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(54) **Wetsuit/drysuit removal tool**

(57) The wetsuit removal tool (1) is a product that helps surfers and other wetsuit users, to remove their wetsuit with ease. The ball bearings (23) will help roll the wetsuit off the user's legs. The fins (6) will work in harmony with the ball bearings and push the wetsuit down the user's leg. It is also a hanger that the wetsuit will be hung on after use. The hanger also has air vents (14) which will allow the air to filter around the wetsuit to help it dry quicker. Another feature is a hook (18) that will help the user zip up and down their wetsuit.

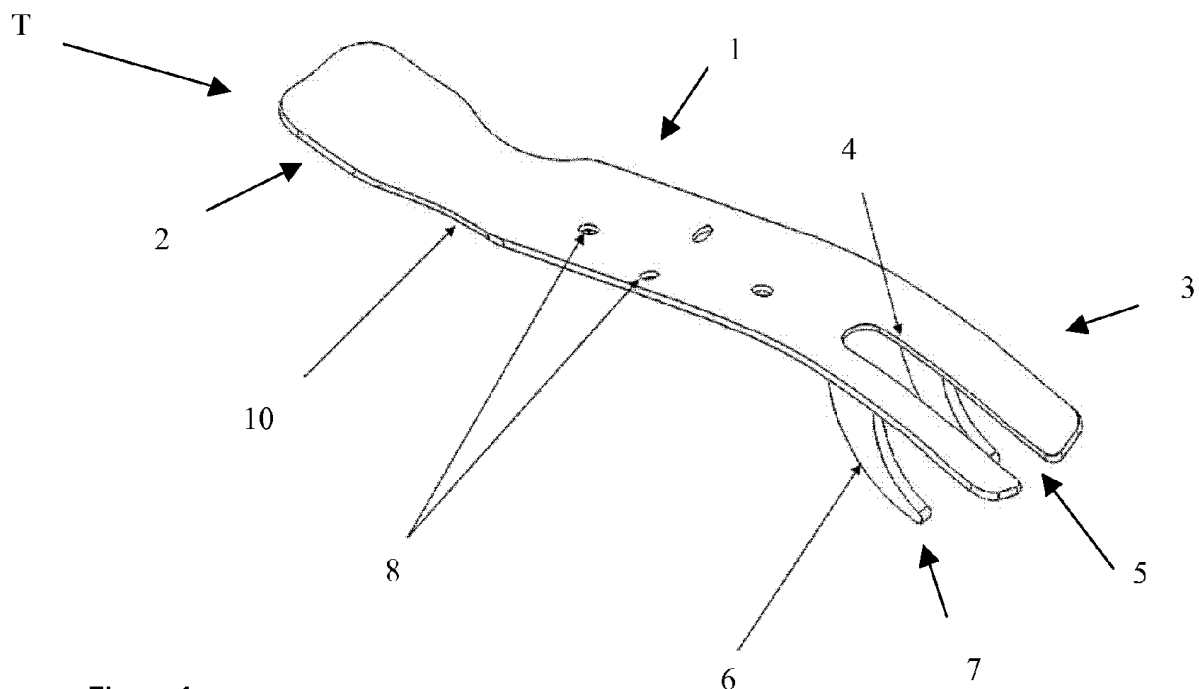


Figure 1

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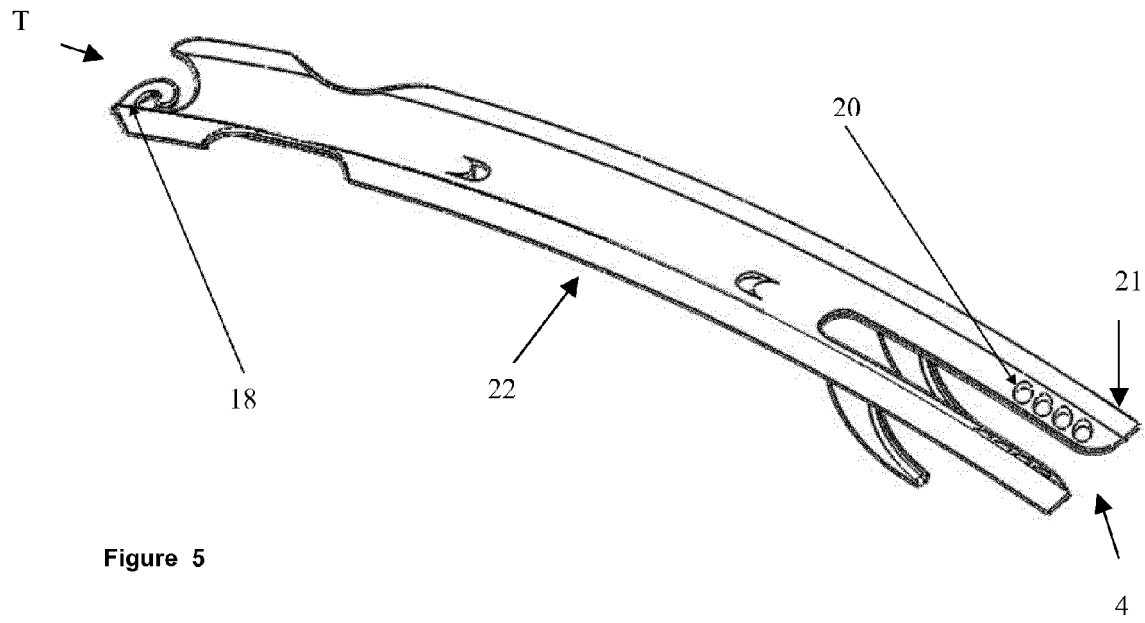


Figure 5

Description

Field of the Invention

[0001] The invention pertains to a tool for assisting in the removal of a wetsuit or drysuit. In particular, the invention pertains to such a tool which may also be used to facilitate drying and correct storage of a wetsuit or drysuit.

Background

[0002] Water sports enthusiasts, including surfers, windsurfers, scuba divers and swimmers frequently wear wetsuits or drysuits to allow them to prolong the period that they can spend in the water. The suit provides thermal insulation, abrasion resistance and buoyancy. However, it is well known that such suits are difficult to remove, particularly when wet. To facilitate removal, products comprising oils or other lubricants are used to lubricate the skin before the suit is worn. However, it is well known that oils or oil based products can damage the suit's neoprene material.

[0003] It is also appreciated that drying of wetsuits can be slow and troublesome and correct wetsuit care requires wetsuits to be dried carefully, desirably in a hanging position avoiding unventilated enclosed areas and avoiding excessive exposure to UV light.

[0004] It is recommended that special wetsuit hangers or heavy padded regular hangers are used such that shoulder wear is eliminated. Flimsy wire hangers should be avoided due to the significant shoulder wear that results from their use. Wetsuits must be stored on a hanger or flat, as folding or cramming in to enclosed spaces can weaken fabric around the areas of the fold. Packing wet gear away can cause mildew and enhance bacteria growth.

[0005] In view of the above and in order to address such deficiencies currently associated with the prior art, there is therefore a need to provide a tool that assists in removal of wet or dry suits. It would also be desirable to provide a tool to assist in wet or dry suit drying and correct storage.

Statements of Invention

[0006] According to the present invention, as set out in the appended claims, there is provided a removal tool for facilitating removal of a wetsuit or drysuit from a wearer's body, the tool comprising an elongate body having a longitudinal length and a transverse length, wherein the elongate body has a first end adapted for gripping by a hand and a second end adapted for insertion between an area of contact intermediate of the suit and the wearer's skin, wherein the distance between the first and second ends is such that on insertion of the second end into the area of contact, a levering movement of the first end of the

elongate body relative to the second end of the elongate body facilitates separation of the suit from the skin to assist removal of the suit.

[0007] Such suits tend to stick to the skin and are particularly difficult to remove from the leg areas. Correct operation of the tool of the invention, assists in facilitating peeling large areas of the suit from the skin in a short space of time, thus reducing the time and effort required to remove the suit. The other advantage is that use of the tool of the invention means the users does not have to excessively pull or tug at the suit to remove it, thereby reducing chance of accidentally ripping or weakening the suit fabric through poor removal practice.

[0008] By "longitudinal" it is meant the direction of greatest length of the tool of the invention. By "transverse" it is meant the direction of the length going across the tool of the invention. With regard to the terms "suit", "wetsuit" or "drysuit", it will be appreciated that these terms can be used interchangeable without any limitation being inferred.

