



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
31.08.2011 Bulletin 2011/35

(51) Int Cl.:
A41D 19/00 (2006.01) A45F 5/02 (2006.01)

(21) Application number: **11155706.2**

(22) Date of filing: **23.02.2011**

(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 MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

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(30) Priority: **29.03.2010 GB 1005213**
15.06.2010 GB 1009996
23.02.2010 GB 1003081

(54) **Garment Including Attachment Means and Method of Use Thereof**

(57) A multipurpose tool holder, wrist support and accessory carrier, incorporated in an easy to clean, light-weight glove, fingerless gauntlet or other garment (1). The glove has demountable attachments means (2). Each multi-positioning attachment means is designed to meet one or more of the needs of a variety of domestic

trades or tasks as well as recreational activities. The operator can select the best location, orientation and direction for the accessory to be mounted on, as well as which arm to wear the glove on; and then select the specific tools accessories and complimentary items to assist in the speedy and safe completion of that task.

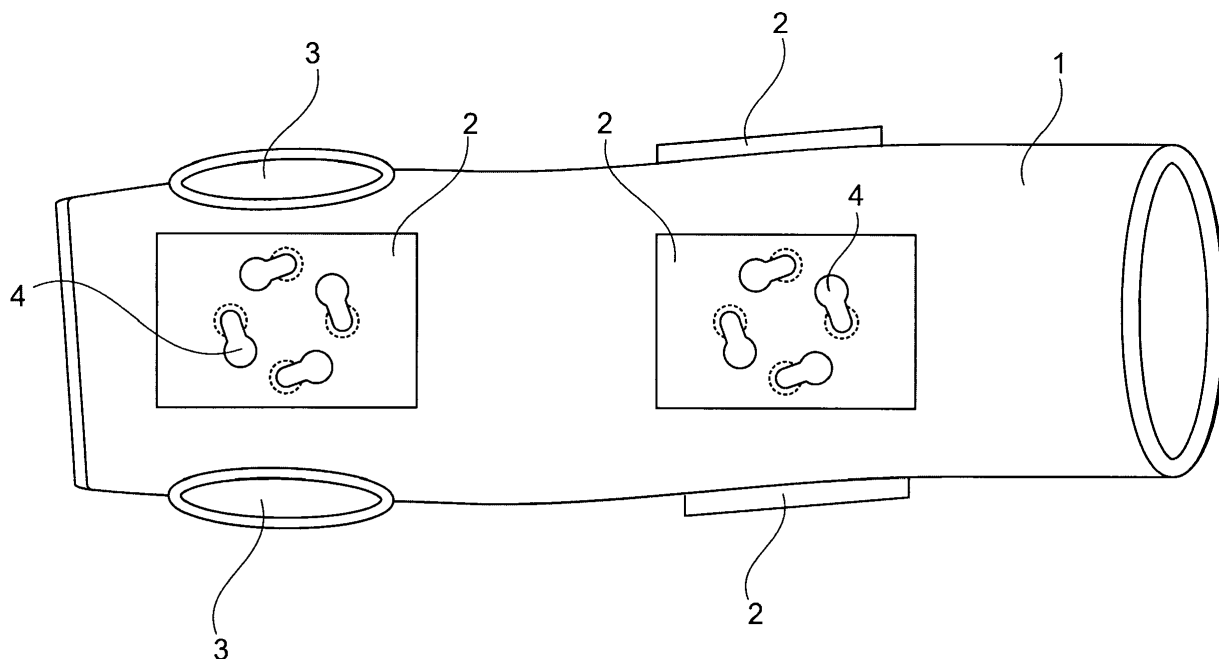


Fig. 1

Description

[0001] The present invention relates to a garment, such as a glove to which accessories can be detachably attached.

[0002] Although the present description refers to gloves, the person skilled in the art will appreciate that the features of the present invention can be applied to other garments and items which a user can wear.

