

(21) Application No: 1305257.6

(22) Date of Filing: 22.03.2013

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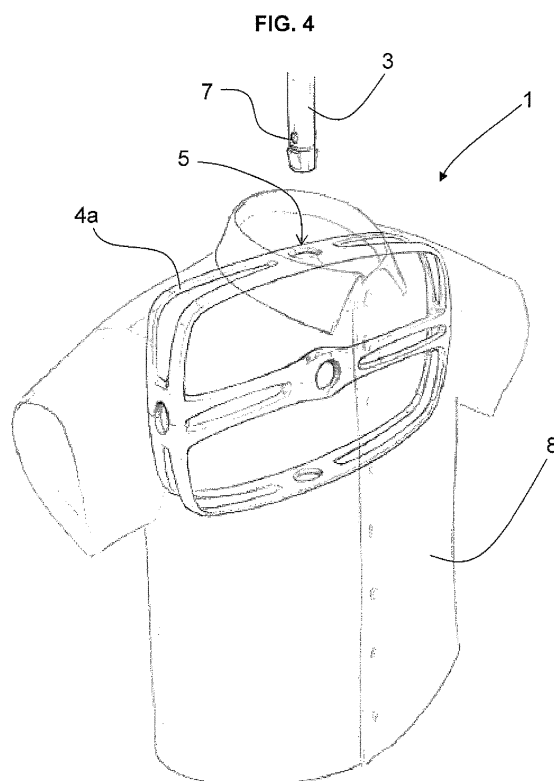
(51) INT CL:
A47G 25/14 (2006.01) **A47G 25/28** (2006.01)
A47G 25/40 (2006.01)

(56) Documents Cited:
CN 202060527 U **CN 201899300 U**
CN 201861378 U **CN 201743445 U**
US 6206254 B1
JPH1132893 A (KANESHIRO) see abstract

(58) Field of Search:
INT CL **A47G**
Other: **EPODOC, WPI**

(54) Title of the Invention: **A clothes hanger**
Abstract Title: **A clothes hanger**

(57) An adjustable clothes hanger (1) is provided. The hanger (1) comprises a main body (2) capable of retaining an article of clothing. The main body (2) has at least two separately positioned engagement means (5). The hanger also has a hanging means (3) that is releasably engageable with any of the engagement means (5). The clothes hanger can be adjusted for use with different sizes and/or types of clothing by changing the engagement means (5) used to engage the hanging means (3).



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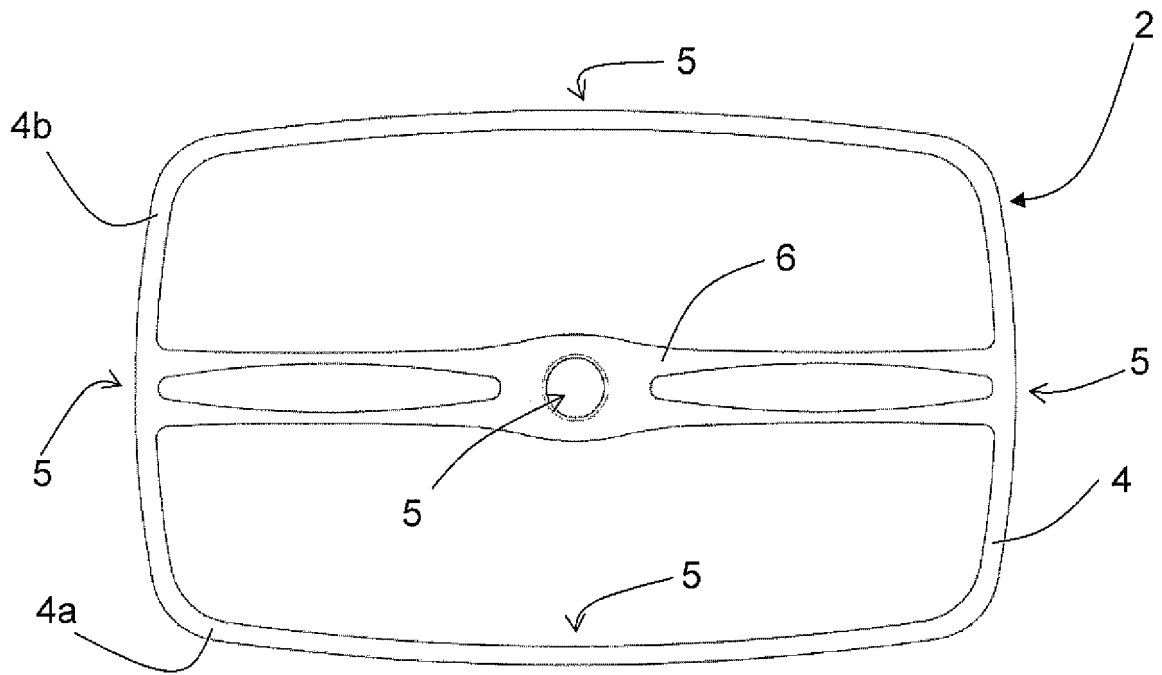


