



(11)

EP 4 825 273 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
21.10.2026 Bulletin 2026/43

(51) International Patent Classification (IPC):
A47D 13/02^(2006.01)

(21) Application number: **26172121.1**

(52) Cooperative Patent Classification (CPC):
A47D 13/025

(22) Date of filing: **14.04.2026**

(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 LA MA MD TN

(72) Inventors:
• **BLAND, Amy**
Huddersfield, HD5 0RH (GB)
• **HARRIS, Matthew, Allen**
Huddersfield, HD5 0RH (GB)

(74) Representative: **Haseltine Lake Kempner LLP**
Cheapside House
138 Cheapside
London EC2V 6BJ (GB)

(30) Priority: **17.04.2025 GB 202505809**

(71) Applicant: **Mamas & Papas (Holdings) Limited**
West Yorkshire, HD5 0RH (GB)

(54) **A CHILD CARRIER**

(57) A child carrier is provided, the child carrier configured to be worn by a user and to support a child against the user's torso when the child carrier is being worn by the user. The carrier comprises: a sling portion configured in use to support the child against the user's body; and first and second shoulder straps arranged on either side of the sling portion, wherein the shoulder straps are configured to extend from the sling portion over respective shoulders of the user, wherein the shoulder straps comprise a front portion configured in use to be arranged on a front side of the user's body and a rear portion configured in use to be arranged on the rear side of the user's body, wherein the child carrier further comprises an adjustment strap extending between the rear portions of the first and second shoulder straps, wherein the adjustment strap is adjustable in length in order to adjust a distance between the first and second shoulder straps at the adjustment strap, wherein the child carrier further comprises: an adjustment cord extending at least partially along one of the first and second shoulder straps and at least partially along the adjustment strap; a cord adjustor provided on the front portion of the one of the shoulder straps and configured to selectively adjust a length of the adjustment cord to thereby adjust a length of the adjustment strap.

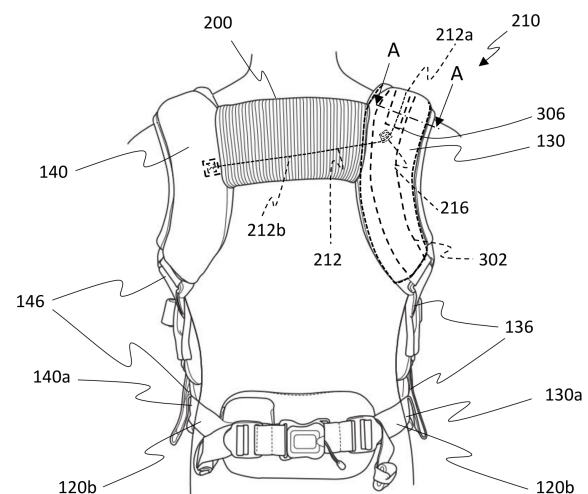


FIG. 2

Description

Technical Field

[0001] The present disclosure relates to a child carrier.

Background

[0002] Parents and carers of young children frequently use child carriers to carry their child. Such child carriers are configured to be worn by the user and support the child against the user's torso in a comfortable and supportive position for the child.

[0003] Such carriers typically comprise a plurality of straps which can be adjusted in length and/or relative position, so that the child carrier is comfortable for the user wearing the carrier and for the child supported within the carrier.

[0004] However in some situations, correctly adjusting the carrier straps can be ergonomically challenging, and wearing a poorly fitted or adjusted child carrier can become uncomfortable when using the child carrier over an extended period of time.

[0005] It is desirable to provide a child carrier which addresses one or more disadvantages associated with the prior art.

Statements of Invention

[0006] According to an aspect of the present disclosure, there is provided a child carrier configured to be worn by a user and to support a child against the user's torso when the child carrier is being worn by the user. The carrier comprises: a sling portion configured in use to support the child against the user's body; and first and second shoulder straps arranged on either side of the sling portion, wherein the shoulder straps are configured to extend from the sling portion over respective shoulders of the user, wherein the shoulder straps comprise a front portion configured in use to be arranged on a front side of the user's body and a rear portion configured in use to be arranged on the rear side of the user's body, wherein the child carrier further comprises an adjustment strap extending between the rear portions of the first and second shoulder straps, wherein the adjustment strap is adjustable in length in order to adjust a distance between the first and second shoulder straps at the adjustment strap, wherein the child carrier further comprises: an adjustment cord extending at least partially along one of the first and second shoulder straps and at least partially along the adjustment strap; a cord adjustor provided on the front portion of the one of the shoulder straps and configured to selectively adjust a length of the adjustment cord to thereby adjust a length of the adjustment strap.

[0007] The child carrier may further comprise: a cord guiding member configured, e.g. shaped, to guide the

adjustment cord between the cord adjustor and the adjustment strap. The cord guiding member may be configured, e.g. shaped, to guide the adjustment cord through a change in angle between a first portion of the adjustment cord extending along the one of the shoulder straps and a second portion of the adjustment cord extending along the adjustment strap. In particular, the cord guiding member may be configured, e.g. shaped, to guide the adjustment cord through a change of angle of less than 45 degrees between the first and second portions. The cord guiding member may be configured, e.g. shaped, to guide the adjustment cord through a change in angle of between 15 and 45 degrees, such as approximately 25 degrees, between first portion and the second portion of the adjustment cord. The cord guiding member may be configured, e.g. shaped, to guide the adjustment cord through the change in angle around a radius of between 15mm and 30mm, such as approximately 22 mm.

[0008] The shoulder strap may comprise a layered structure comprising: a first layer comprising a resilient material; a second layer comprising an elastically deformable material and a third layer provided between the second layer and the first layer. The adjustment cord may extend along the one of the shoulder straps between the first layer and the third layer. The third layer may comprise a fabric material. The third layer may be provided along the shoulder strap between the cord adjustor and the cord guiding member. In other words, the third layers may not extend along the shoulder strap beyond the cord adjustor or the cord guiding member. The cord guiding member may be coupled to the first layer.

