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(54) **HANGER**

(57) Modular garment hanger with an elastic pants bar (3) with terminal ends releasably received in oppositely arranged matching cavities (8) at the tips of the arms. The arms (5) can have a U-shaped cross section

with flanges (9) shielding the cavities (8) for receiving the ends of the pants bar (3). The hanger can comprise clips slideable along and removable from a ridge on the pants bar.

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## Description

**[0001]** The present disclosure relates to a garment hanger, or clothes hanger. Garment hangers usually comprise a hanger body with two oppositely arranged arms extending downward from a middle section. The hangers typically have an essentially triangular symmetrical shape, the middle section usually being provided with a hook at its top side. The downwardly extending arms mimic human shoulders and allow clothes to be suspended and displayed in an unfolded manner.

**[0002]** Different types of hangers are used for different types of garment. For instance, hangers for trousers typically comprise a pants bar. For skirts, hangers are used with a bar carrying clips. For jackets, costumes or coats, hangers are used with arms of larger thickness, particularly in the area of the shoulder ends. For shirts, hangers are used with thinner arms so more hangers can be hung on a bar. Other hangers may be provided with notches for engaging straps of a skirt. Retailers need to have sufficient supply of all these types of hangers.

**[0003]** It is an object of the invention to provide a hanger that can be used for different types of clothes.

**[0004]** The object of the invention is achieved with a garment hanger comprising a pair of arms symmetrically sloping down from a central hook section and an elastic pants bar with terminal ends releasably received in oppositely arranged matching cavities at the tips of the arms. This provides a modular set-up, allowing to use the hanger for shirts as well as for costumes or trousers.

**[0005]** To hide the cavities from view, the arms can be made with a U-shaped cross section with flanges shielding the cavities for receiving the ends of the pants bar. The cavities can for example be defined by a wall, e.g., a closed rectangular wall.

**[0006]** In a further embodiment, the garment hanger further comprises a set of clips on the pants bar for clipping the waist of a skirt or the hems of trouser legs. To accommodate the clips, the pants bar may for example comprise an upper ridge the clips resiliently gripping the upper ridge. To that end, the pants bar can have an I-shaped or T-shaped cross section. The clips engage the upper ridge of the crossbar on opposing sides of the ridge, e.g., in a slideable manner. After removing the pants bar, the clips can be slid and removed from the pants bar.

**[0007]** In a specific embodiment, each clip includes a pair of jaws, both jaws including a lower clamping surface, an upper grip and a central hinge section, the clip comprising a spring biasing the lower clamping surfaces towards one another. A suitable spring may for example comprise a U-shaped leaf spring, e.g., comprising a pair of legs connected at an upper end. The legs may for example be accommodated in a matching slot disposed in an outer surface of an associated jaw. The clips will typically have a symmetrical set-up, with jaws of identical size and shape.

**[0008]** In a specific embodiment, the hinge section of

one of the jaws comprises side flanges facing opposite side flanges of the other one of said jaws, the flanges being provided with recesses fitting slidably on the upper ridge of the pants bar. The jaws pivot about the upper ridge. Such clips are low cost and can be easily assembled and mounted on the pants bar.

**[0009]** In a further embodiment, the arms have a width of 15 - 25 mm over their full length. It has been found that, even without the usual bulging tips of the arms, coats and jackets are still supported in a presentable manner, while the hanger still does not take up much space. This way, the hanger is suitable for coats and costumes, but also for shirts and sweaters. If both arms are provided with a notch for engaging a strap, the hanger can also be used for skirts.

**[0010]** The hanger will typically have a symmetrical set-up, with arms of even lengths. The garment hanger will also typically have a hook for hanging it on a bar or similar support. The garment hanger may for example be made of a suitable plastic, such as PVC or PE.

**[0011]** The above-described aspects will hereafter be more explained with further details and benefits with reference to the drawings showing a number of embodiments by way of example.

Figure 1: shows a hanger according to the present invention;

Figure 2: shows the main module of the hanger of Figure 1;

Figure 3: shows a detail of the connection of the pants bar of the hanger of Figure 1;

Figure 4: shows a clip of the hanger in front view;

Figure 5: shows the clip in side view;

Figure 6: shows the spring of the clip of Figure 4 in front view.

**[0012]** Figure 1 shows a garment hanger 1 according to the present invention comprising a main hanger 2 and several additional modules, including a pants bar 3 and two clips 4 for hanging a skirt or trousers. Figure 2 shows the main hanger 2 without the additional modules 3, 4.