FIG. 1

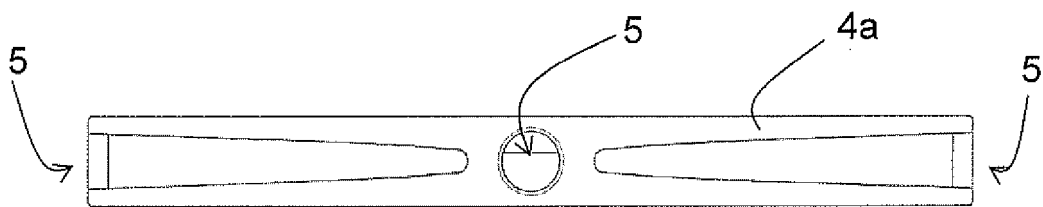


FIG. 2

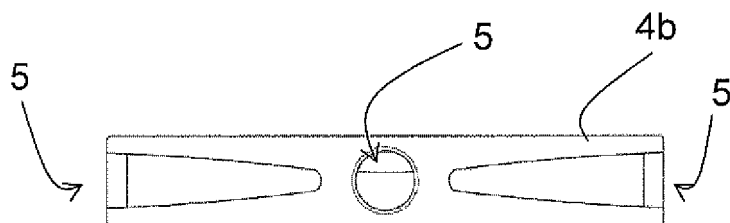


FIG. 3

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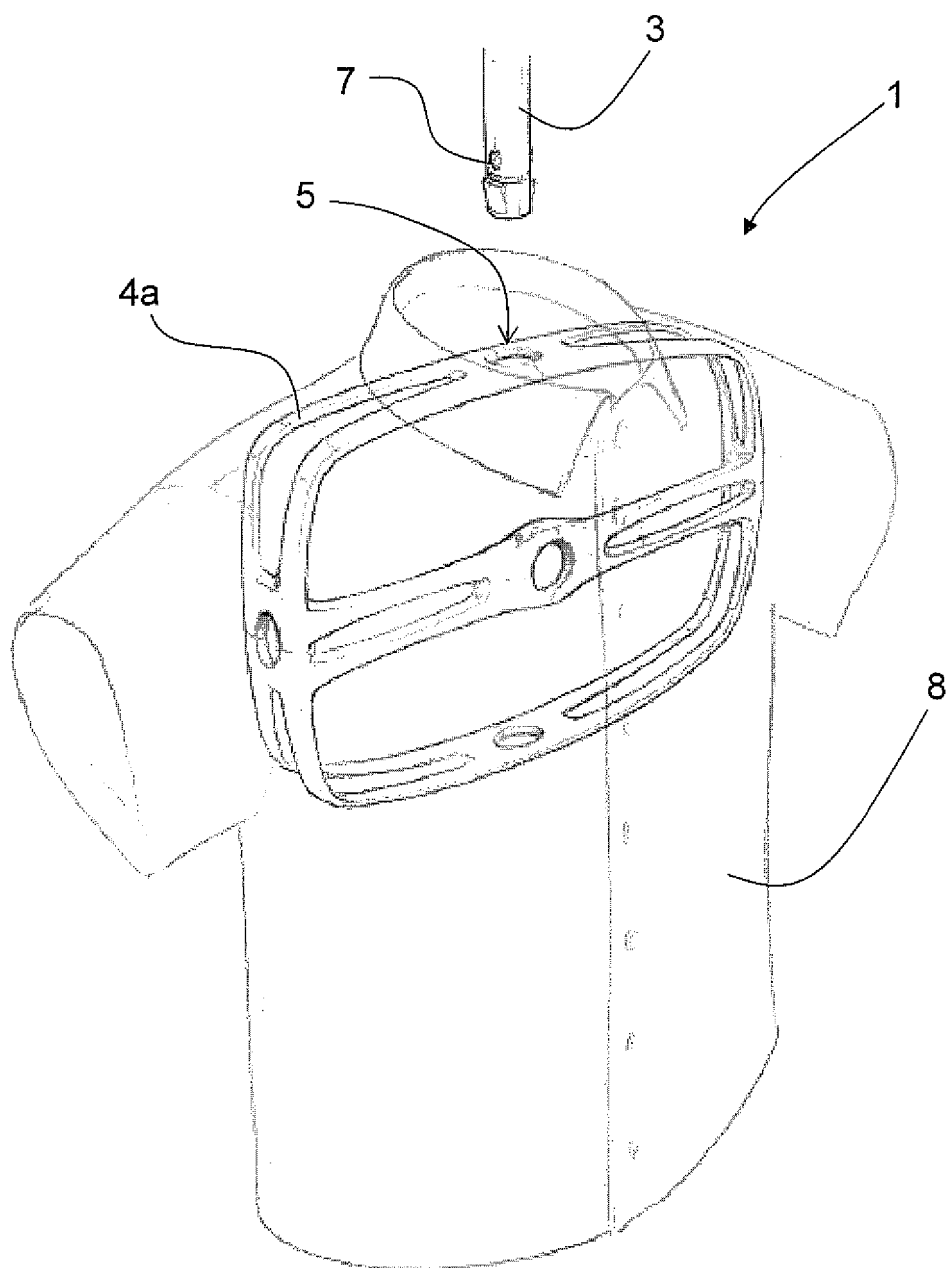