[0009] The shoulder strap may further comprise a fourth layer comprising an electrically deformable material, which may have a different, e.g. greater, stiffness than the second layer. The fourth layer may be provided on an opposite side of the first layer from the third layer.

[0010] One or more of the layers of the shoulder strap may be at least partially wrapped around the first layer of the shoulder strap to be arranged on either side of the first layer within the layer structure of the shoulder strap. For example, the second layer may at least partially wrap around the first and/or fourth layers, to be provided on either side of the first and/or fourth layers within the layered structure of the shoulder strap.

[0011] An opening may be formed through one or more layers of the shoulder strap, e.g. the layer of the strap wrapped around the first layer, such as the second layer. The opening may be formed into a space between the first and third layers. The adjustment cord may extend from the cord adjustor through the opening into the space between the first and third layers.

[0012] The cord adjustor may comprise a reel. The cord adjustor may be configured to wind the adjustment cord around the reel in order to adjust the length of the adjustment cord. The cord adjustor may comprise a

ratchet mechanism configured to selectively prevent the reel from rotating in a direction in which the adjusting cord unwinds from the reel.

[0013] To avoid unnecessary duplication of effort and repetition of text in the specification, certain features are described in relation to only one or several aspects or embodiments of the invention. However, it is to be understood that, where it is technically possible, features described in relation to any aspect or embodiment of the invention may also be used with any other aspect or embodiment of the invention.

Brief Description of the Drawings

[0014] For a better understanding of the present invention, and to show more clearly how it may be carried into effect, reference will now be made, by way of example, to the accompanying drawings, in which:

Figure 1 is a front perspective view of a child carrier according to an arrangement of the present disclosure;

Figure 2 is a rear perspective view of the child carrier;

Figure 3 is a schematic cross-sectional view on line A-A in Figure 2, showing the structure of a strap of the child carrier; and

Figure 4 is a schematic top view of a cord adjustor for the child carrier.

Detailed Description

[0015] With reference to Figure 1 a child carrier 100 according to arrangements of the present disclosure will now be described. The child carrier is configured to be worn by a user, such as a parent or carer of a child, such as a young child, for example, below the age of about 2 years or 18 months. The child carrier 100 is further configured to support the child against the user's torso when the child carrier is being worn by the user.

[0016] The child carrier 100 comprises a sling part 110, which is configured, in use, to support the child against the user's body. In particular, the sling part 110 may comprise a seat portion 112 configured to engage with the child's lower body and/or upper legs, and a back support portion 114 configured to engage the child's back, e.g. lower, mid and/or upper back, neck and, optionally, a lower portion of the child's head, in order to comfortably support the child's upper body adjacent to the user's torso. The sling part 110, e.g. the seat portion and/or the back support portion may extend laterally across the child carrier. In this way, the sling part may support the child across the lateral width of the child's body and/or the user's body.

[0017] As illustrated, in some arrangements, the back support portion 114 may comprise a further layer of the sling part 110 arranged outside of the seat portion 112. The back support portion 114 may at least partially overlap the seat portion 112 and may additionally support the child's upper legs and/or lower body.

[0018] As illustrated in Figure 1, the child carrier 100 may comprise a waist/hip strap 120 to be fastened around the user's waist. In particular, the waist/hip strap may be configured to be fastened around and/or at least partially, or substantially, above the user's hips, e.g. such that a lower edge of the waist/hip strap rests on an upper portion of the user's hips. As can be seen from Figures 1 and 2, the waist/hips strap may comprise a fixed length portion 120a, which may be configured to be worn on, e.g. across, a user's front, and one or more adjustable length portions 120b configured to extend from either end of the fixed length portions around the back of the user. A buckle 120c, such as a clip buckle, may be provided for bucking distal ends of the adjustable length portions together, e.g. at the back of the user. The buckle 120c may comprise a pair of complementary buckle portions coupled to the respective adjustable length portions 120b. The buckle portions may be configured to releasably couple together, e.g. using one or more interlocking features provided on the complementary buckle portions, in order to couple together the distal ends of the adjustable length portions 120b. Adjusting the length of the adjustable length portions 120b may adjust the distance of the buckle portions along the respective adjustable length portions of the waist strap from the fixed length portion 120a, in order to adjust the fit of the waist strap 120 around the user.

[0019] The adjustable length portions 120b of the waist strap may comprise webbing strap portions, or other fixed length strap portions, which pass through a slide buckle, tri-glide buckle, ladder lock buckle, slip lock buckle or any other similar buckle for enabling a length of the adjustable strap portion to be slideably adjusted. The buckle for enabling a length of the adjustable strap portion to be slideably adjusted may be integrated with the buckle portion, or may be separate.

[0020] A lower end 110a of the sling part 110, which may comprise a lower end 112a of the seat portion, may be coupled to the waist strap 120. In this way, the lower end 110a of the sling part, e.g. the seat portion, may be held against the user's body, the sling part, e.g. the seat portion, may be configured to extend at least partially away from the user's body towards an upper end 112a of the seat portion, so that the seat portion 120 forms a suitable shape for supporting underneath the child's body. As illustrated, a width of the sling part 110, e.g. the seat portion 112, may be configured to allow the child's legs to protrude to either side of the seat portion 112, so that the child's lower legs are substantially unsupported by the sling part 110 beneath the seat portion, and are free to hang down below the level

of the seat portion.

[0021] As illustrated, in some arrangements, the lower ends 112a, 114a of both the seat portion and the back support portion are coupled to the waist strap. The seat portion 112 may be configured to extend from the waist strap 120 around the child's upper legs and lower body, around the back or front of the child (depending on the whether the child is facing forwards or rearwards within the carrier). For example, the seat portion 112 may be configured to extend up to approximately the child's waist or hips. The back support portion 114 may extend, e.g. from the waist strap 120, outside the seat portion, over the child's back, neck and/or lower portion of their head. In some arrangements, the sling part 110 may comprise a head support portion 116 which may be coupled to an upper end 114b of the back support portion, or may be integrally formed with the back support portion, and may extend from the upper end 114b of the back support portion, e.g. to be arrangeable to support at upper part of the child's head within the carrier.