**[0013]** The main hanger 2 comprises a pair of arms 5 symmetrically sloping down from a central hook section 6. The hook section 6 has a top side provided with a hook 7. The two arms 5 are equally shaped to provide a symmetrical and essentially triangular outline. The arms 5 are curved to mimic the anatomy of human shoulders.

**[0014]** The pants bar 3 is an elastic pants bar with terminal ends received in oppositely arranged matching cavities 8 at the tips of the arms 5. Figure 3 shows an inner side of a tip of one of the arms 5. The tip has a U-shaped cross section with two side walls 9 bridged by a top wall (not shown). The side walls 9 shield the cavity 8 which is defined by a rectangular wall on a lower surface of the top wall of the arm 5. The cavity 8 has a shape matching with the cross section of the pants bar 3, so the tip of the pants bar 3 fits within the cavity 8. The opposite arm 5 of the garment hanger 1 has an identical cavity 8.

The two cavities 8 face each other and are aligned with each other so they can receive the tips of the pants bar 3 in order to suspend the pants bar 3 in a stable manner, allowing it to carry one or more pants. The pants bar 3 is elastic, so it can be slightly bent when it is snapped into the cavities 8 or out of the cavities 8.

**[0015]** The pants bar 3 has an I-shaped cross section with an upper ridge 10 and a lower ridge 11 (see Figures 3 and 4). The cross section is the same over the full length of the pants bar 3.

**[0016]** The pants bar 3 carries a set of two clips 4 on the pants bar 3. The clip 4 is shown in front view in Figure 4 and in side view in Figure 5. The two clips 4 engage the upper ridge 10 of the pants bar 3 on opposing sides of the upper ridge 10. Both clips 4 comprise a pair of identical jaws 12. Both jaws 12 of a clip 4 have a lower clamping surface 13, an upper grip 14 and a central hinge section 15. The clips 4 also comprise a spring 16 biasing the lower clamping surfaces 13 towards one another.

**[0017]** The spring 16 is a U-shaped leaf spring shown separately in Figure 6. The leaf spring 16 comprising a pair of legs 17 connected at an upper end by a central web 18, the inwardly bent tips 19 of the legs 17 being accommodated in a matching slot 20 in an outer surface of the respective jaw 12.

**[0018]** The hinge section 15 of the jaws 12 comprises side flanges 21 facing opposite side flanges 21 of the other one of the pair of jaws 12. These flanges 15 are provided with recesses 22 fitting slidably on the upper ridge 10 of the pants bar 3. This way the clips 4 can be slid along the upper ridge 10 of the pants bar 3. When the pants bar 3 is removed from the main hanger 2 the clips 4 can be removed from the pants bar 3 by sliding the clips 4 over the end tips of the pants bar 3. The clips 4 can be placed on the pants bar 3 by placing the upper ridge 10 of the pants bar 3 in the recesses 22 of the hinge section 15 and sliding the clip 4 to a desired position on the pants bar 3.

**[0019]** The leaf spring 16 biases the jaws 12 of the clip 4 towards each other so the clamping surfaces 13 of the two jaws 12 engage each other in a clamping manner. This way the clip 4 can clamp the straps of a skirt or the hems of a trousers leg.

**[0020]** To release the clamping surfaces 13 a user can pinch the grips 14 of the clip 4 toward each other against the action of the U-shaped leaf spring 16.

**[0021]** The arms 5 have a width of 15 - 25 mm over their full length. It has been found that this is sufficient to hang a coat or jacket in a presentable manner.

**[0022]** Both arms 5 are provided with a notch 23 for engaging a strap.

**[0023]** It is noted that the drawings are schematic, not necessarily to scale and that details that are not required for understanding the present invention may have been omitted. The terms "upward", "downward", "below", "above", and the like relate to the embodiments as oriented in the drawings, unless otherwise specified.

**[0024]** The disclosure is not restricted to the above de-

scribed embodiments which can be varied in a number of ways within the scope of the claims.