[0003] Attaching accessories to clothing is known. In particular US patent 5003637 discloses a glove to which a variety of accessories, including a container, can be attached using hook and loop type fastenings such as Velcro™.

[0004] Such 'accessory gloves' have a number of problems. The first is that whilst the accessories are easy to remove intentionally, they can also be accidentally removed or knocked off when performing tasks. Secondly, only one accessory can be attached to the glove. Furthermore, the accessory can only be attached at a single location on the glove. As such, the direction and/or orientation of the accessory relative to the glove and the user is also limited. This restricts the user as to the type of accessories suitable for attachment to the glove and can also restrict the use of the same.

[0005] It is therefore an aim of the present invention to provide a garment with attachment means which addresses the aforementioned problems.

[0006] It is a yet further aim of the present invention to provide a method of using such a garment and attachment means.

[0007] In a first aspect of the invention there is provided a garment including attachment means for attaching one or more accessories to the garment, wherein said accessory is engaged with and/or disengaged from the garment by relative rotation between the garment and the accessory.

[0008] Typically this arrangement provides that the accessories are secured to the garment by rotating the same. This ensures that the accessories cannot be removed from the garment by pulling the same in a linear direction. Furthermore the accessories can be attached to the garment at a number of different orientations with respect to the garment. Further typically each orientation is angularly spaced from another.

[0009] In one embodiment the accessories are detachably attached to the attachment means and thereby detachably attached to the garment.

[0010] In one embodiment the attachment means includes at least one first member attached to, and/or formed in, the garment.

[0011] In one embodiment the attachment means includes at least one second member attached to, and/or formed in, the one or more accessories. Typically the first and second members can be detachably attached together by rotating one member relative to another.

[0012] Further typically the members can be attached in a number of orientations, directions and/or at different

positions, and therefore the accessories can be selectively positioned on the garment. In such an arrangement the relative position and location of the accessories to the user can be predetermined and/or selected.

[0013] In one embodiment the first and/or second members include a female formation to receive at least part of the other first or second member. Typically the members are secured together by the female formation of one member receiving at least part of another member.

[0014] In one embodiment the first and/or second members include one or more male formations. Typically the male formations engage with the one or more female formations on the first and/or second members. Further typically the formations are engaged by rotating at least one member and/or formation relative to another member and/or formation thereby securing at least the first and second members together.

[0015] In one embodiment the formations are engaged by inserting the male formation into the female formation by relative movement of the male formation along an axis. Typically the male formations extend from the member along the same axis.

[0016] The members are typically secured together by engaging at least one male formation with at least one female formation on another member, by bringing the same together along an axis and then rotating at least one member and/or formation in a direction substantially about said axis.

[0017] Typically, the first and second members are unsecured or detached by rotating the members and/or formations in the opposite direction about the axis. Further typically the members are separated by pulling the same apart along the axis.

[0018] In one embodiment a first and/or second member can be secured to the other of a first or second member in two or more positions on said other member. Typically each position is angularly spaced from other further positions and thereby the position and/or orientation of the members can be selected. Further typically each position is in the same plane.

[0019] In one embodiment at least the first member includes a surface. Typically the surface is substantially planar.

[0020] In one embodiment the surface includes the male and/or female formations which are attached to the surface and/or are integrally formed with the same.

[0021] In one embodiment the male protrusions are substantially cylindrical.

[0022] In one embodiment the male protrusions include at least one flared portion. Typically the flared portion is located a spaced distance from the surface of the member. Preferably the flared portion is located towards the distal end of the male protrusion.

[0023] In one embodiment the protrusions are mushroom shaped and/or T shaped.

[0024] In one embodiment the female formations include a first portion of a first diameter. Typically the first portion is connected to and/or extends to a second por-

tion of a second diameter. Further typically the second diameter is smaller than the first diameter. Preferably the first portion substantially tapers to the second portion.

[0025] In one embodiment the first and/or second portions of the female formations are substantially circular.