[0022] The head support portion 116 may be deformable, e.g. foldable, relative to the back support portion 114. In particular, the head support portion 116 may be arrangeable to extend beyond, e.g. upwards from, the upper end 114a of the back support portion further upward/along the child's neck and/or to support a mid-portion and/or upper portion of the child's head. The head support portion 116 may otherwise be deformable/foldable in order to fold back on the outside of the back support portion 114, e.g. if support of the child's mid and/or upper head is not desired.

[0023] The child carrier 100 further comprises first and second shoulder straps 130, 140. The first and second shoulder straps are arranged on either side, e.g. either lateral side, of the child carrier, e.g. on either side of the sling portion 110. The first and second shoulder straps 130, 140, e.g. first ends 130a of the first and second shoulder straps, may be configured to couple to the waist strap 120. The first and second shoulder straps may be configured to couple to the waist strap so as to be arranged on opposite sides of the user's body, when the child carrier is being worn by a user.

[0024] The first and second shoulder straps 130, 140 are configured to extend, e.g. from the waist strap 120, over the left and right shoulders of the user respectively. After passing over and around the user's shoulders, the first and second shoulder straps may be coupled to the waist strap 120 at their second ends 130b, 140b. The first and second shoulder straps may comprise front portions configured to be arranged on the front of a user when the child carrier is being worn by a user, and back portions, configured to be arranged on a back of the user when the child carrier is being worn by a user.

[0025] As described in greater detail below, the second ends 130b, 140b of the shoulder straps may be

indirectly coupled to the waist strap 120. For example, the first and second shoulder straps may be coupled to the waist strap at their second ends via the sling part 110. However, in other arrangements, the first and second shoulder straps may be directly coupled to the waist strap at their second ends. The first and second shoulder straps may thereby be configured, in conjunction with the waist strap, to comfortably secure the child carrier to the user's body, so that the child can be supported against the user's body by the child carrier, e.g. by the sling part.

[0026] As shown in Figure 1, the sling part 110, e.g. the back support portion 114, may be coupled to the first and second shoulder straps 130, 140 on either lateral side of the sling part at the upper end 114b of the back support portion. As illustrated, the back support portion 114 may comprise adjustable shoulder strap coupling portions 114c provided on either lateral side of the back support portion and configured to couple to the first and second shoulder straps respectively. In particular, the child carrier may comprise decouplable connectors 114d, and sling part 110 may be coupled to the first and second shoulder straps 130, 140 using respective decouplable connectors between the sling part 110 and the first and second shoulder straps 130, 140 on either lateral side of the sling part, e.g. on either adjustable shoulder strap coupling portion 114c. The decouplable connectors 114d may be any desirable form of connector, such as a connector comprising one or more interlocking and/or latching features for releasably coupling together complementary components of the decouplable connector that are coupled, e.g. fixedly coupled, to the sling part 110 and the respective shoulder straps 130, 140. In other arrangements, any other desirable connector or connecting method may be used for releasably coupling the sling part to the first and second shoulder straps, e.g. on either lateral side of the child carrier.

[0027] The adjustable shoulder strap coupling portions 114c may be adjustable in length in order to adjust the overall length of the sling portion 110, e.g. the back support portion, between the waist strap 120 and the shoulder straps 130, 140, and thereby adjust the fit of the child carrier for a child supported within the sling portion 110. For example, the adjustable shoulder strap coupling portions 114c may comprise lengths of webbing strap, or other fixed length strap portions, passing through a slide buckle, tri-glide buckle, ladder lock buckle, slip lock buckle or any other similar buckle for enabling a length of the adjustable shoulder strap coupling portions 114c, e.g. between the upper end of the back support portion and the decouplable connectors on the shoulder strap coupling portions 114c to be slideably adjusted.

[0028] As further illustrated in Figure 1, the seat portion 112 of the sling part may also be coupled to the shoulder straps 130, 140 on either lateral side of the sling part 110. The sling part, e.g. the seat portion 112

may be coupled to the first and second shoulder straps 130, 140 at positions on the shoulder straps between the positions at which the back support portion 114 of the sling part couples to the shoulder straps 130, 140, and the position at which the shoulder straps couple, e.g. directly couple, to the waist strap, e.g. the first ends of the shoulder straps. Additionally or alternatively, the seat portion 112 of the sling part 110 may be coupled to the first and second shoulder straps at the second ends 130b, 140b of the shoulder straps. As mentioned above, the second ends 130b, 140b of the shoulder straps may be indirectly coupled to the waist strap 120, which may be via their coupling to the seat portion 112 of the sling part in this way.

[0029] The seat portion 112 of the sling part may be coupled to the first and second shoulder straps using decouplable connectors 112d, which may be provided on adjustable shoulder strap couple portions 112c of the seat portion, in the same way that the back support portion of the sling part is coupled to the shoulder straps, as described above. In this way, the overall length of the seat portion 112 between the waist strap 120 and the shoulder straps can be selectively varied by adjusting the lengths of the adjustable shoulder strap couple portions 112c of the seat portion e.g. in order to adjust the fit of the carrier for a child supported in the sling part 110. In other arrangements, the child carrier may not comprise the adjustable shoulder strap couple portions 112c and the decouplable connectors 112d may be directly coupled to the seat portion, such that the length of the seat portion is not adjustable. The seat portion 112 of the sling part may be coupled to the first and second shoulder straps 130, 140 using the same type of decouplable connector, or a different type of decouplable connector, as the back support portion, and/or a different coupling method.