FIG. 4

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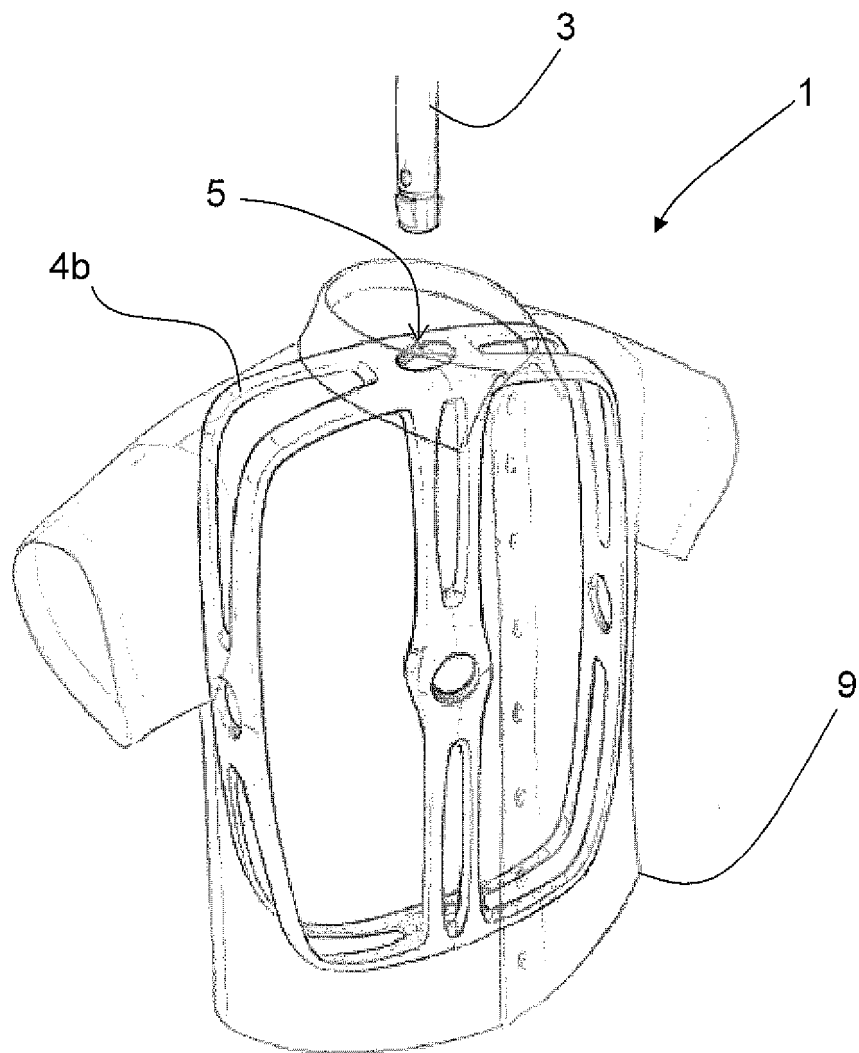