[0009] The remover tool of the invention may be further adapted to comprise means for maintaining separation of the wetsuit from the skin. In a preferred embodiment, the means for maintaining separation of the wetsuit from the skin comprises at least one projection extending downwards from the underside of the tool. The projection may be at an angle of less than 120 degrees to the norm formed by the elongate body. Preferably, the projection may be at an angle of less than 90 degrees to the norm. The projection itself may be straight or substantially straight, or may have a generally curved or grooved shape for gathering and/or holding back the rolled of suit material. The projection may have an apex pointing in the general direction of the second end of the elongate body. Preferably, at least two such projections are provided and are spaced apart transversely along the transverse length of the second end of the elongate body. Preferably, the projection is at least one fin or more preferably a pair of fins aligned together on the elongate body at the second end of same. The projection may be wider at the base connected to the tool, and narrow to a point at the apex/top of the projection. Other suitable means for maintaining separation of the wetsuit from the skin include at least one projecting arm, hooks, fingers, forks, or combinations thereof, any of which can be used to gather the loosened material and prevent it from re-connecting with the skin. The means for maintaining separation of the wetsuit from the skin functions to gather the suit and assist in peeling it back from the skin during use of the tool.

[0010] Suitably, the removal tool of the invention may be entirely from a material selected from any hard, strong, durable material, for example, plastics, hard woods, stainless steel and combinations thereof. Stainless steel is a particularly preferred material of construction. Also other metals, coated in stainless steel may be used. Various components of the tool can be made from any of these materials alone or in combination. The material is

such that the tool is resistant/can withstand the elements for up to 5 years.

[0011] In a preferred embodiment, the removal tool of the invention may further comprise at least one friction reducing means for reducing friction produced on moving the second end of the tool down between the suit and the skin. In other words, when the second end of the tool is inserted between an area of contact intermediate of the suit and the wearer's skin, the at least one friction reducing means makes sliding the tool into this area of contact much easier and therefore facilitates removal of the suit from the body. The friction reducing means assist greatly in peeling the suit from the skin. Thus, use of the removal tool of the invention allows a suit to be removed much more quickly and without as much effort as would be required to remove the suit without the tool. In this regard, the invention is particularly suited to tri-athletes and competitive racer, particularly where a watersport is an element of the competition and speed of transitions is of the essence.

[0012] In a preferred embodiment, the remover tool comprises at least one friction-reducing means which are mounted onto or along or within the elongate body such that the means contacts the area between the suit and the user's skin. Preferably, such means are provided on the elongate body at a region adjacent to the second end of the body. The means can be provided in a region extending from the second end of the body. Furthermore, the friction-reducing means can be positioned along at least one edge of the elongate body or may be disposed within the central portion of elongate body at an intermediate portion to the longitudinal edges. The friction-reducing means may be provided on side arm extensions from the second end of the elongated body and/or at the tips or extremities of such arms. Suitably, the friction-reducing means may be a pair or a group or series or a plurality of friction-reducing means arranged in a predetermined positioned on the elongate body. The friction-reducing means may be arranged linearly or non-linearly along different regions of the elongate body. Suitably, the friction reducing means may be arranged non-linearly along the elongate body, for example, in a geometric arrangement, such as a circular or star shaped arrangement. Suitably, at least one type of friction-reducing means may be used, in various combinations, in various locations on the elongate body.

[0013] It will be understood that in embodiments comprising friction reducing means and means for means for maintaining separation of the wetsuit from the skin, these features can work in conjunction to assist in peeling/rolling the suit off the skin and maintaining the separation. As the friction reducing means assists in the tool sliding between the suit and the skin, the means for means for maintaining separation of the suit from the skin minimizes any hindrance from the rolled off part of the suit. This means that the tendency of the suit to re-stick to the skin is lessened, and the friction reducing means has a clearer path/area of operation.

[0014] Suitably, the friction-reducing means comprises at least one ball bearing, at least one endless conveyor belt means, at least one roller means or combinations thereof, and which are disposed within the elongate body as described above. Ball bearings are a preferred friction reducing means. Preferred friction reducing means includes a roller which may be arranged in a series wherein the multi-rollers are juxtaposed in front to rear (face-to-face) linear configuration. A series of at least two, preferably three, more preferably four or five such rollers is highly desirable. Particularly preferred is a series of multi-rollers, wherein the multi-rollers are juxtaposed in edge-to-edge linear configuration. Two or more of this arrangement of multi-rollers may be aligned relative to each other in a face to face (front to rear) arrangement on the second end of the elongate body.

[0015] Preferably, the friction reducing means is disposed in elongate body towards a region of the second end for insertion between an area of contact intermediate of the suit and the wearer's skin. The skilled person will appreciate that the elongate body may have various adaptations to accommodate the variety of possible friction-reducing means. For example, the elongate body may have grooves, pins, screws, ball bearing mounts or cups, clips etc. for incorporating the friction-reducing means into the elongate body. The elongated body may be adapted to accommodate friction-reducing means securely, but in such a way as to allow the friction-reducing means to move relative to the elongate body. Mounting of the friction-reducing means on the elongated body may be irreversible or reversible. Removal and reinsertion of the friction reducing means will facilitate cleaning and removal of sand/trapped debris. Suitably, the rollers of the invention may be covered in soft plastics or rubber or combinations thereof.

[0016] The elongate body may be provided in a single integral piece or may be provide in sections, for example, a lower and upper section, which are complementarily designed to fix together. Such fixing may be reversal (for assisting cleaning) or irreversible, depending on the mode of manufacture.

[0017] Suitably, the first end of elongate body comprises grooves for gripping by a hand. Desirably, the first end of the elongate body which is adapted to be gripped by a hand may further comprise finger grooves, indentations or positioning areas for ensuring a firm and secure grip.

[0018] In the remover tool of the invention, the second end of the elongate body may terminate in a tapered head having an open-ended or closed ended arrangement whereby the head narrows to a mid point in front of the elongate body. A tapered head facilitates insertion of the tool into the area between the skin and the suit. The tapered head may be round-shaped, square-shaped u-shaped or v-shaped or substantially similar. Alternatively, the second end of the elongate body may terminate in a fork arrangement provided on the second end of the elongate body. Alternatively, the head may be wide at the insertion edge and taper into a collar or neck shape con-

necting with the second end of the elongate body.

[0019] Where a fork arrangement is provided on the tool of the invention, the fork arrangement may comprise at least two forks or arms, which are dimensioned and located on the elongate body in a position such that, on insertion between an area of contact intermediate of the suit and the wearer's skin, they slide against the sides of the users thighs and calves. Preferably, a plurality of forks may be provided. The plurality of forks may be provided at different angles to each other but may be aligned in the general direction of insertion. Suitably, the second end of the elongate body may be adapted to fit around the heel. For example, there may be a gap or space formed/provided between the arms of the fork arrangement. This type of arrangement is useful for accommodating the heel of the user so that on using the tool, that is, sliding the tool down towards the ankle area produces a comfortable movement against the leg and heel.

[0020] The forks may be in the form of at least one arm or finger member, preferably the forks may be provided as a pair of parallel arms. The parallel arms may be moveable relative to each other. A resiliently biasing means (for example a spring) may be used to move the arms relative to each other with a bias towards keeping the arms apart. Thus the arms can flex and move in cooperation with the contours of the user's legs. Suitably, a spring may be used as the biasing means. However, the skilled person will appreciate that other biasing means can also be used. Suitably, at least one additional friction-reducing means may be provided on at least one of the forks. This additional friction-reducing means can be the same or different to the previously desired friction-reducing means.

[0021] The elongate body may be straight, or substantially straight. However, it is preferred that remover tool has a concave shape, such a U-shape, or an S-shape, whereby a portion of the elongate body is concave (curved), along the transverse length of the elongate body that is inserted during use. By "concave" it is meant concave relative to the underside (fin/projection side) of the tool. This shape is useful as it ensures a comfortable user experience and facilitates insert of the tool into the area between the skin and the suit.

[0022] It is preferred that the remover tool of the invention has a curved (concave) shape (relative to the underside of the tool) along the longitudinal length of the elongate body and/or along the transverse length such that the tool fits towards the contours of the leg.