[0026] In one embodiment the first portions of the female formations are of a sufficient diameter to receive at least the flared portions of the protrusions. Typically the second portions are usually of a diameter smaller than the flared portions of the male formations. Thus the male and female formations can interlock when manipulated such that the flared portions engage with the second portions of the formations.

[0027] In one embodiment the first and/or second member includes a resilient member. Typically the resilient member is a sprung and/or resiliently biased surface. Typically the surface is a surface in a channel and/or cavity formed by the female formation in the first and/or second members.

[0028] In one embodiment the resilient member abuts or otherwise engages with the male formation when the members are engaged.

[0029] In one embodiment the resilient member forms a dust cap or cover when the attachment means is not attached and/or engaged to an accessory.

[0030] In one embodiment the members of the attachment means are secured together in a plug and socket arrangement.

[0031] Typically the accessories include any one or any combination of tools, for example screwdrivers, tape measures, pencils, pens, screws, nails, plugs, drill bits, compasses and/or the like.

[0032] In one embodiment the accessory is an accessory holding means. Typically the holding means includes one or more compartments or formations by which further accessories can be held and/or secured. Further typically the accessory holding means includes at least one formation to secure one or more accessories.

[0033] In one embodiment the garment is a glove, gauntlet and/or the like. The glove may or may not have fingers formed therein. In an alternative one embodiment the garment is a strap. Typically the strap is suitable for being attached to a user's arm and/or wrist in use.

[0034] In a second aspect of the invention there is provided a garment including a plurality of attachment means for attaching one or more accessories to the garment in use, wherein said plurality of attachment means provide a plurality of positions on the garment at which the accessories can be attached.

[0035] In a third aspect of the invention there is provided a glove including at least one attachment means to attach one or more accessories to the glove in use, wherein the glove includes at least two apertures substantially positioned at either side of the glove to accommodate a user's thumbs such that the glove can be worn on either hand.

[0036] Typically the glove has at least two thumb holes or apertures located at either side of the glove so that a

single glove can be worn on either hand.

[0037] A garment according to any preceding claim wherein the one or more accessories include a holder provided with attachment means to allow the same to be attached to the garment by relative rotation and said holder allows the location of one or more tools therewith.

[0038] In one embodiment the at least one accessory is a tool which includes attachment means to allow the same to be attached to the garment.

[0039] In one aspect there is provided a plurality of holding means for location of at least one tool therewith, characterised in that each of said holding means includes attachment means to allow the same to be attached to a garment by relative rotation between the same and each of the holding means includes location means configured to allow a specific tool or tools to be located therewith such that a wearer of the garment can select which of the holding means from the range of holding means is appropriate to be located on the garment at that time so as to provide the appropriate tools.

[0040] Typically a set of accessories of a first type can be interchanged with a set of accessories of a second type.

[0041] In a further aspect of the invention there is provided a method of attaching one or more accessories to a garment, said garment including at least one attachment means for attaching one or more accessories to the garment in use, wherein said method includes the steps of:

- providing attachment means on the accessory; and
- rotating the accessory attachment means relative to the garment attachment means to secure the same together.

[0042] In a further aspect of the invention there is provided an attachment means for attaching one or more accessories to a garment in use. Typically said attachment means includes at least one member attached to the garment in use and one or more formations shaped to receive at least part of an accessory and/or at least part of a further member.

[0043] In a further aspect of the invention there is provided a system for attaching one or more accessory holding means to a garment, said system including a garment with one or more attachment means for attaching one or more accessory holding means to the garment, wherein said accessory holding means is engaged and/or disengaged from the garment by relative rotation between the garment and the accessory holding means.

[0044] Typically the holding means holds one or more accessories associated with a particular activity. For example in the field of DIY a first holding means can be equipped with accessories related to plumbing and a second holding means can be equipped with accessories suitable for carpentry. Further typically the holding means and/or the attachment means are interchangeable. As such, the DIY accessories can be changed for sports

accessories (for example golf tees or fishing flies etc.) and thus a garment can have a multitude of uses.