[0030] As illustrated, openings 132 may be formed in the first and second shoulder straps, e.g. at positions between the first ends 130a, 140a of the shoulder straps and the positions on the shoulder straps at which the back support portion 114 of the sling part is coupled to the shoulder straps.

[0031] The second ends 130b, 140b of the first and second shoulder straps may be arranged to pass through openings formed in first and second shoulder straps respectively in order to reach the seat portion 114 of the sling part. The seat portion 114 of the sling part may thereby be coupled to the first and second shoulder straps 130, 140 at the openings 132 via the portion of the shoulder straps which have passed through the openings, e.g. the portions between the openings and the second ends of the shoulder straps.

[0032] In order to improve the comfort and fit of the child carrier for both the user, e.g. the parent or carer, and the child supported in the carrier, lengths of one or more of the straps may be adjustable. In particular, and as described above, the waist strap 120 may comprise the fixed length portion 120a and the one or more ad-

justable length portions 120b.

[0033] The shoulder straps 130, 140 may similarly comprise fixed length portions 134, 144 and one or more adjustable length portions 136, 146 provided at either or both ends of the fixed length portions 134, 144. In particular, the adjustable length portions 136, 146 may be provided at the first and/or second ends 130a, 140a, 130b, 140b of the first and second shoulder straps. Accordingly, the decouplable connectors 112d for coupling the shoulder straps to the seat portion 112 of the sling part, or for coupling the first and second shoulder straps directly to the waist strap 120 in other arrangements, may be provided on adjustable length portions 136, 146 provided at the second ends of the shoulder straps. Additionally or alternatively, the first ends of the first and second shoulder straps may be coupled to the waist strap 120 by adjustable length portions 136, 146 provided at the first ends of the shoulder straps. The lengths of the adjustable length portions 136, 146 of the shoulder straps may therefore be adjusted in order to adjust a fit of the carrier on the user, e.g. over the user's shoulders, and, in arrangements in which the second ends of the shoulder straps are coupled to the seat portion of the sling part, lengths of the adjustable length portions 136, 146 of the shoulder straps may be adjusted in order to adjust a fit of the sling part of the carrier on the child support by the child carrier.

[0034] One, more than one or each of the adjustable length portions of the straps of the child carrier, such as the adjustable length portions of the waist strap and the first and second shoulder straps, may be configured such that the lengths of the adjustable length portions can be shortened by pulling on the adjustable length portion, e.g. a free end of a strap of the adjustable length portion in a direction with a component forwards of the user when the user is wearing the child carrier and/or by pulling on a portion of the adjustable length portions arranged closer to the user's front than the user's back. For example, the slide buckles provided as part of the adjustable length portions may be arranged such that free ends of the straps passing through the buckle, for enabling a length of the adjustable strap portion to be slideably adjusted, leave the buckle in the direction with the component forwards of the user.

[0035] In addition, or as an alternative to including the adjustable length portions of one or more of the straps as described above, the child carrier comprises an adjustment strap 200 for improving ergonomics and comfort of the user when wearing the child carrier 100.

[0036] As shown, particularly in Figure 2, the adjustment strap 200 extends between, e.g. laterally between, the first and second shoulder straps 130, 140. A length of the adjustment strap 200 is selectively adjustable, in order to adjust a distance, e.g. a lateral distance, between the first and second shoulder straps 130, 140 at the position of the adjustment strap. As

illustrated, the adjustment strap may be coupled to the first and second shoulder straps such that, when the child carrier is being worn by a user, the adjustment strap 200 is arranged on/across the user's back. In other words, the adjustment strap extends between the rear portions of the first and second shoulder straps. In particular, the adjustment strap 200 may be configured to be at least partially aligned with or above a level of the user's shoulder blades when the child carrier is being worn by the user. In this way adjusting the length of the adjustment strap 200 may adjust the distance between the first and second shoulder straps 130, 140 across the user's back, such as across the user's shoulder blades, and/or above and/or below the level of the user's shoulder blades.

[0037] The child carrier 100 further comprises an adjustment mechanism 210 for adjusting a length of the adjustment strap 200. The adjustment mechanism comprises an adjustment cord 212 and a cord adjustor 400. The cord adjustor 400 may be provided on one of the first and second shoulder straps 130, 140 and may be positioned on the one of the shoulder straps so as to be positioned on the front of the user when the child carrier is being worn by the user. In other words, the cord adjustor 400 may be provided on the front portion of the one of the shoulder straps.

[0038] The adjustment cord 212 may extend from the cord adjustor 400 and extends at least partially along the one of the first and second shoulder straps (on which the cord adjustor is provided) and at least partially along the adjustment strap 200. In the arrangements shown, the adjustment cord 212 extends over the complete length of the adjustment strap 200. The adjustment cord 212 may be coupled to the one of the first and second shoulder straps 130, 140 and to the other of the first and second shoulder straps on the other side of the adjustment strap 200. In particular, the adjustment cord may be fixedly coupled to the other of the first and second shoulder straps. In the arrangement illustrated, the adjustment cord is fixedly coupled to the other of the shoulder straps by stitching the adjustment cord to the other of the shoulder straps, optionally using a webbing strap coupled, e.g. stitched, to both the adjustment cord and the other of the first and second shoulder straps.

[0039] The cord adjustor 400 is configured to selectively adjust a length of the adjustment cord 212 to thereby adjust a length of the adjustment strap.

[0040] The adjustment cord 212 may also be slideably coupled to the one of the first and second shoulder straps (on which the cord adjustor is provided). The adjustment mechanism 210 may further comprise a cord guiding member 216. The adjustment cord may be slideably coupled to the one of the first and second shoulder straps by the cord guiding member. The cord guiding member 216 may be configured to guide the adjustment cord between the cord adjustor and the adjustment strap 200. In particular, the cord guiding mem-

ber 216 may be configured to guide the adjustment cord through a change in angle between a first portion 212a of the adjustment cord, extending along the one of the shoulder straps, and a second portion 212b of the adjustment cord, extending along the adjustment strap.