[0023] In a particularly preferred embodiment, the elongate body may be adapted to accommodate a means for hanging/suspending the removal tool to facilitate drying of the suit. Suitably, the means for hanging/suspending may comprise at least one, but preferably at least a pair of apertures disposed in the body for accommodating string, wire, hook or a handle for suspending. The wide nature of the transverse width of the remover tool and inclusion of air ventilation apertures therein facilitate circulation of air through the suit when the tool is used as

a hanger. This means the suit will dry faster, will smell better and various parts of the suit will not inadvertently stick together during the drying process. It will be appreciated that the side of the tool which is upright when in the hanging position is considered that topside of the device, whereas the underside/underneath the device is the oppositive side of the tool, and is typically the side comprising the means for maintaining separation of the wetsuit from the skin, which is preferably a fin or projection.

[0024] Accordingly, the means for hanging/suspending the removal tool may comprise at least one orifice located in the elongate body for accommodating string, wire, hook or a handle or combinations thereof for suspending. Suitably, the means is a handle or wire. Desirably, the means is provided at an intermediate position along the elongate body, that is, intermediate of the ends and/or edges.

[0025] Suitably, such means for hanging/suspending can include a handle which may be moveably, pivotally and/or rotatable mounted onto the elongate body such that the position of the handle relative to the elongate body can be adjusted for use to hand or for storage within a complementary orifice on the elongate body. This feature makes for a particularly attractive aesthetically pleasing tool. Desirably, the means for hanging/suspending is adapted to fold into the elongate body when the tool is not in use.

[0026] In a further aspect of the invention the elongate body of the remover tool may comprise at least one aperture or opening disposed within the body to allow for circulation of air when the tool is used to hang a suit. Preferably, at least two such openings are provided along the elongate body.

[0027] In one embodiment, the elongate body may also be adapted to have anchor means for securing the ends of the string/wire, etc., to the elongate body. Such anchor means may be in the form of at least one guide, nib, lip, flange, nib, lug, peg, etc.

[0028] The remover tool of the invention may also be provided with means for gripping a zipper on the suit. Suitably, the gripping means can be provide on the first end of the elongate body. The means for gripping can be a swirl, spiral, coiled or slot type feature provided on the elongate body or may be a hook which is suitable for grasping a zipper on a wet or dry suit.

[0029] A further embodiment may comprise side wings which can extended on either or both sides of the elongate body in a region adjacent to the elongate body.

[0030] In a preferred embodiment, the elongate body may be reinforced for providing additional strength. For example, reinforcing ribbing can be used to add strength.

[0031] In a related aspect there is provided a method for making a wet suit remover tool comprising the step of providing a elongate body having a first end adapted for gripping by a hand and a second end adapted for insertion between an area of contact intermediate of the suit and the wearer's skin, with a friction reducing means.

Suitable means are described above.

[0032] In a related aspect still, there is provided a kit of parts comprising the removal tool of the invention, in combination with instructions for use, and optionally string and/or wire for forming a hanger, optionally a hanger designed to fit into a recess provided in the tool of the invention, optionally friction reducing means as described above, for assembly or replacement.

[0033] The words "comprises/comprising" and the words "having/including" when used herein with reference to the present invention are used to specify the presence of stated features, integers, steps or components but does not preclude the presence or addition of one or more other features, integers, steps, components or groups thereof.

[0034] It is appreciated that certain features of the invention, which are, for clarity, described in the context of separate embodiments, may also be provided in combination in a single embodiment. Conversely, various features of the invention, which are, for brevity, described in the context of a single embodiment, may also be provided separately or in any suitable sub-combination. In other words, any individual feature described in any one embodiment may be combined with another individual feature from another embodiment.

[0035] The invention is not limited to the embodiments hereinbefore described but may be varied in both construction and detail.

Brief Description of the Drawings

[0036] The invention will be more clearly understood from the following description of an embodiment thereof, given by way of example only, with reference to the accompanying drawings.

[0037] **Figure 1** illustrates perspective view of a first embodiment of the remover tool of the invention with fins.

[0038] **Figure 2** illustrates side view of the first embodiment of the remover tool of the invention with fins.

[0039] **Figure 3** illustrates perspective view of a second embodiment of the remover tool of the invention with air vent feature.

[0040] **Figure 4** illustrates perspective view of a third embodiment of the remover tool of the invention with fork arrangement.

[0041] **Figure 5** illustrates perspective view of a fourth embodiment of the remover tool of the invention with orifices disposed along the second end of the elongate body for accommodating ball bearing friction reducing means. A swirl type zip grabber is also included in this embodiment.

[0042] **Figure 6** illustrates perspective view of a fifth embodiment of the remover tool of the invention with ball bearings in place. Air vents and finger grips on the grab regions on the elongate body are also illustrated.

[0043] **Figure 7** illustrates a perspective view of a sixth embodiment of a disassembled remover tool (the lower half), aperture in elongate body for storage of the hanger

when not in use. Also illustrated are a linear arrangement cups for accommodating the ball bearing friction-reducing means within the elongate body.

[0044] **Figure 8** illustrates a perspective view of a seventh embodiment of a disassembled remover tool (the lower half) whereby the ball bearing cups are arranged in a geometric arrangement and at angles to the elongate body.

[0045] **Figure 9** illustrates a perspective view of an eighth embodiment of the remover tool whereby a series of linearly front to back arranged rollers form the friction-reducing means.

[0046] **Figure 10** illustrates a perspective view of a ninth embodiment of the remover tool whereby a conveyor belt arrangement forms the friction-reducing means.

[0047] **Figure 11** illustrates a perspective view of a tenth embodiment of the remover tool whereby a series of linearly front to back arranged angled tri-rollers form the friction-reducing means. A pair of tapering side arms protruding from the second end of the elongate body is also shown, together with a gap between the arms for accommodating the heel area of the user.

[0048] **Figure 12** illustrates a perspective view of an eleventh embodiment of the remover tool whereby a series of linearly front to back arranged rollers form the friction-reducing means. A pair of side arms tapering together at a single point frontward of the second end of the elongate body are also shown. A mini roller (smaller than the roller series) is mounted onto the side arms.

[0049] **Figure 13** illustrates a perspective view of a twelfth embodiment of the remover tool whereby a series of linearly front to back arranged rollers form the friction-reducing means. A pair of frontward extending arms extend forward from the second end of the elongate body are also shown. A spherical head is provided on the tip of each arm.

[0050] **Figure 14** illustrates a perspective view of a thirteenth embodiment of the remover tool whereby a series of linearly front to back arranged rollers form the friction-reducing means. A pair of resiliently biased (springs not shown) frontward extending arms extend forward from the second end of the elongate body are also shown. A mini roller head is provided on the tip of each arm.

[0051] **Figure 15** illustrates a perspective view of a sixteenth embodiment of the remover tool whereby a pair of side wings are provided on the elongate body. An extended head are with outward tapering is also shown.

[0052] **Figure 16** illustrates a perspective view of a sixteenth embodiment of a seventeenth embodiment of the tool of the invention using a tri-roller friction reducing means feature.

[0053] **Figure 17** illustrates a blow blown up drawings of one embodiment of the tool (T) of the invention.

Detailed Description of the Invention

[0054] The wetsuit removal tool of the invention, also

known as the "Surf Hanger" is a product that helps surfers and other wetsuit users, to remove their wetsuit with ease. The ball bearings will help roll the wetsuit off the user's legs. The fins will work in harmony with the ball bearings and push the wetsuit down the user's leg. It is also a hanger that the wetsuit will be hung on after use. The hanger also has air vents which will allow the air to filter around the wetsuit to help it dry quicker. Another feature is a hook that will help the user zip up and down their wetsuit.

[0055] Referring now to the drawings and specifically Figures 1 to 17 inclusive and initially Figure 1. Figure 1 shows a remover tool of the invention (T) which is generally S-shaped along the longitudinal length, and concave (curved) along the transverse length (with respect to the lower side of the tool (T) as shown in Figure 1. Elongate body (1) has a first end (2) and a second end (3), wherein second end (3) terminates in fork arrangement (4) has aperture (5) disposed within the fork arrangement (3). A pair of fins (6) project from the rear of the elongate body (1) and function to maintaining separation of the wetsuit from the skin. The apex (7) of the fins (6) point in the direction of insertion of the tool (T) between the skin and the wetsuit. Orifices (8) are provided to accommodate string or wire if the tool (T) is to be used as a suit hanger. The first end (2) of the elongate body (1) is adapted with groves (10) for gripping with a hand.

[0056] Referring now to Figure 2, a side view of the tool (T) of Figure 1, hooks (9) are provided on the underside of the elongate body (1) in proximity to the orifices (8) and are suitable for tying off string or wire used to adapt the tool (T) to be a hanger.

[0057] Referring now to Figure 3, air vent (14) are disposed at several locations along the elongate body (1) for allowing air circulation when the suit is in the hanging position.