FIG. 5

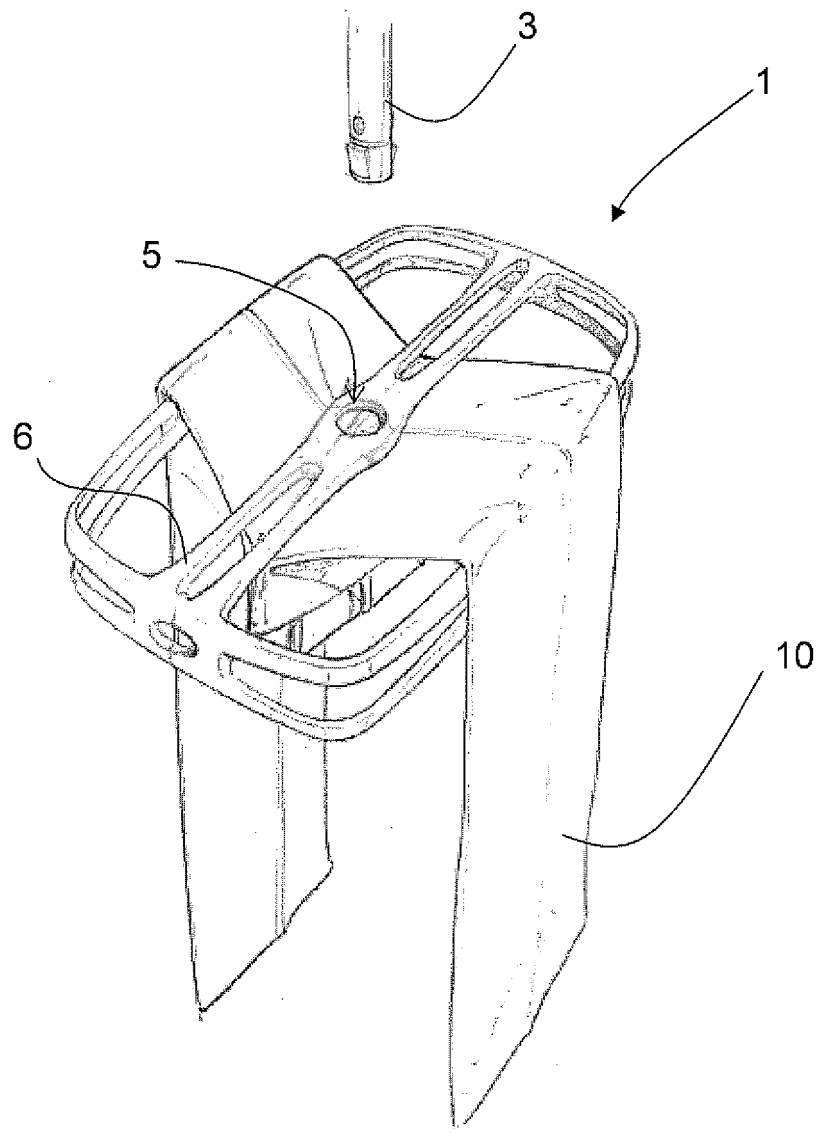


FIG. 6

A CLOTHES HANGER

Field of the Invention

The present invention relates to clothes hangers and in particular clothes
5 hangers capable of being adjusted to retain a range of different clothing types
and/or sizes.

Background of the Invention

Clothes hangers are available in a large range of shapes and sizes to
10 accommodate various types and sizes of clothing.

Whilst some hanger designs are only suitable to retain certain types and sizes
of clothing, it is known for hangers to be designed to accommodate multiple
types and/or sizes of clothing.

15

In order to accommodate multiple types/sizes of clothing it is known to provide
hangers with adjustable mechanical means that are movable to vary the
shape of hanger so that it can better retain a particular article of clothing.

20 Summary of the Invention

The present invention seeks to provide a hanger which is capable of retaining
a range of types and/or sizes of clothing without the need for adjustable
mechanical means which increases the manufacture costs and reduces the
durability of the hangers.

25

To this end the present invention provides an adjustable clothes hanger as
claimed in claim 1.

In use the main body of the clothes hanger is suspended (e.g. from a clothes
30 rail) by way of the hanging means. Providing a choice of more than one
engagement means on the main body enables the hanging means to be
engaged to the main body of the clothes hanger in more than one
arrangement. The ability to arrange the main body and the hanging means of

the present invention in a variety of ways gives the clothes hanger a level of adjustability.

5 It will be appreciated that one arrangement of the main body and hanging means may be suitable for retaining a shirt due to the orientation of the main body, whereas in a second arrangement the main body may have a relative orientation that is more suitable for retaining trousers.

10 A user would therefore be able to select which engagement means to connect the hanging means to dependant on the type and/or size of clothing that is to be hung on the hanger.

15 Preferably at least one of the engagement means may be positioned on an outer edge of the main body. In this way most, if not all, of the main body of the hanger hangs down from the hanging means.

20 Preferably at least two engagement means may be positioned or orientated perpendicular to one another on the main body. In this way the orientation of the main body can be adjusted by rotating it about an angle of 90°.

25 Preferably the main body may comprise a substantially oblong shaped frame. Although other shapes are considered possible the variation in the dimensions of the main body's frame is considered beneficial to the creation of a different hanger shape depending which engagement means the hanging means are connected to.

It will be appreciated that providing different hanger shapes with enable the hanger to retain different clothes types and/ or sizes.

30 Further preferably the frame may have rounded corners. It is appreciated that rounded corners are preferable to angular corners because clothing sits better on them.

Although an oblong shaped frame is particularly preferable it is considered that a substantially oval shaped frame may also be adopted for similar reasons to the oblong shaped frame.

