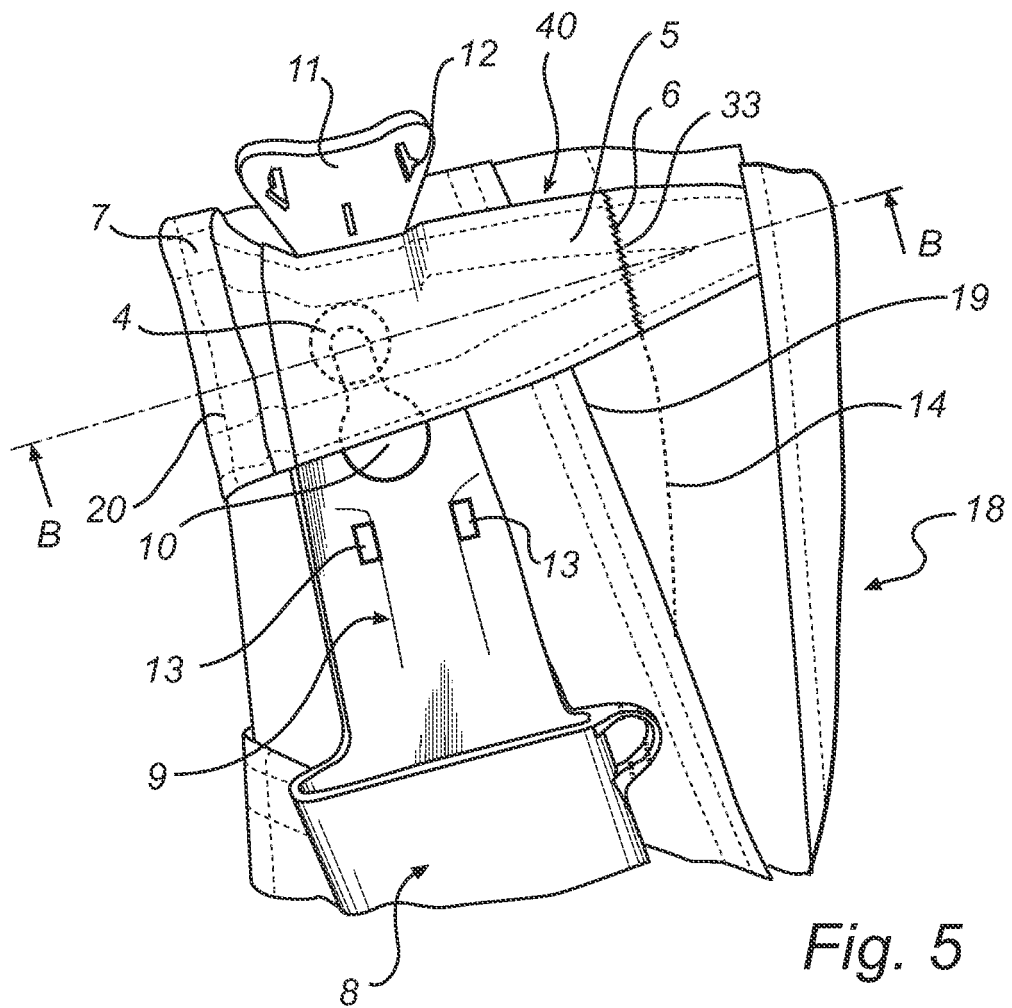


Fig. 4



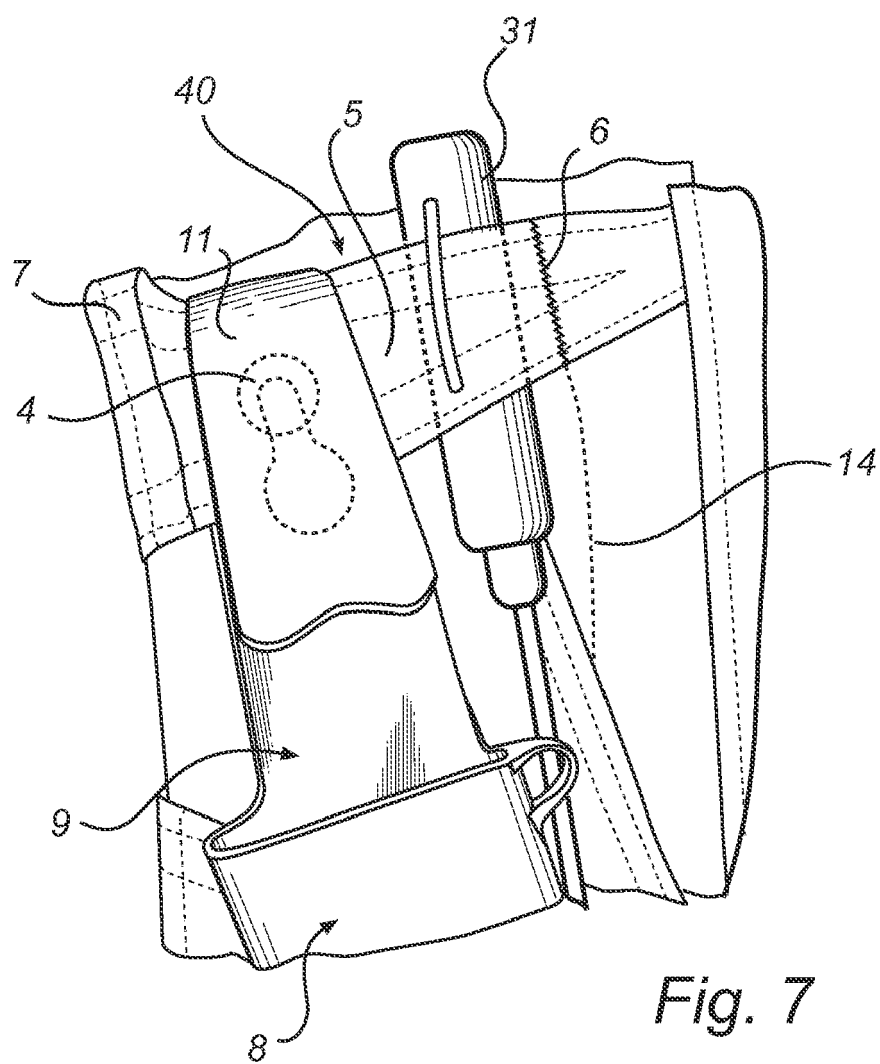


Fig. 7

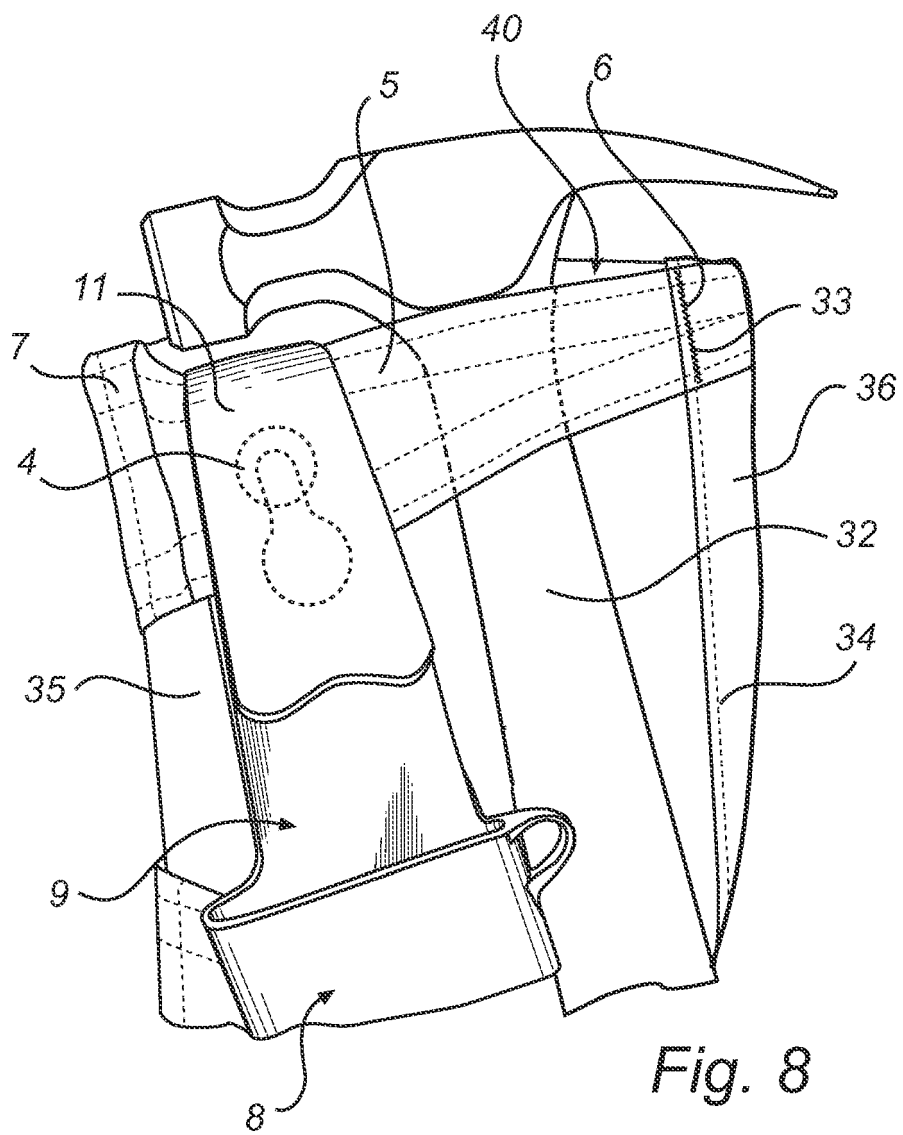


Fig. 8



EUROPEAN SEARCH REPORT

Application Number
EP 09 16 6677

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 6 327 714 B1 (KOERNER GREGORY ALAN [US]) 11 December 2001 (2001-12-11) * column 2, line 66 - column 3, line 42 * * figures *	1-8, 10-11	INV. A45F5/02
X	US 2005/284909 A1 (MUNOZ JOSE [US]) 29 December 2005 (2005-12-29) * paragraphs [0028] - [0036] * * figures *	1-3,5-6, 8-10	
X	US 2003/071095 A1 (DEDRICK TED R [US]) 17 April 2003 (2003-04-17) * paragraphs [0013] - [0016] * * figures *	1-3,7-10 12	
X	US 6 390 348 B1 (GODSHAW DONALD E [US] ET AL) 21 May 2002 (2002-05-21) * column 2, line 23 - column 3, line 58 * * figures *	1,3,5,8, 10 12	