[0058] Referring now to Figure 4 which illustrates a further embodiment of the tool of the invention, the second end (3) of the tool (T) of this embodiment has fork arrangement (4) which has four arms, a pair of inner arms (15) and a pair of outer arms (16). A gap (15) is provided between the pair of inner arms (15) for accommodating the heel when the device is in use.

[0059] Referring now to Figure 5 which illustrates a further embodiment still of the tool (T) of the invention have a swirl zip grabber (18) at the first end (2) of the elongate body (1). In this example, the fork arrangement (4) has arms (21) which are provided with a series of linearly positioned holes (20) into which ball bearing (not shown) friction reducing means are provided. Reinforced edges (22) of the tool (T) are also shown in this example.

[0060] Referring now to Figure 6 which shows a further embodiment of the invention, which is composed of an upper and lower parts (not shown) assembled into the tool (T) shown in Figure 6. Air vents (14) can be seen in the assembled device, as can ball bearing (23) friction reducing means be seen in arms (21) of the fork arrange-

ment (4) of the second end (3) of the elongate body (1).

[0061] Referring now to Figure 7, a further embodiment still is illustrated. In this example, the second end (3) of the elongate body (1) is disassembled, to show the ball bearing cups (26) into which the ball bearings (note shown) are mounted. A cover portion of the elongate body (1) is assembled over this portion when the ball bearings are mounted into the cups (26). In this example, curved head (24) is used instead of the forked arrangement of the previous embodiments. Also shown is recess (28) for accommodating hanger (not shown) when the hanger part of the tool (T) is not in use.

[0062] Referring now to Figure 8, there is shown an alternative configurations for the ball bearing cups (26) for mounting ball bearing friction reducing means. As illustrated in this Figure, the cups (26) are positioned at various angles to the surface of the elongate body (1).

[0063] Referring now to Figure 9, this is shown an alternative frictions reducing means, that is a series of single rollers (30) that are arranged in a face to face (front to rear) arrangement on the second end (3) of the elongate body (1).

[0064] Referring now to Figure 10, there is shown an further alternative configuration of friction reducing means, that is, a conveyor belt arrangement (32) provided on the second end (3) of the elongate body (1).

[0065] Referring now to Figure 11, there is shown a further alternative configuration of friction reducing means, that is, a series of tri-rollers (34), wherein the tri-rollers are arranged in edge to edge linear configuration, three of which aligned relative to each other in a face to face (front to rear) arrangement on the second end (3) of the elongate body (1). Also shown are tapered arms (35) that are provided in an opened ended configuration whereby space (36) is formed at the end of the second end of the elongate body (1).

[0066] Referring now to Figure 12, there is shown a series of single rollers (30) (series of four rollers) as friction reducing means (35). Also shown are tapered arms (35) that are provided in an closed ended configuration whereby space (36) is formed at the end of the second end of the elongate body (1) and further roller is provided towards the extremity of the tapered arms (35).

[0067] Referring now to Figure 13, a further example of fork arrangement (4) is illustrated whereby arms (21) are provided with spheres (40) for assisting insertion into area between suit and user's skin.

[0068] Referring now to Figure 14, a further example still of a second end of the elongate body (1) is illustrated and consists of a resiliently biased (spring not shown) arm (35) arrangement wherein a further friction reducing means, in this case, a pair of mini-rollers is provided on the extremity of each arm (35).

[0069] Referring now to Figure 15, which illustrates side wings (41) provided on the elongate body (1) and head and neck (43) arrangement on the second end of the elongate body (1).

[0070] Referring now to Figure 16, which illustrates a

further examples of the tool (T) of the invention whereby a series of tri-rollers (34), wherein the tri-rollers are arranged in edge to edge linear configuration, four of which aligned relative to each other in a face to face (front to rear) arrangement on the second end (3) of the elongate body (1). Also shown are side arms (35) that are provided in an opened ended configuration whereby space (36) is formed at the end of the second end of the elongate body (1).

[0071] Referring now to Figure 17, which illustrates a blown up drawings of the tool (T) of the invention whereby the various components of the tool (T) of the invention are shown, including handle (56), ball bearings (23) and ball bearing cups (26). Slot type zipper grab (58) is also shown, as is reinforcement ribbing (60) provided on the inner portions of the tool (T).

Claims

1. A removal tool for facilitating removal of a wetsuit or drysuit from a wearer's body, the tool comprising an elongate body having two ends and a longitudinal length and a transverse length, wherein the elongate body has a first end adapted to be gripped by a hand and a second end adapted for insertion between an area of contact intermediate of the suit and the wearer's skin, wherein the distance between the first and second ends is such that on insertion into the area of contact, a levering movement of the first end of the elongate body relative to the second end of the elongate body facilitates separation of the suit from the skin to assist removal of the suit.
2. A removal tool according to claim 1 further comprising a friction reducing means for reducing friction between the second end of the elongate body and the skin.
3. A remover tool according to claim 2 wherein the friction reducing means comprises at least one ball bearing, at least one endless conveyor belt means, at least one roller means or combinations thereof.
4. A remover tool according to claim 3 wherein the friction reducing means are arranged linearly on the elongate body or are arranged non-linearly on the elongate body.
The removal tool of claim 1 wherein the second end terminates in a fork arrangement.
5. A remover tool according to any preceding claims wherein the elongated body has a concave shape along the longitudinal length.
6. A remover tool of any preceding claims wherein the elongated body has a concave shape along the

transverse length.

7. A remover tool of any preceding claim wherein the second end is further adapted to maintain separation of the wetsuit from the skin.
8. A remover tool of claim 7 wherein the second end adapted to maintain separation of the wetsuit from the skin comprises at least one fin pointing in direction of the second end.
9. A remover tool according to any preceding claim wherein the elongate body is adapted to accommodate a means for hanging/suspending the removal tool to facilitate drying of a wetsuit.
10. A remover tool according to claim 9 wherein the means for hanging/suspending comprises a pair of apertures disposed in the body for accommodating string, wire, hook or a handle for suspending.
11. A remover tool according to claim 10 wherein the means for hanging/suspending is adapted to fold into the elongate body when the tool is not in use.
12. A remover tool according to any preceding claim wherein the elongate body has a grasp means for gripping a zipper on the suit.
13. A remover tool according to any preceding claim wherein the elongate body comprises at least one aperture disposed within the body to allow for circulation of air when the tool is used to hand a suit.
14. A method for making a wetsuit remover tool comprising the step of providing a elongate body having a first end adapted for gripping by a hand and a second end adapted for insertion between an area of contact intermediate of the suit and the wearer's skin, with a friction reducing means.
15. A kit of parts comprising the removal tool of the invention, in combination with instructions for use, and optionally string and/or wire for forming a hanger, optionally a hanger designed to fit into a recess provided in the tool of the invention, optionally friction reducing means as described above, for assembly or replacement.