- 5 Preferable the main body may comprise a frame with a cross-bar extending between opposing sides or edges of the frame. It is considered beneficial for the frame of the main body to be provided with a cross-bar, not least for the structural strength it provides.
- 10 Further preferably the cross-bar may have an engagement means positioned thereon. The provision of an engagement means on the cross-bar enables the main body to connected to the hanging means in further alternative orientation, thus providing for further types and/or sizes of clothes to be retained by the clothes hanger of the present invention.
- 15 Preferably each engagement means may comprise an aperture capable of releasably receiving the hanging means. In this way the hanging means can be inserted into whichever engagement means will produce the desired orientation of the hanger main body.
- 20 Further preferably the hanging means and said apertures may be provided with complementary screw threads. In this way the main body and the hanging means can be screwed into a secure connection that will ensure the weight of an article of clothing does not pull the hanger apart.
- 25 Alternatively the hanging means may have a resiliently biased portion that releasably retains the hanging means within each of said apertures. In this way the user can simply push the hanging means in to a chosen engagement means to form a hanger with the required shape. When the user wishes to
- 30 change the shape of the hanger they can depress or otherwise disengage the resiliently biased portion and remove the hanging means from the engagement means.

Brief Description of the Drawings

The present invention will now be described with reference to preferred embodiment shown in the drawings, wherein:

5 Figure 1 shows a top view of the main body frame of a preferred embodiment of the clothes hanger of the present invention;
 Figure 2 shows a side view of the clothes hanger shown in Figure 1;
 Figure 3 shows an end view of the clothes hanger shown in Figure 1;
 Figure 4 shows the clothes hanger of the present invention in a first
10 orientation and retaining a large shirt;
 Figure 5 shows the clothes hanger in a second orientation and retaining a small shirt; and
 Figure 6 shows the clothes hanger in a third orientation and retaining a pair of trousers.

Detailed Description of the Preferred Embodiment

The present invention provides a clothes hanger that can be adjusted for use in hanging clothing of various types and/or sizes. It is appreciated that the clothes hanger of the present invention might be used as standard clothes
20 hangers are and be hung in a wardrobe or cupboard.

However it is also envisioned that the adjustability of the described hanger makes it particularly suitable for use with a domestic washing machine of the type shown in European Patent Application No. 06755552.4. It is envisioned
25 that the washing machine would be provided with one or more clothes hangers of the present invention and that the user would be able to adjust the hangers to suit the size and/or type of the articles of clothing that are to be washed.

30 A preferred embodiment of the adjustable clothes hanger 1 of the present invention is shown in Figures 4-6, with each figure showing a different arrangement of the same adjustable clothes hanger 1. The different possible arrangements of the clothes hanger will be described in more detail hereinafter.

Figures 1-3 show a preferred embodiment of the main body 2 of the clothes hanger of the present invention. In use, and as will be appreciated from Figures 4-6, a complementary hanging means 3 is connectable to the main
5 body 2 to form the clothes hanger of the present invention.

As can be seen from Figure 1, the main body 2 comprises a substantially oblong shaped frame 4 with rounded corners. Although alternative frame shapes are considered possible the oblong shaped frame 4 represented in the
10 figures is particularly preferable. This is because the differing dimensions of the frame facilitate the creation of different shaped hangers depending on the orientation the main body 4 and the hanging means 3 have when they are connected together.

15 The frame 4 has two opposing long sides 4a and two opposing shorter sides 4b. Preferably, in addition to the rounded corners, each side or edge of the frame is rounded to better receive a shirt, jacket or other types of clothing top.

It is appreciated that in an alternative frame shape the corners may be
20 rounded to such an extent that the frame's shape is closer to that of an oval rather than an oblong.

It will be appreciated from Figures 1-3 that each of the frame's sides is provided with an engagement means in the form of an aperture 5. Each
25 aperture 5 is shaped so as to releasably receive the hanging means 3. Although none of the figures actually show the hanging means 3 connected to the main body 2 the skilled person will readily appreciate the interaction of the hanging means 3 with the engagement means 5 of the main body 2.

30 It will be appreciated that although the figures show the main body's frame 4 as having an aperture 5 on each of its sides 4a, 4b more simplified embodiments of the present invention may only have an aperture on one of the long sides 4a and one of the short sides 4b.