[0041] The cord guiding member 216 may be a resilient and/or wear resistant component (e.g. relative to one or more materials of the shoulder straps), e.g. formed from a polymer material, arranged for the adjustment cord to run over as the length of the adjustment cord is varied, e.g. due to the operation of the cord adjustor. In particular, the cord guiding member may comprise a channel, e.g. an open channel, or a bore through which the adjustment cord 212 runs. The cord guiding member may be configured to guide the adjustment cord through a change of angle of less than 45 degrees between the first and second portions. For example, the cord guiding member may be configured to guide the adjustment cord through a change in angle of between 45 and 15 degrees, such as approximately 23 degrees, between first portion and the second portion of the adjustment cord. In order to guide the adjustment cord through the change in angle, the channel or bore of the cord guiding member may be accurate. For example, the channel or bore may extend through an angle of less than 45 degrees, e.g. between 45 and 15 degrees, such as approximately 25 degrees along the channel or bore. The channel or bore of the cord guiding member may extend through the angle at a radius of between 15mm and 30mm, such as approximately 22mm. The cord guiding member may thereby be configured to guide the adjustment cord through the change in angle, e.g. between the first and second portions of the adjustment cord, at curve radius of between 15mm and 30mm such as approximately 22 mm.

[0042] With reference to Figure 3, which illustrates a portion of a cross-section through the one of the first and second shoulder straps 130, 140 through which the adjustment cord 212 is routed, the shoulder strap 130, 140, e.g. the fixed length portion 134, 144 of the shoulder strap, may be constructed as a layered structure. The first and second shoulder straps may be constructed of the same or a similar layered structure to one another. However, it will be appreciated that the other of the shoulder straps may not comprise the adjustment cord within the layered structure.

[0043] The first and second shoulder straps may comprise a first layer 302, which may comprise a resilient material, e.g. a relatively resilient material compared to the others of the layers. For example, the first layer may comprise a polymer material, such as polypropylene. The first layer may extend the full length of the fixed length portion of the shoulder strap. In particular, the first layer may extend between the cord adjustor 400 and the cord guiding member 316. The cord guiding member may be coupled, e.g. fixedly coupled, to the first layer 302.

[0044] The first and second shoulder straps 130, 140 may comprise a second layer 304 comprising an elastically deformable material, e.g. a relatively elastically deformable material compared to the other layers of the structure of the shoulder straps, such as more elastically deformable than the first layer. For example, the elastically deformable material may comprise a polymer foam material.

[0045] The shoulder strap 130, 140 may further comprise a third layer 306. The third layer may be provided between the first layer 302 and the second layer 304. The third layer 306 may be made from a fabric material. The material of the third layer may have a greater wear resistance than the material of the second layer. As illustrated, the adjustment cord 212 may be routed along the shoulder strap 130, 140 between the first layer 302 and the third layer 306. The third layer 306 may maintain the position of the adjustment layer against the first layer 302. The third layer 306 may thereby protect the other layers of the shoulder strap, such as the second layer 306 from being worn by the adjustment cord., e.g. as the length of the adjustment cord is changed.

[0046] As shown in Figure 2, the third layer 306 may be provided along the shoulder strap between the cord adjuster 400 and the cord guiding member 216. The third layer 306 may not extend along the shoulder strap beyond the cord adjuster 400 and/or the cord guiding member 216, e.g. in respective directions along the shoulder strap. Further, the third layer 306 may be omitted in the layered structure of the other of the shoulder straps which the adjustment cord is not routed through.

[0047] Returning to Figure 3, the shoulder strap 130, 140 may further comprise a fourth layer 308, which may comprise an elastically deformable material. The fourth layer 308 may be provided on an opposite side of the first layer 302 from the adjustment cord 212. As depicted, a thickness of the fourth layer 308 may be greater than a thickness of the first layer 302 and/or the second layer 304. In some arrangements, the fourth layer 304 may have the greatest thickness of all of the layers of the shoulder strap.

[0048] As illustrated in Figure 3, the second layer 304 may be at least partially wrapped around the first, third and/or fourth layers of the shoulder strap (and the adjustment cord). In particular, the second layer 304 may be folded around on one side, e.g. lateral side, of the shoulder strap, e.g. the first and third layers. So that the second layer is arranged on both sides of the first, third and/or fourth layers within the layered structure of the shoulder strap.

[0049] The shoulder strap 130, 140 may further comprise a fifth layer 310, which may comprise a fabric material. The fifth layer may be at least partially wrapped around the first layer of the shoulder strap (and the adjustment cord) and may be wrapped around the first layer to be arranged in between the first layer

and the fourth layer.

[0050] The shoulder strap 130, 140 may further comprise a sixth layer, which may comprise a fabric material, and may be wrapped around the other layers of the layered structure of the shoulder strap, such that the sixth layer forms an exterior of the shoulder strap.

[0051] Although not shown in Figure 3, free ends of the layers of the shoulder strap which are described as being folded around other layers of the layered structure may be stitched or otherwise coupled together to thereby enclose the combination of the first and third layers inside the folded over second, fifth and sixth layers.

[0052] Each of the layers of the shoulder strap comprising a fabric material may comprise the same fabric. Alternatively, one or more of the layers may comprise a different fabric material from others of the fabric layers.

[0053] Further, each of the layers of the shoulder strap comprising a resiliently deformable material may comprise the same, or a similar, resilient deformable material. Alternatively, one or more of the layers may be made from a different resiliently deformable material from others of the layers. For example, the second layer 304 may be made from a deformable material with a different, e.g. lower, stiffness, such as compression stiffness, than the fourth layer. Further, a thickness of the layers of the shoulder strap comprising an elastically deformable material may be the same or may be different. For example, a thickness of the fourth layer 308 may be greater than a thickness of the second layer.