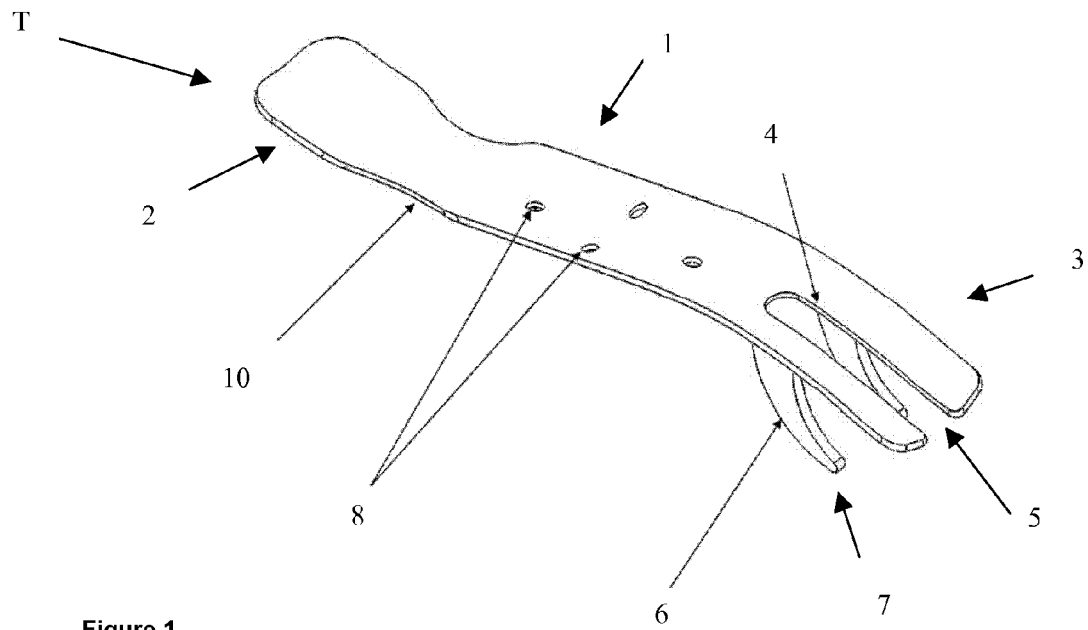


Figure 1

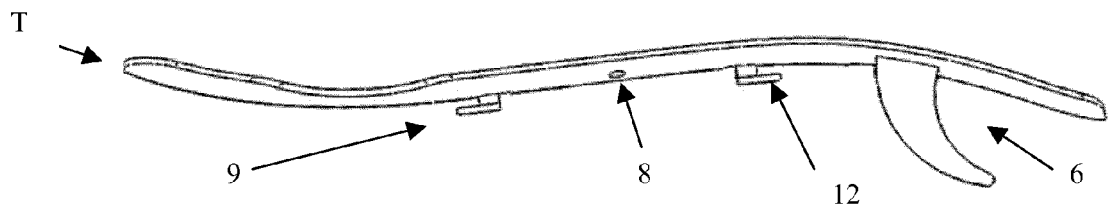


Figure 2

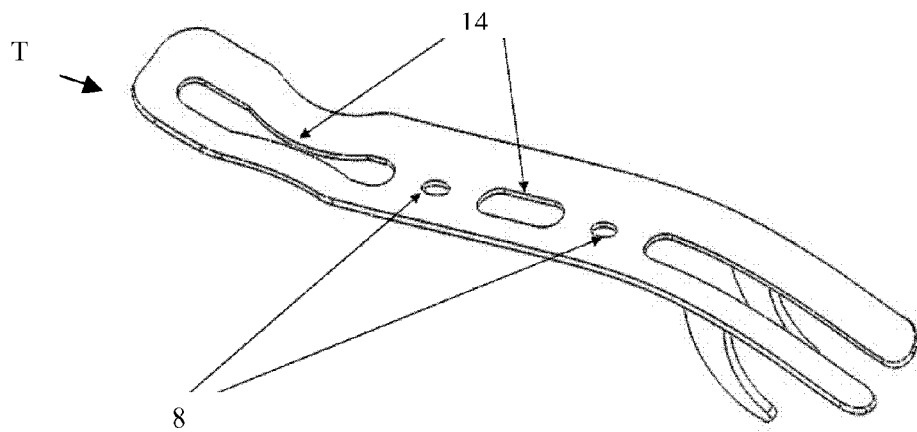


Figure 3

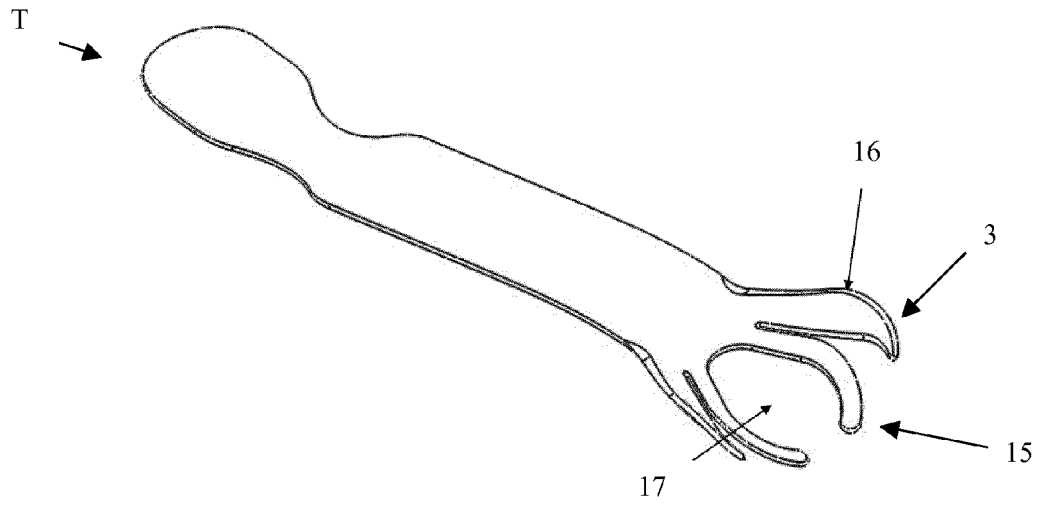


Figure 4

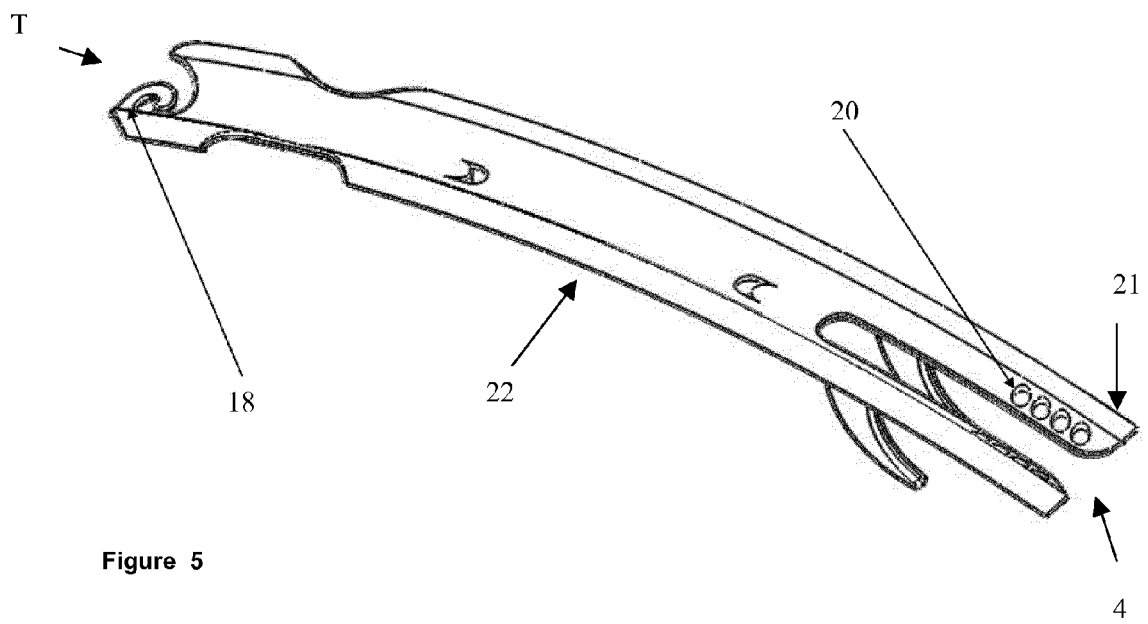


Figure 5

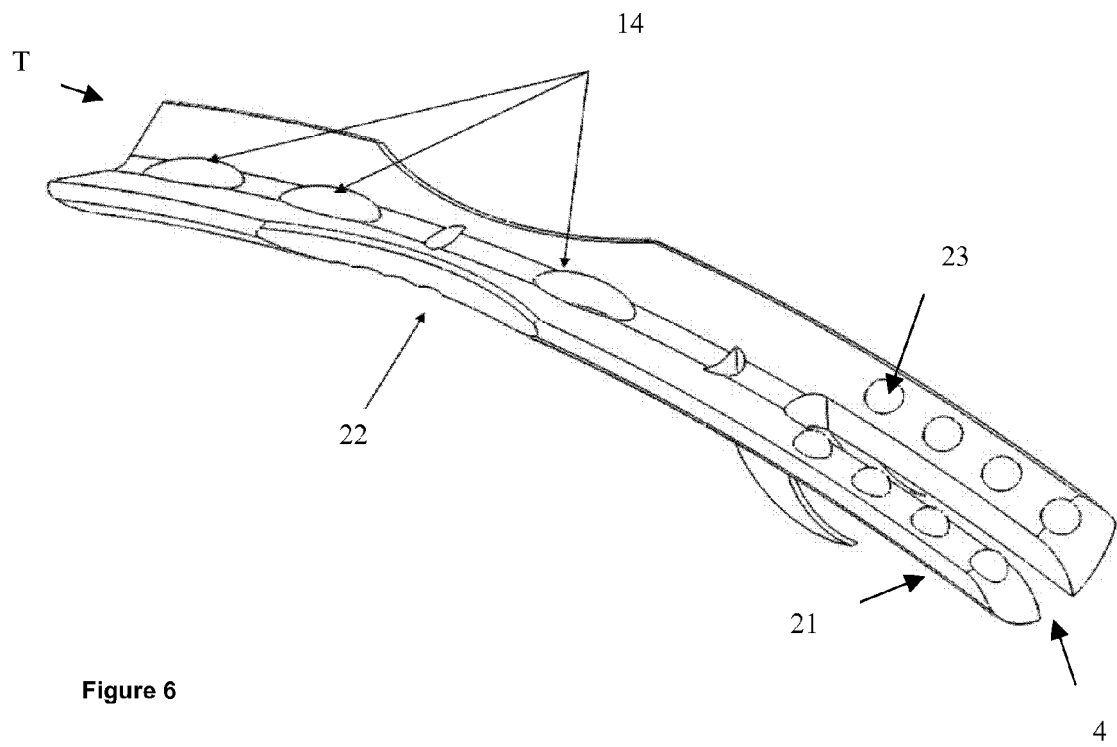


Figure 6

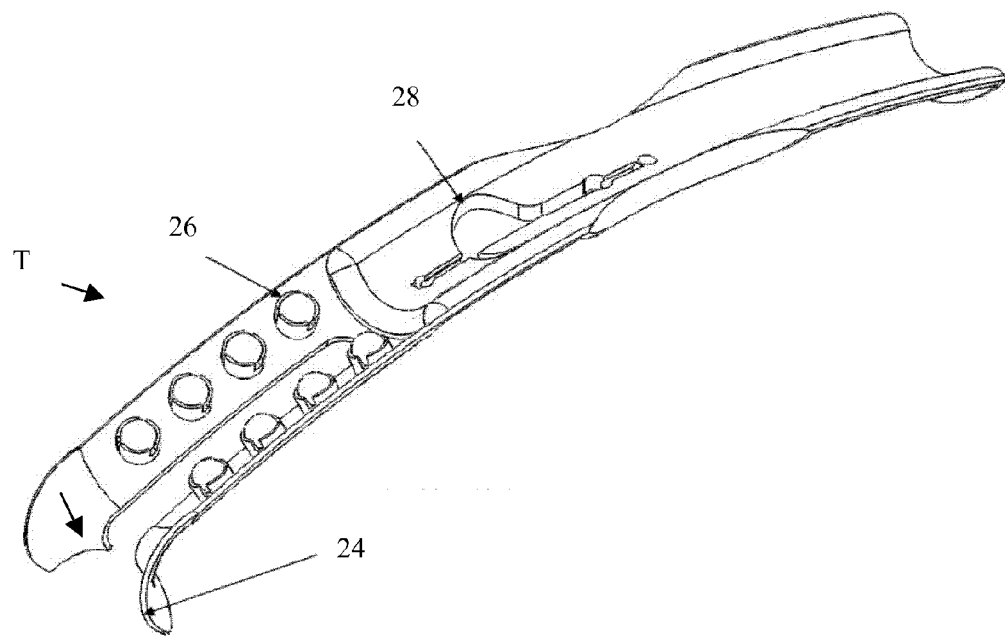


Figure 7

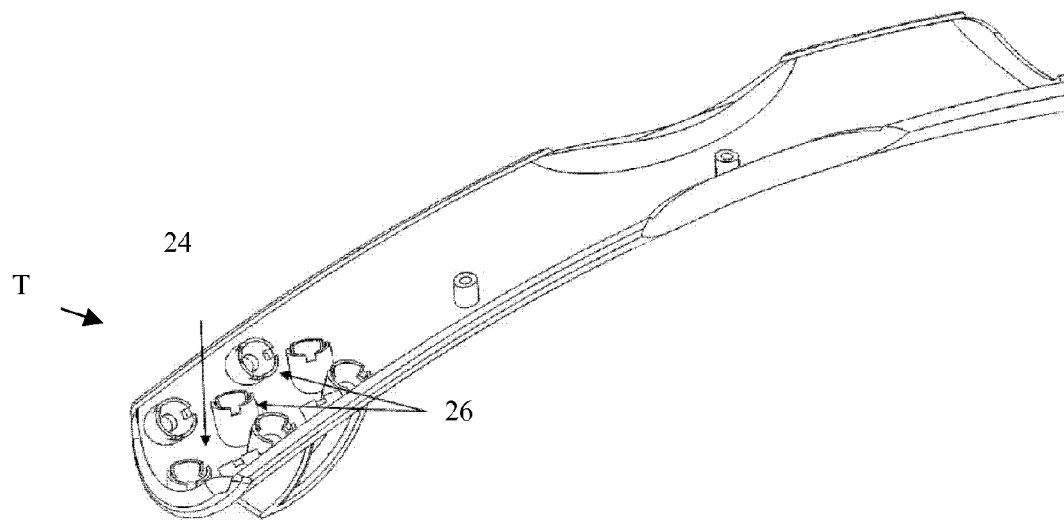


Figure 8

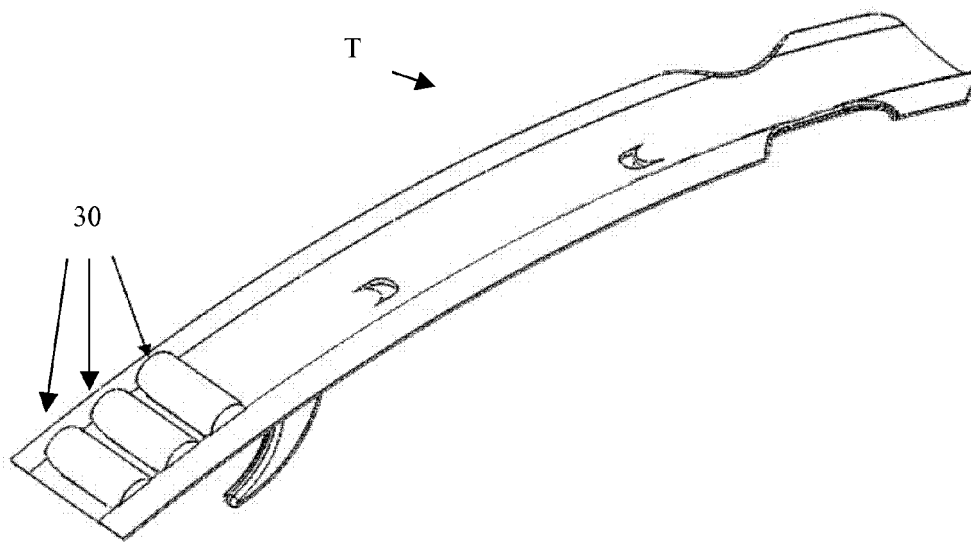


Figure 9

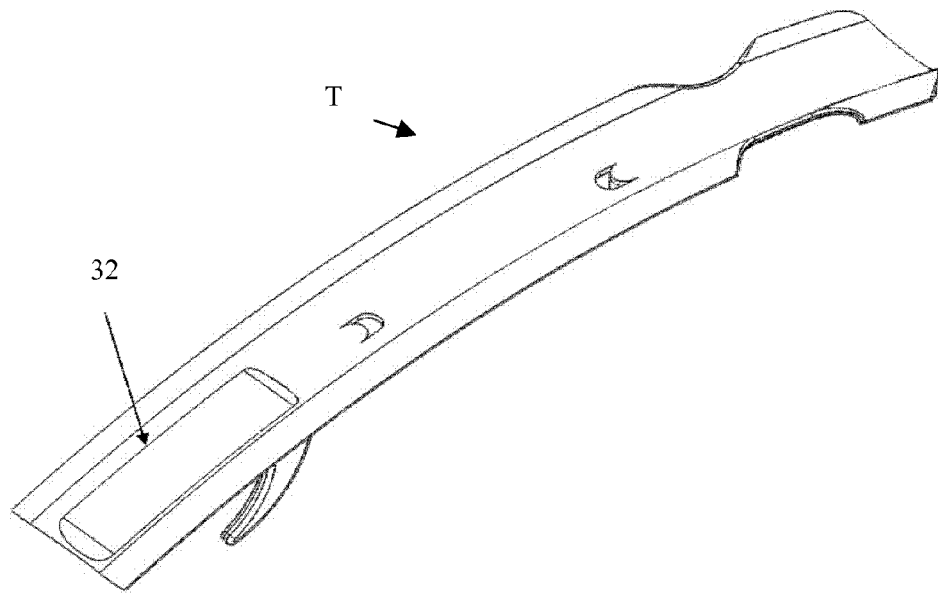