X	US 5 881 392 A (KOERNER GREGORY ALAN [US] ET AL) 16 March 1999 (1999-03-16) * column 2, line 66 - column 3, line 48 * * figures *	1-3,5-11	TECHNICAL FIELDS SEARCHED (IPC) A45F
A	DE 298 19 768 U1 (AGOT ERIC JOEL [DE]) 25 March 1999 (1999-03-25) * page 2 * * figures 3-5 *	11	
A	US 5 938 025 A (CHERNACK MILTON [US]) 17 August 1999 (1999-08-17) * abstract * * figures 1,6 *	11	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 25 March 2010	Examiner Frank, Lucia
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			

1
EPO FORM 1503 03.82 (P04C01)



EUROPEAN SEARCH REPORT

Application Number
EP 09 16 6677

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 6 085 952 A (GARLAND GORDON DAVID [CA]) 11 July 2000 (2000-07-11) * abstract * * figures *	12	
A	US 2007/068982 A1 (GRUNDY GARY M [US] ET AL) 29 March 2007 (2007-03-29) * paragraphs [0014] - [0029] * * figures *	12-13	
A	US 2004/099553 A1 (CHEN TERENCE [TW]) 27 May 2004 (2004-05-27) * abstract * * figures *	12-13	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
Place of search The Hague		Date of completion of the search 25 March 2010	Examiner Frank, Lucia
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			

1
EPO FORM 1503 03.02 (P04C01)

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

EP 09 16 6677

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.

25-03-2010

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6327714	B1	11-12-2001	NONE	
US 2005284909	A1	29-12-2005	NONE	
US 2003071095	A1	17-04-2003	NONE	
US 6390348	B1	21-05-2002	NONE	
US 5881392	A	16-03-1999	NONE	
DE 29819768	U1	25-03-1999	NONE	
US 5938025	A	17-08-1999	NONE	
US 6085952	A	11-07-2000	NONE	
US 2007068982	A1	29-03-2007	NONE	
US 2004099553	A1	27-05-2004	NONE	

EPO FORM P0459

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