## 5 Claims

1. Garment hanger (1) comprising a pair of arms (5) symmetrically sloping down from a central hook section (6) and an elastic pants bar (3) with terminal ends releasably received in oppositely arranged matching cavities (8) at the tips of the arms.
2. Garment hanger according to claim 1, the arms (5) having a U-shaped cross section with flanges (9) shielding the cavities (8) for receiving the ends of the pants bar (3).
3. Garment hanger according to claim 1 or 2, wherein the cavities (8) are defined by a wall, e.g., a closed rectangular wall.
4. Garment hanger according to claim 1, 2 or 3, further comprising a set of clips (4) on the pants bar (3).
5. Garment hanger according to claim 4, wherein the pants bar (3) has an upper ridge the clips resiliently gripping the upper ridge.
6. Garment hanger according to claim 5, wherein the pants bar has an I-shaped or T-shaped cross section.
7. Garment hanger according to claim 5 or 6, wherein the two clips (4) slidably and pivotally engage the upper ridge (10) of the pants bar (3) on opposing sides of the upper ridge.
8. Garment hanger according to claim 7, wherein each clip (4) includes a pair of jaws, both jaws including a lower clamping surface, an upper grip and a central hinge section, the clip comprising a spring biasing the lower clamping surfaces towards one another.
9. Garment hanger according to claim 8, wherein the spring comprises a U-shaped leaf spring.
10. Garment hanger according to claim 9, the leaf spring comprising a pair of legs connected at an upper end, the legs being accommodated in a matching slot disposed in an outer surface of an associated jaw.
11. Garment hanger according to claim 10, wherein the hinge section of one of said jaws comprises side flanges facing opposite side flanges of the other one of said jaws, the flanges being provided with recesses fitting slidably on the upper ridge of the pants bar.
12. Garment hanger according to any one of the preced-

ing claims, wherein the arms have a width of 15 - 25 mm over their full length.

13. Garment hanger according to any one of the preceding claims, wherein both arms are provided with a notch for engaging a strap.

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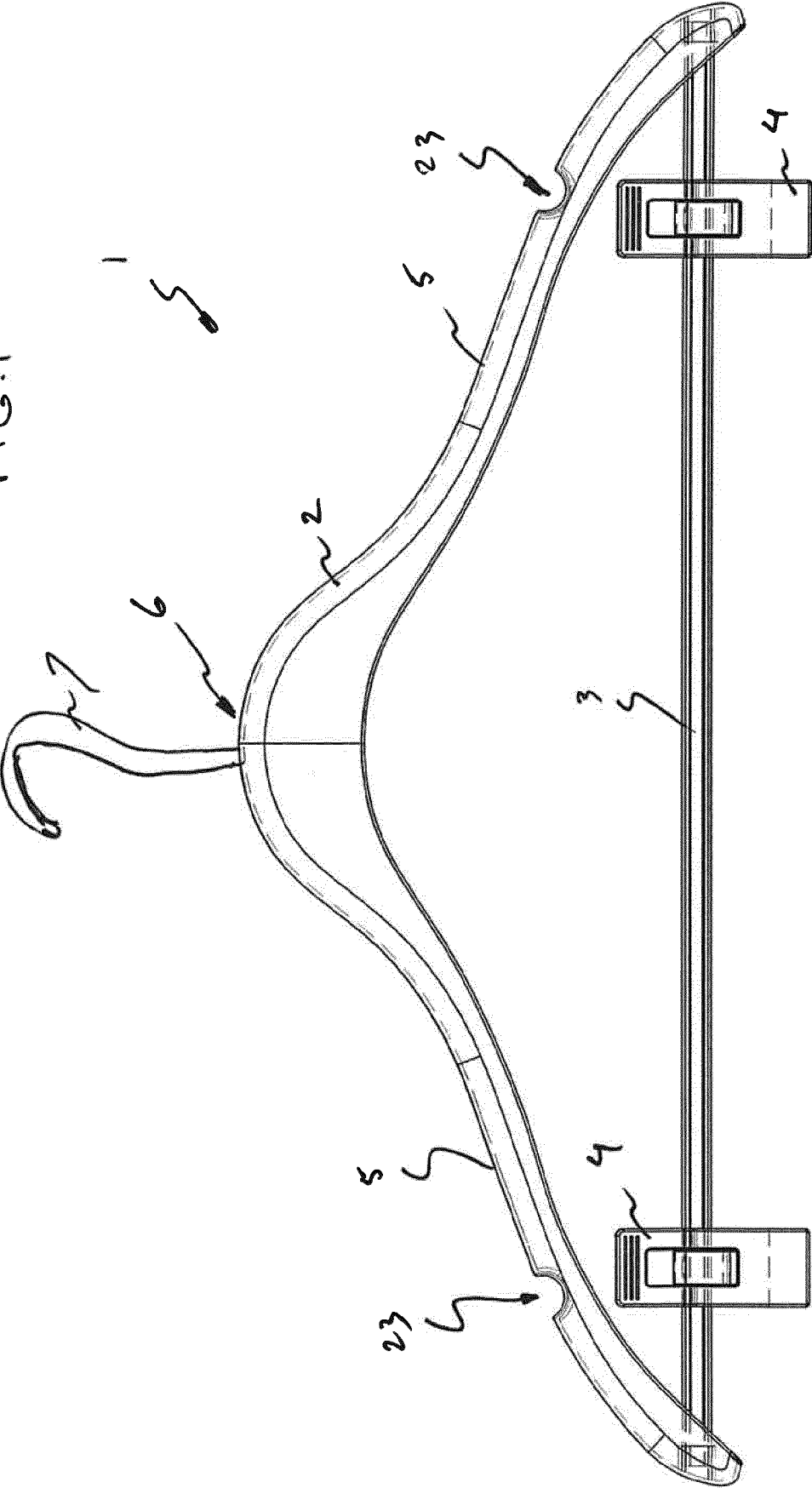
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FIG. 1