[0054] As illustrated in Figure 1, an adjustment cord opening 314 may be formed in the shoulder strap. In particular, the adjustment cord opening formed through one or more layers of the shoulder strap, such as the second layer, the fifth layer and/or the sixth layer. The opening may be formed into a space between the first and third layers, so that the adjustment cord may be route from outside the shoulder strap, e.g. from the cord adjuster, into the space between the first and third layers. The adjustment cord may thereby extend from the cord adjuster though the adjustment cord opening into the space between the first and third layers in order to be routed through the layered structure of the shoulder strap.

[0055] With reference to Figure 4, the cord adjuster 400 may comprise a twist tightener comprising a reel 410, around which the adjustment cord 212 is can be wound, in order to adjust the length of the adjustment cord.

[0056] The cord adjuster may comprise a housing 420. The reel 410 may be rotatably supported by the housing 420 for rotation about a reel axis A_R . The cord adjuster may further comprise and a twist actuator cap 430 rotatably supported on the housing for rotation about a twist actuator cap axis A_C , which may be aligned with the reel axis A_R . The twist actuator cap may be configured to be gripped by a user and twisted

in order to rotate the reel 410 to wind the adjustment cord 212 around the reel.

[0057] The cord adjustor may further comprise a ratchet mechanism 440 comprising a plurality of ratchet teeth 442 disposed about the housing 420, and a ratchet latch 444 movably coupled to the twist actuator cap 430. The ratchet latch 444 may be biased into a position in which the ratchet latch can engage the ratchet teeth 442 to prevent or restrict rotation of the twist actuator cap 430, and thereby the reel 410, in a first direction which unwinds the adjustment cord from the reel. However, the ratchet latch 444 may be resiliently deformable away from the ratchet teeth 442 so that the ratchet latch 444 can pass over the ratchet teeth when the twist actuator cap is rotated in a second direction which winds the adjustment cord onto the reel.

[0058] The twist actuator cap 430 may further be movable, e.g. slideably, in order to selectively decouple the twist actuator cap from the reel 410, so that the reel is able to rotate in the first direction and allow the adjustment cord to be unwound from the reel. For example, the twist actuator cap 430 may be slidably supported on the housing 410 for sliding movement in a direction parallel with the twist actuator cap axis to disengage from and engage the reel 410 to prevent rotation of the reel relative to the twist actuator cap.

[0059] In use of the child carrier 100, the twist actuator cap 430 may be moved, e.g. slid, relative to the housing 420, to couple to the reel 410, so that the reel is constrained to rotate together with the twist actuator cap 430. The twist actuator cap may then be rotated about the twist actuator cap axis A_C , against the action of the ratchet mechanism 440, to wind the adjustment cord 212 onto the reel 410, thereby shortening the adjustment strap 200. When the child carrier is to be removed, the user may move, e.g. slide, the twist actuator cap 430 to decouple from the reel 410, so that the reel is rotatable to unwind the adjustment cord from the reel, to lengthen the adjustment strap.

[0060] In other arrangements, the cord adjustor 400 may have any other configuration which enables the adjustment cord 212 to be selectively shortened and lengthened, in order to adjust the length of the adjustment strap 200.

[0061] It will be appreciated by those skilled in the art that although the invention has been described by way of example, with reference to one or more exemplary examples, it is not limited to the disclosed examples and that alternative examples could be constructed without departing from the scope of the invention as defined by the appended claims.

Claims

1. A child carrier configured to be worn by a user and to support a child against the user's torso when the child carrier is being worn by the user, wherein the

carrier comprises:

a sling portion configured in use to support the child against the user's body; and
first and second shoulder straps arranged on either side of the sling portion, wherein the shoulder straps are configured to extend from the sling portion over respective shoulders of the user, wherein the shoulder straps comprise a front portion configured in use to be arranged on a front side of the user's body and a rear portion configured in use to be arranged on the rear side of the user's body, wherein the child carrier further comprises an adjustment strap extending between the rear portions of the first and second shoulder straps, wherein the adjustment strap is adjustable in length in order to adjust a distance between the first and second shoulder straps at the adjustment strap, wherein the child carrier further comprises:
an adjustment cord extending at least partially along one of the first and second shoulder straps and at least partially along the adjustment strap;
a cord adjustor provided on the front portion of the one of the shoulder straps and configured to selectively adjust a length of the adjustment cord to thereby adjust a length of the adjustment strap.

2. The child carrier of claim 1, wherein the child carrier further comprises:
a cord guiding member configured to guide the adjustment cord between the cord adjustor and the adjustment strap, wherein the cord guiding member is configured to guide the adjustment cord through a change in angle between a first portion of the adjustment cord extending along the one of the shoulder straps and a second portion of the adjustment cord extending along the adjustment strap, wherein the cord guiding member is configured to guide the adjustment cord through a change of angle of less than 45 degrees between the first and second portions.
3. The child carrier of claim 2, wherein the cord guiding member is configured to guide the adjustment cord through a change in angle of between 15 and 45 degrees, such as approximately 25 degrees, between first portion and the second portion of the adjustment cord.
4. The child carrier of claim 2 or 3, wherein the cord guiding member is configured to guide the adjustment cord through the change in angle around a radius of between 15mm and 30mm, such as approximately 22 mm.