Figure 10

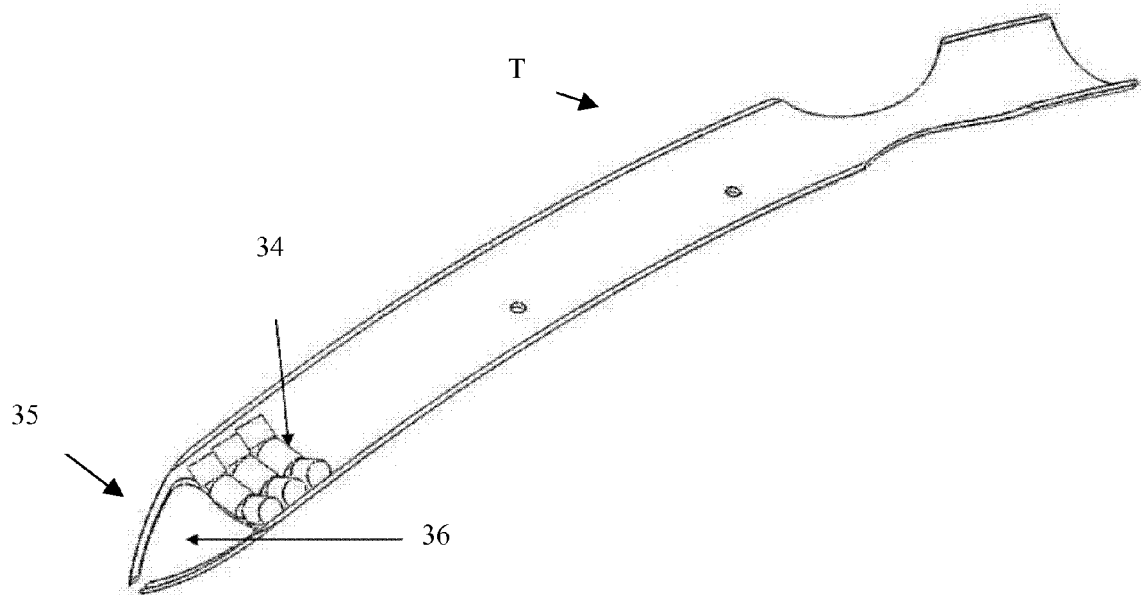


Figure 11

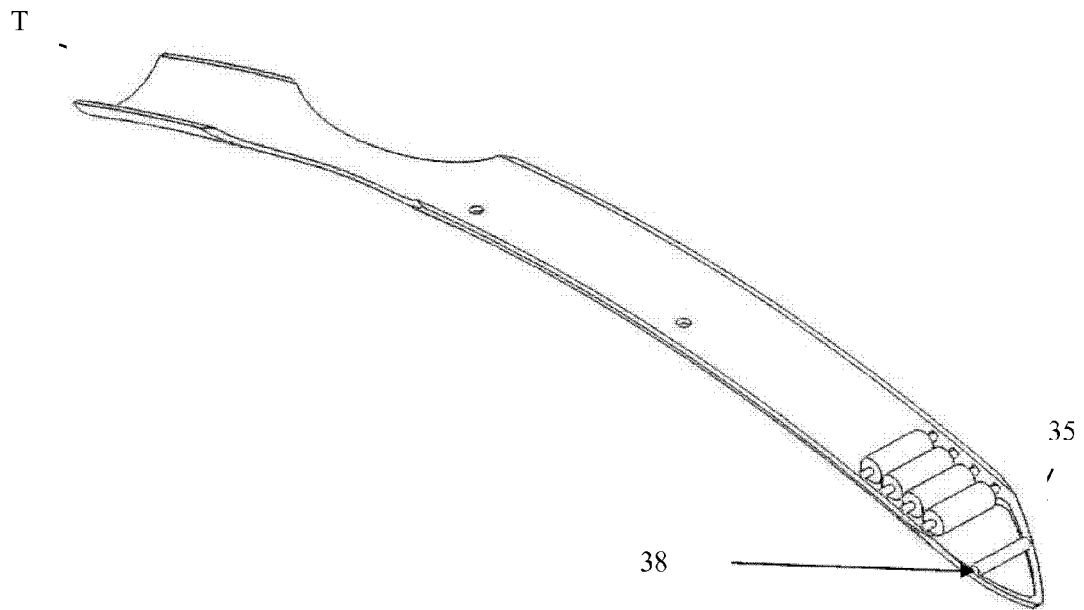


Figure 12

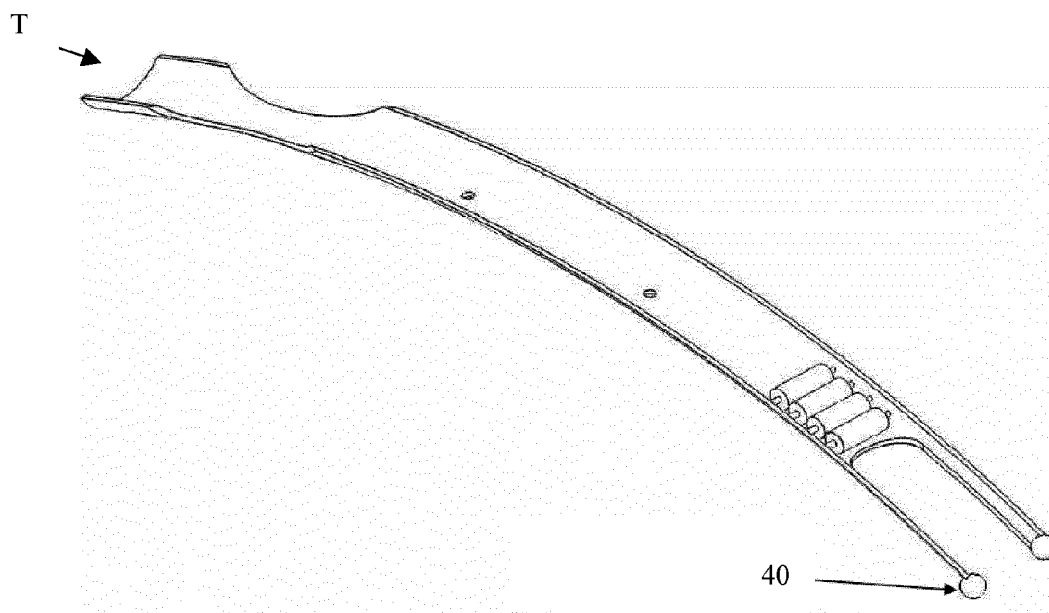


Figure 13

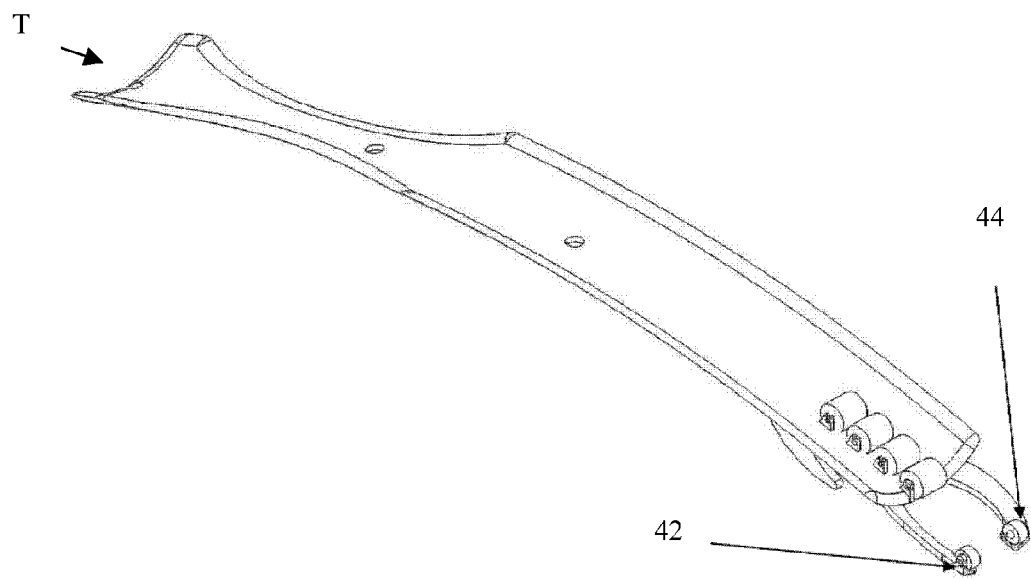


Figure 14

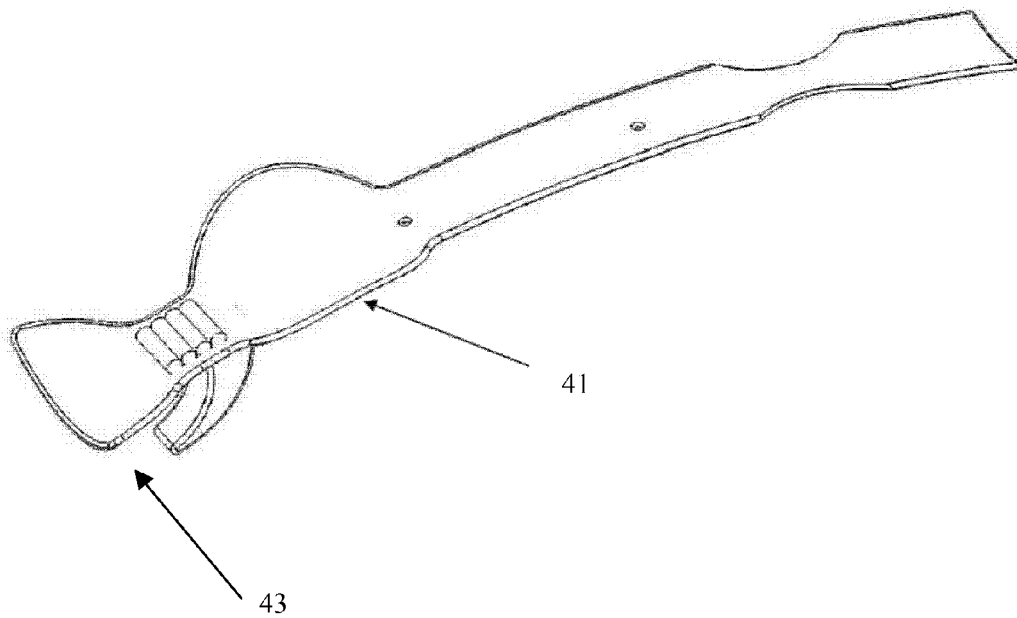


Figure 15

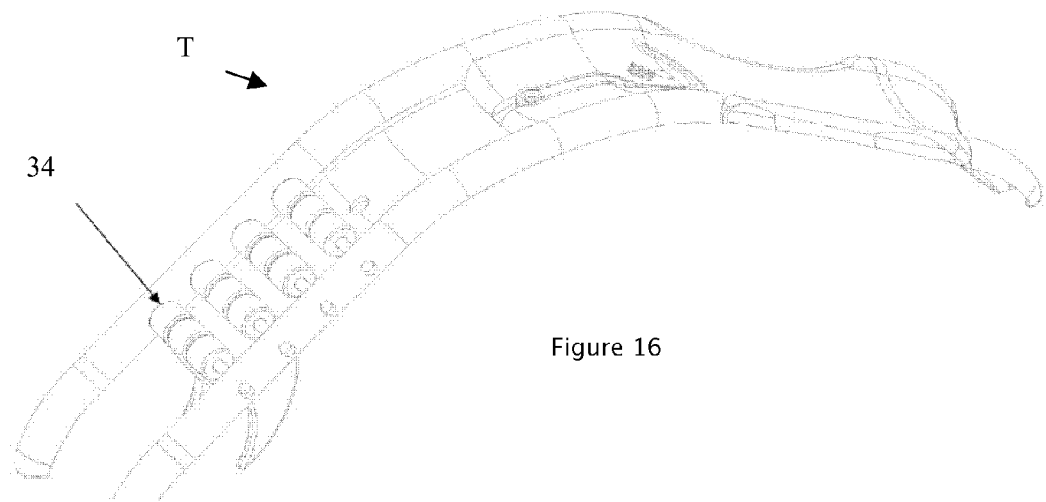


Figure 16

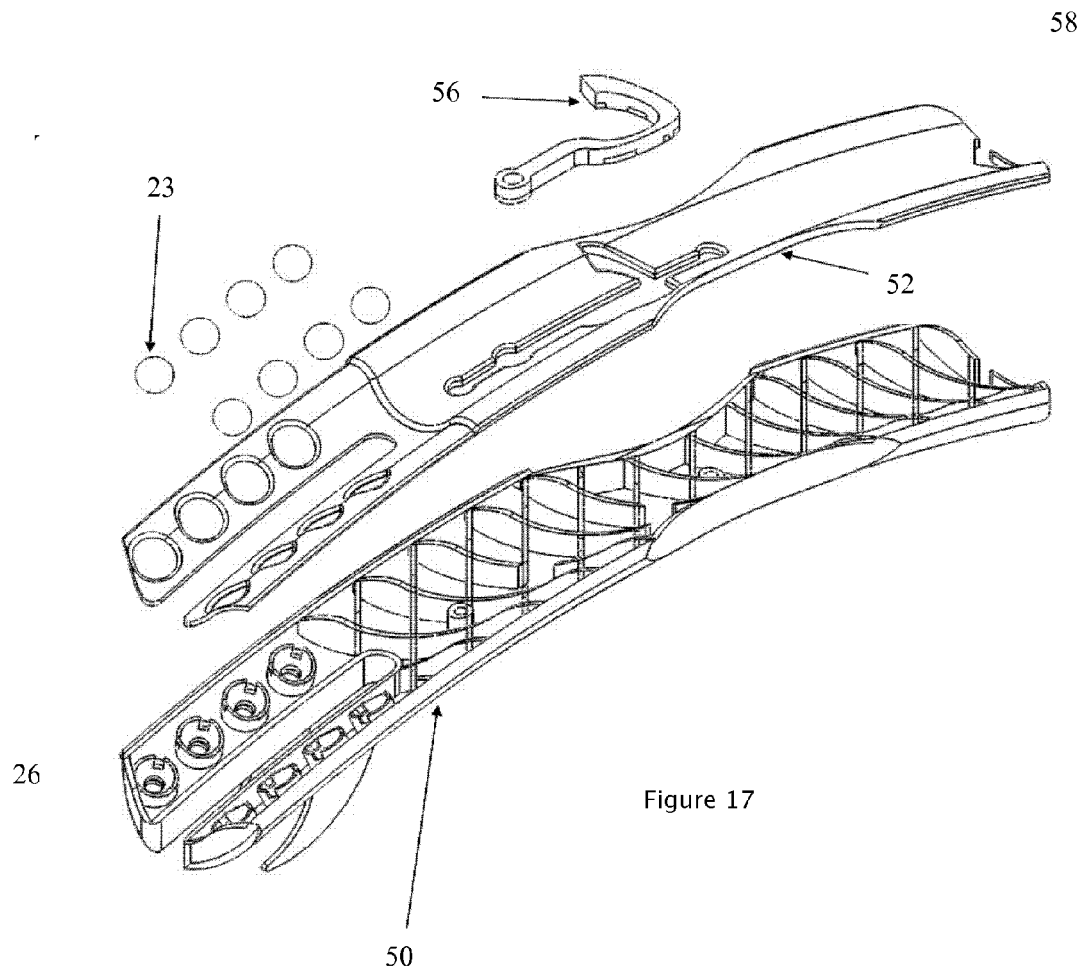


Figure 17



EUROPEAN SEARCH REPORT

 Application Number
 EP 13 15 2888

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 6 763 982 B1 (LIVORNESE GEORGE [US]) 20 July 2004 (2004-07-20) * figures *	1,2,5, 7-9,12, 14,15	INV. A47G25/90
X	GB 196 521 A (JAMES WALTER HENRY DEW) 26 April 1923 (1923-04-26) * figures *	1,2,5,6, 8-15 3	
X	WO 88/05641 A1 (RYAN AUSTIN TIMOTHY [AU]; RYAN PAUL EDWARD [AU]) 11 August 1988 (1988-08-11) * page 6, paragraph 3; figures *	1,2,4-7, 9,14,15	
X	GB 2 221 604 A (KOOON HING TRADING CO LTD [HK]) 14 February 1990 (1990-02-14) * page 1, line 19 - line 22 * * page 2, line 11 - line 14 * * figures *	1,2,5-9, 14,15	
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 15 March 2013	Examiner van Overbeek, Kajsa
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	

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EP 13 15 2888

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The members are as contained in the European Patent Office EDP file on
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15-03-2013

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