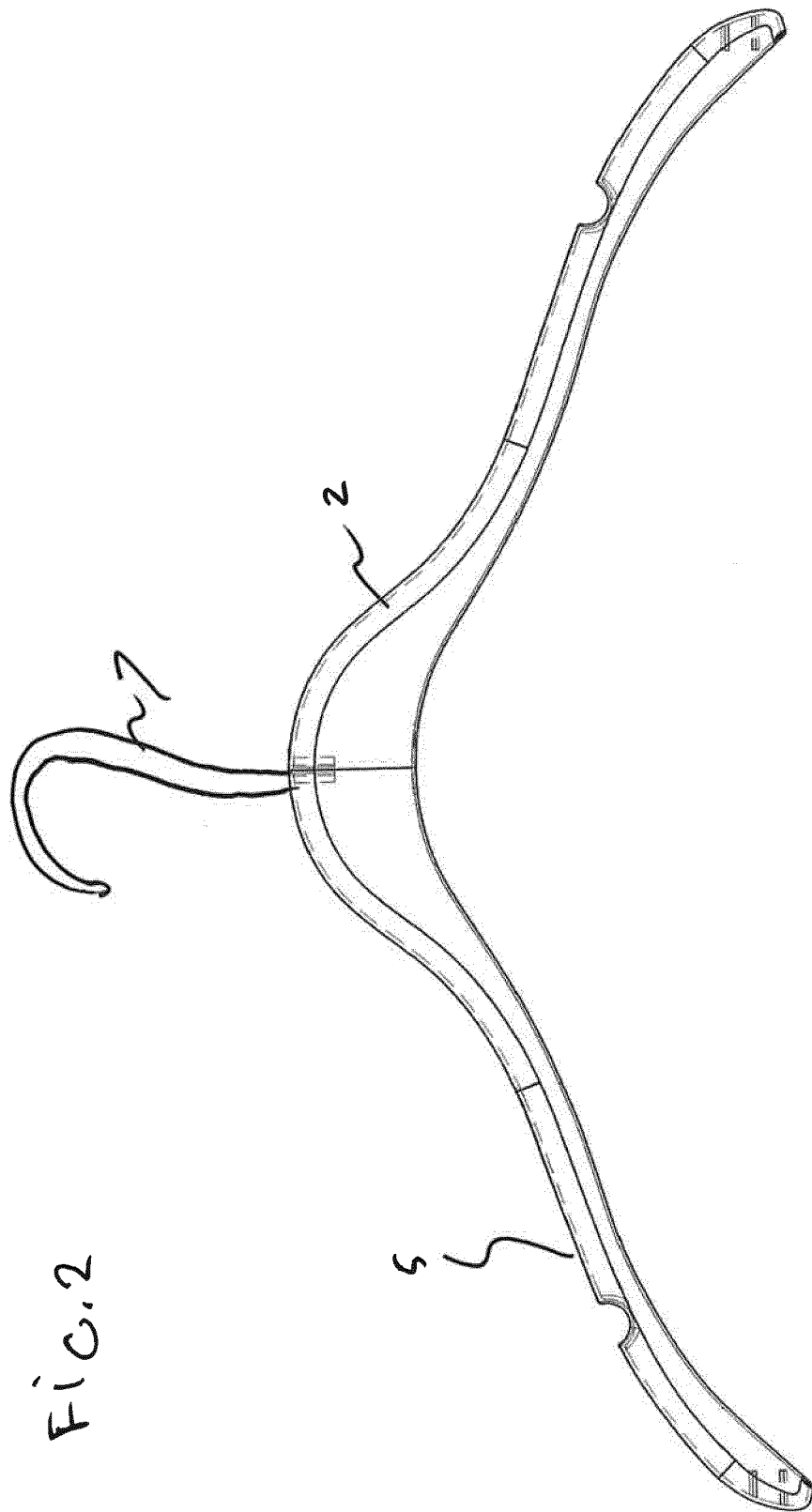


FIG. 3

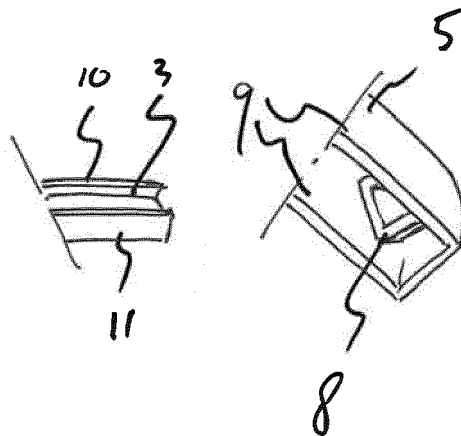


FIG.5

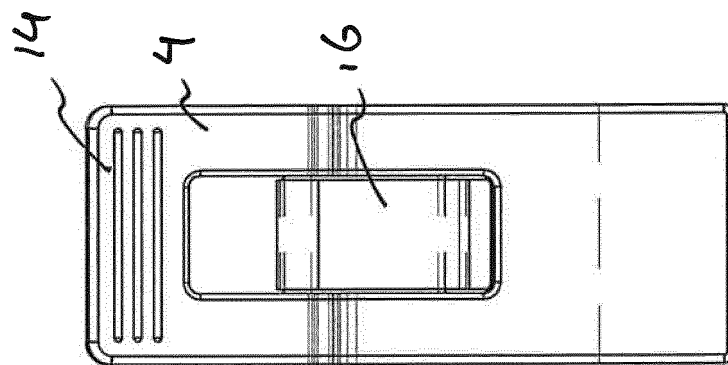


FIG.4

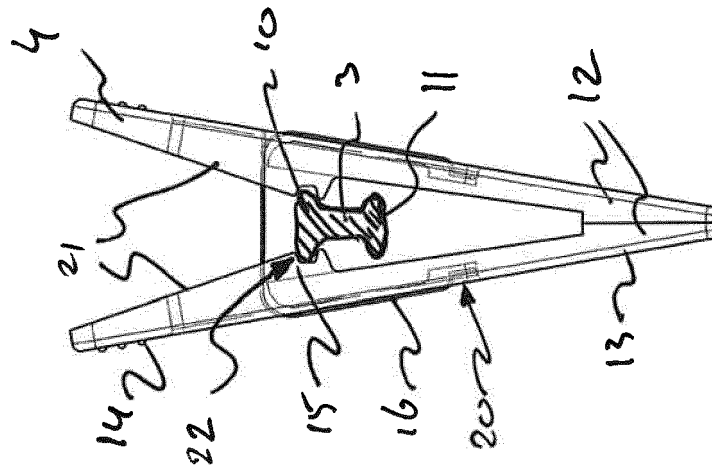
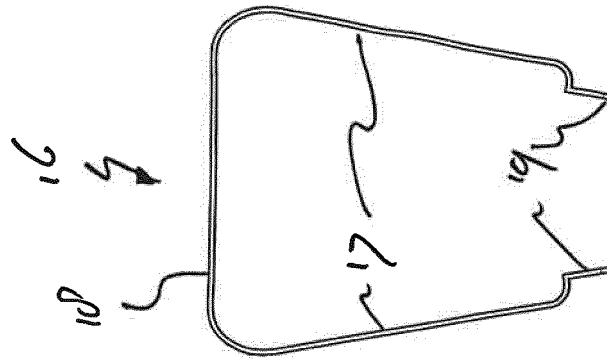


FIG.6







## EUROPEAN SEARCH REPORT

Application Number  
EP 19 18 8017

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Place of search <b>The Hague</b>		Date of completion of the search <b>30 January 2020</b>	Examiner <b>van Overbeek, Kajsa</b>
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