5. The child carrier of any of the preceding claims, wherein the shoulder strap comprises a layered structure comprising: a first layer comprising a resilient material; a second layer comprising an elastically deformable material and a third layer provided between the second layer and the first layer, wherein the adjustment cord extends along the one of the shoulder straps between the first layer and the third layer. 5 10
6. The child carrier of claim 5, wherein the cord guiding member is coupled to the first layer.
7. The child carrier of claim 5 or 6, wherein the third layer comprises a fabric material. 15
8. The child carrier of any of claims 5 to 7 when depending on claim 2, wherein the third layer is provided along the shoulder strap between the cord adjustor and the cord guiding member. 20
9. The child carrier of any of claims 5 to 8, wherein the shoulder strap further comprises a fourth layer comprising an electrically deformable material having a different, e.g. greater, stiffness than the second layer. 25
10. The child carrier of claim 9, wherein the fourth layer is provided on an opposite side of the first layer from the third layer. 30
11. The child carrier of any of claim 5 to 10, wherein one or more of the layers of the shoulder strap are at least partially wrapped around the first layer of the shoulder strap to be arranged on either side of the first layer within the layer structure of the shoulder strap. 35
12. The child carrier of claim 11 and 9 or 10, wherein the second layer at least partially wraps around the first and fourth layers, to be provided on either side of the first and fourth layers within the layered structure of the shoulder strap. 40
13. The child carrier of any of the preceding claims, wherein an opening is formed through one or more layers of the shoulder strap, such as the second layer, into a space between the first and third layers, wherein the adjustment cord extends from the cord adjustor through the opening into the space between the first and third layers. 45 50
14. The child carrier of any of the preceding claims, wherein the cord adjustor comprises a reel and wherein the cord adjustor is configured to wind the adjustment cord around the reel in order to adjust the length of the adjustment cord. 55
15. The child carrier of claim 14, wherein the cord adjustor comprises a ratchet mechanism configured to selectively prevent the reel from rotating in a direction in which the adjusting cord unwinds from the reel.