The frame 4 is also provided with a cross-bar 6 that extends between two opposing sides of the frame. Although the cross-bar 6 is shown in the figures as extending between the opposing short sides 4b it is envisioned that a cross-bar may alternatively extend between the opposing long sides 4a without departing from the present invention.

Although not shown in the figures, it is envisaged that the frame may be provided with more than one cross-bar to facilitate multiple articles of clothing to be hung on a single hanger.

It will be appreciated that the cross-bar 6 will provide an element of structural support to the frame 4 and help it to retain its shape. As will be appreciated from Figure 6 the cross-bar 6 will also play a role in retaining trousers on the clothes hanger.

As with the sides/edges of the frame 4 the cross-bar 6 is provided with engagement means in the form of an aperture 5 in to which the hanging means 3 can be releasably received.

It will be appreciated from the figures that the positioning and orientation of the apertures on the frame is such that the central point of the apertures on the long side 4a, the short side 4b and the cross-bar 6 are located in separate perpendicular planes in respect to one another.

Preferably the main body's frame 4 is moulded from a durable material, such as plastic, wood or metal.

In order to reduce the amount of material used to make the main body both the sides/edges of the frame and the cross-bar may be provided with cut-out regions.

Turning now to Figures 4-6 the various clothes hanger shapes that can be achieved using the hanger of the preferred embodiment will now be described in more detail.

Figure 4 shows a hanger arrangement considered particularly suitable for retaining larger shirts 8. In this arrangement the hanging means 3 is inserted in to an aperture located in one of the longer sides/edges 4a. In this way the width of the main body's frame 4 is maximised to fill the shoulders of the shirt.

The interaction of the hanging means 3 with the aperture 5 of the main body 2 can be appreciated from Figure 4. Although not actually shown in an engaged relationship it should be clear that the bottom end portion of the hanging means is inserted in to the aperture 5 provided in the uppermost long side/edge 4a of the frame 4.

The bottom end of the hanging means 3 is provided with a latch mechanism 7 which depresses to allow the hanging means to be inserted into the aperture 5. Once the latch is passed through the aperture 5 it will spring back to retain the hanging means 3 within the aperture 5.

In order to disconnect the hanging means 3 from the main body 2 the resiliently biased latch may be depressed using an actuating means in the form of a simple button, for example. The skilled person will appreciate that alternative approaches may be used to releasably connect the hanging means 3 to the main body 2.

One alternative approach that is envisioned is the use of corresponding screw threads on both the hanging means 3 and the aperture 5. In this way a user can screw the clothes hanger together in whichever arrangement they require for a particular type and/or size of clothing and then unscrew them again when they need a hanger with an alternative arrangement.

Another alternative approach may be to adopt a simple bayonet connection similar to those adopted in light bulb fittings.

Moving on from the hanger arrangement shown in Figure 4, the skilled person will appreciate that alternative sizes and/or types of clothing may be

accommodated using the hanger of the present invention by simply disconnecting the hanging means 3 from the main body 2 and reconnecting them with a different orientation.

5 In the arrangement shown in Figure 5 the hanging means 3 is inserted into an aperture 5 in the uppermost short side/edge 4b of the main body's frame 4. By doing this the width of the clothes hanger 1 is minimised thus allowing it to receive smaller shirts, jackets or other clothes tops.

10 In the arrangement of Figure 6 the hanging means 3 is inserted into the aperture 5 in the cross-bar 6 of the main body 2. By inserting the hanging means 3 into the cross-bar rather than one of the sides/edges of the frame the main body has a flat orientation. As is shown in Figure 6, the flat orientation makes the hanger more suitable for receiving trousers 10.

15

Although not shown in the figures it is appreciated that the hanging means 3 may be provided with a hook to hang the hanger from a clothes rail for example. Of course the present invention could also make use of suitable alternatives to the hook which are known in the art without departing from the

20 scope of the present invention.