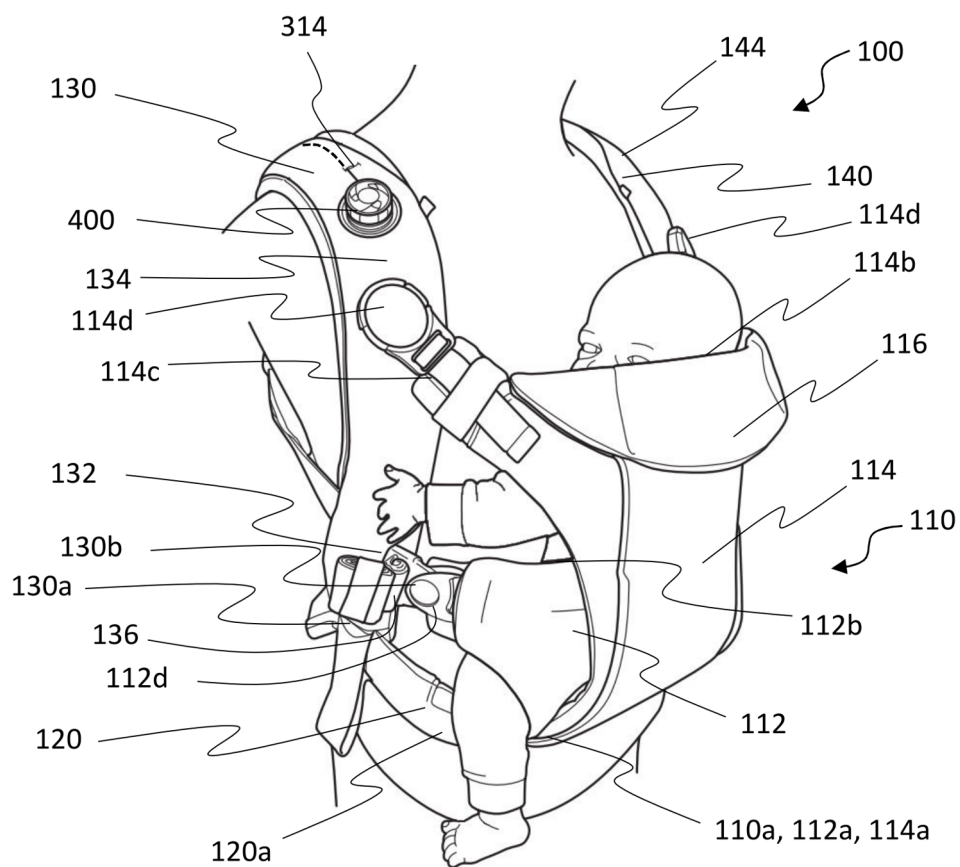


FIG. 1

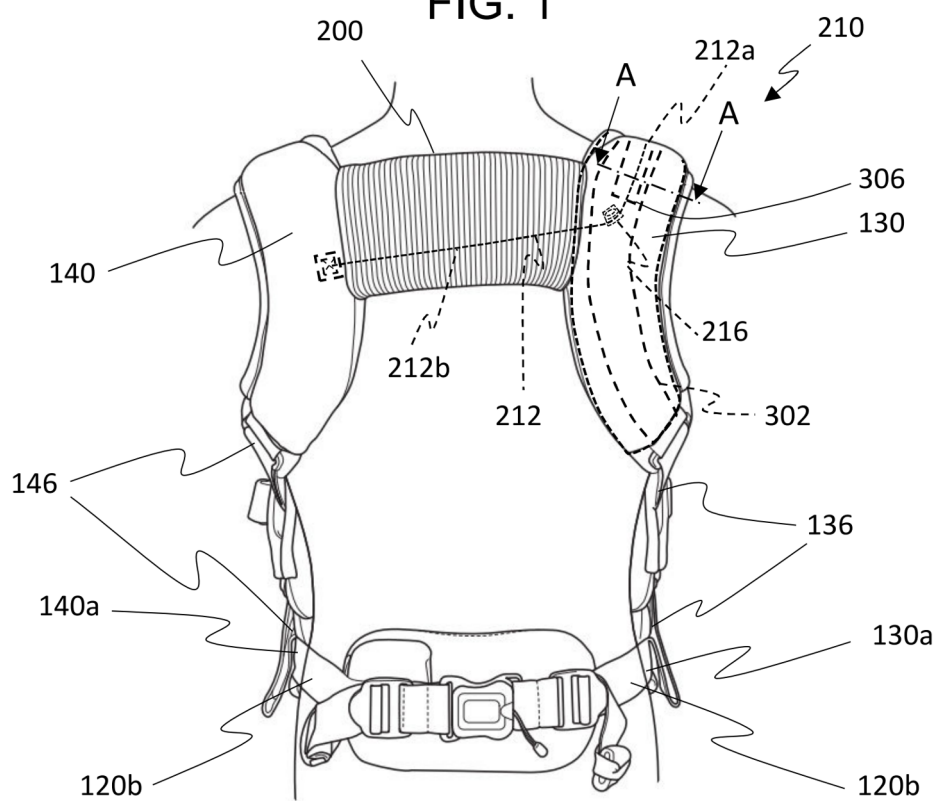


FIG. 2

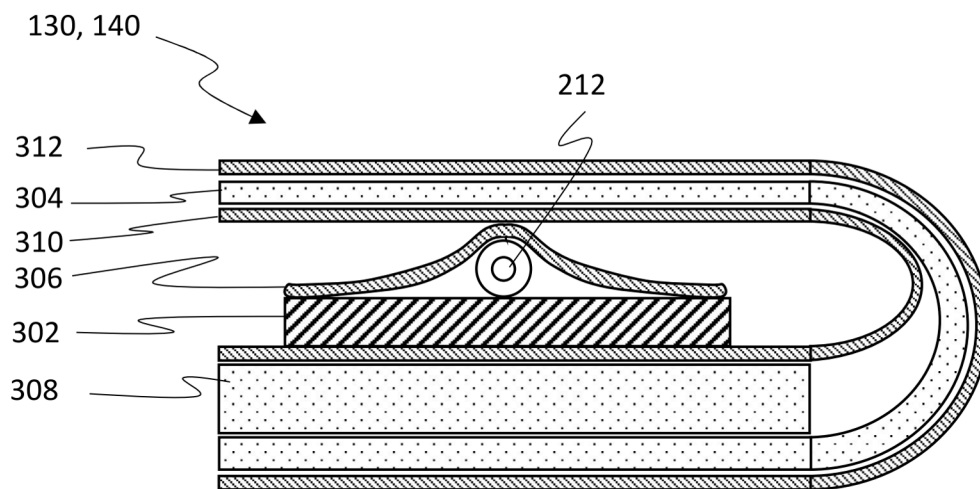


FIG. 3

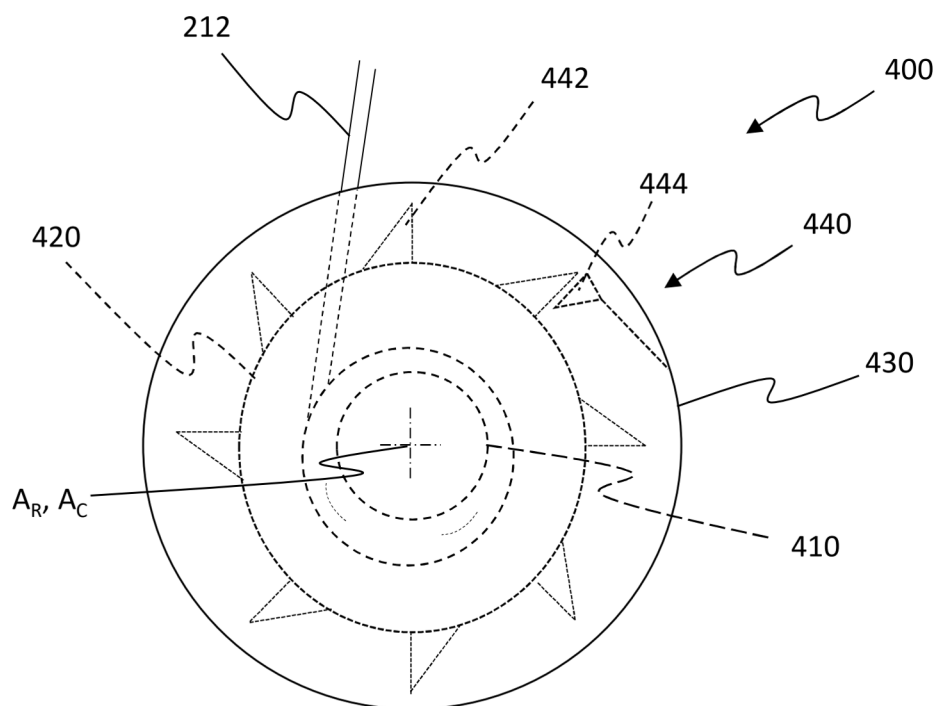


FIG. 4



EUROPEAN SEARCH REPORT

Application Number

EP 26 17 2121

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 2021/361079 A1 (SALAZAR MAUREEN O'CONNOR [US] ET AL) 25 November 2021 (2021-11-25) * figures 1-5 *	1-15	INV. A47D13/02
A	US 2019/150634 A1 (NAJAFI NIKLAS [SE] ET AL) 23 May 2019 (2019-05-23) * figures 1-2 *	1-15	
			TECHNICAL FIELDS SEARCHED (IPC)
			A47D
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		18 August 2026	Melo Sousa, Filipe
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			

EPO FORM 1503 03.82 (P24C01)

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

EP 26 17 2121

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.

18-08-2026

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2021361079 A1	25-11-2021	CN 108244885 A	06-07-2018
		US 2018184813 A1	05-07-2018
		US 2020107650 A1	09-04-2020
		US 2021361079 A1	25-11-2021

US 2019150634 A1	23-05-2019	CN 109310218 A	05-02-2019
		EP 3457893 A1	27-03-2019
		JP 6921185 B2	18-08-2021
		JP 2019516536 A	20-06-2019
		KR 20190009373 A	28-01-2019
		SE 1650694 A1	21-11-2017
		US 2019150634 A1	23-05-2019
		WO 2017200451 A1	23-11-2017

EPO FORM P0459

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