Claims

1. An adjustable clothes hanger comprising:
a main body capable of retaining an article of clothing, said body
5 having at least two separately positioned engagement means;
a hanging means that is releasably engageable with any of the
engagement means; and
whereby adjustment of the clothes hanger is achievable by changing
the engagement means used to engage the hanging means.
10
2. The hanger of claim 1, wherein at least one of the engagement means
is positioned on an outer edge of the main body.
3. The hanger of claim 1 or 2, wherein at least two engagement means
15 are positioned perpendicular to one another on the main body.
4. The hanger of claim 1, 2 or 3, wherein the main body comprises a
substantially oblong shaped frame.
- 20 5. The hanger of claim 4, wherein the frame has rounded corners
6. The hanger of claim 1, 2 or 3, wherein the main body comprises a
substantially oval shaped frame.
- 25 7. The hanger of any of the preceding claims, wherein the main body
comprises a frame with a cross-bar extending between opposing sides or
edges of the frame.
8. The hanger of claim 7, wherein the cross-bar has an engagement
30 means positioned thereon.
9. The hanger of any of the preceding claims, wherein each engagement
means comprises an aperture capable of releasably receiving the hanging
means.

10. The hanger of claim 9, wherein the hanging means and each of the apertures are provided with complementary screw threads.

11. The hanger of claim 9, wherein the hanging means has a resiliently
5 biased portion that releasably retains the hanging means within each of said apertures.

12. An adjustable clothes hanger substantially as described, with reference to the drawings, hereinbefore.

Amendments to the claims have been filed as follows:

Claims

1. An adjustable clothes hanger comprising:
a main body capable of retaining an article of clothing, said body
5 having at least two engagement means separately positioned perpendicular to
one another on the main body;
a hanging means that is releasably engageable with any of the
engagement means; and
whereby adjustment of the clothes hanger is achievable by changing
10 the engagement means used to engage the hanging means.
2. The hanger of claim 1, wherein at least one of the engagement means
is positioned on an outer edge of the main body.
- 15 3. The hanger of claim 1 or 2, wherein the main body comprises a
substantially oblong shaped frame.
4. The hanger of claim 3, wherein the frame has rounded corners
- 20 5. The hanger of claim 1 or 2, wherein the main body comprises a
substantially oval shaped frame.
6. The hanger of any of the preceding claims, wherein the main body
comprises a frame with a cross-bar extending between opposing sides or
25 edges of the frame.
7. The hanger of claim 6, wherein the cross-bar has an engagement
means positioned thereon.

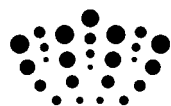
8. The hanger of any of the preceding claims, wherein each engagement means comprises an aperture capable of releasably receiving the hanging means.

5 9. The hanger of claim 8, wherein the hanging means and each of the apertures are provided with complementary screw threads.

10. The hanger of claim 8, wherein the hanging means has a resiliently biased portion that releasably retains the hanging means within each of said apertures.

10

11. An adjustable clothes hanger substantially as described, with reference to the drawings, hereinbefore.



Application No: GB1305257.6

Examiner: Mr Mike Walker

Claims searched: ALL

Date of search: 20 September 2013

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1,2,7,9	CN202060527 U (QIYI HIGH SCHOOL ---) see abstract and drawings
X	1,2,4,9	CN201743445 U (ECNU AFFILIATED --) see abstract
X	1,2,4,9	CN201861378 U (GUOJI LIN) see abstract
X	1,2	CN201899300 U (ZEHANG ZHAO) see abstract
X	1,2	US6206254 B1 (LIN) see abstract
X	1,2	JPH1132893 A (KANESHIRO) see abstract

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
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&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

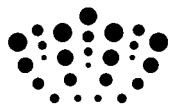
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The following online and other databases have been used in the preparation of this search report

EPODOC, WPI



International Classification:

Subclass	Subgroup	Valid From
None		