[0045] Specific embodiments of the invention are now described with reference to the following figures wherein;

Figure 1 shows a plan view of a glove in accordance with one embodiment of the invention;

Figures 2a-2d show plan and side views of an attachment means in accordance with one embodiment of the invention;

Figure 3 shows a side view of a garment in accordance with one embodiment of the invention;

Figures 4a and 4b shows a end views of a glove in accordance with one embodiment of the invention;

Figures 5-7 show various embodiments of accessories which can be attached to the garment in accordance with the invention; and

Figures 8a-8d show various embodiments of further accessories which can be attached to the garment.

[0046] Turning to figure 1 wherein there is shown a glove garment 1, which includes a number of first members or plates 2 (also referred to as 'hot shoes') of the attachment means, by which the accessories and/or accessory holders are attached. As the first members or plates 2 are provided at different locations on the glove accessories can therefore be attached at a number of different positions. The glove in this example includes two thumb holes 3, located on substantially either side of the garment. The glove can therefore be worn on either hand of the same. As such, the same user or operator can use left or right hand for different tasks and attach accessories associated with those tasks on either hand in a number of positions.

[0047] Also shown in figure 1 is the female formation 4 of the first members. In this example each first member includes four female formations 4, which have a substantially keyhole shape. Each female formation is in the same plane as the other formations on the same first member. However the narrow part of each formation 4 is angularly displaced at approximately 90 degrees from the adjacent formations. In this arrangement, the male formations 10 (shown in figure 2 and also referred to as PODs) are engaged with the female formations and then rotated clockwise to secure the formations together.

[0048] Figures 2a and 2b show the arrangement of the male formations 10 on the second member or plate 12 of the attachment means. Similar to the first members 2, the second members are formed on a substantially planar four sided plate. The male formations 10 are T-shaped and can be inserted into the circular part of the female formations 4. Rotation of the male formations in the clockwise direction secures the members of the attachment

means together. The person skilled in the art will appreciate that the male or female formations could be formed as part of an accessory and/or attached to the same. Furthermore, the formations could be attached to an accessory holder to hold a number of accessories.

[0049] Figure 2c shows the shape and arrangement of the female formations 4 on the first member 2. Under the surface of the first member is a channel or cavity shaped to receive the flared part of the male formation 10. The cavity 14 is shown in figure 2d, which also houses a resilient member 7 which functions as a dust cover when the male and female formations are not engaged. Spring 8 biases the member 7 to cover the female formations when the same are not engaged and the spring is compressed when the male formations are engaged. The resilient member can also help secure the male and female formations together by applying a degree of force to the members when engaged.

[0050] Figure 3 shows a side view of the glove shown in figure 1. It is clear that this particular example includes four first members 2 situated around the wrist portion 70 of the glove 1 and one first member located on the back of the hand. In this example the glove material is primarily constructed from Neoprene. This flexible polymeric material can provide support to the users hand and/or wrist when in position and help to prevent strains and/or sprains when undertaking tasks.

[0051] Turning now to figure 4a where there is shown a front view of the glove 1 with four of the five first members 2 visible, the fifth being obscured by the forwardmost member 2' located on the back of the hand. This glove 1 has a single opening or aperture 40 for the fingers and two openings 3 for a user's thumbs. As such, the glove 1 can easily be transferred from one hand to the other as required. Adjustable flap 42 in this example includes hook and loop type fastenings and therefore can be fitted to any size wrist. Figure 4b shows the view from the opposite end of the glove 1 looking through the glove from the wrist end 70. The hook and loop fastenings 72 are visible as is the excess material 74 associated with the same to ensure that the garment fits different size hands and/or wrists. In this example a first member plate 2 is attached to the wrist portion of the glove 70 associated with the fixing means. As such, the user can use the hook and loop fastenings to selectively position the member 2.

[0052] Figure 5a shows an embodiment wherein the second member includes a self coiling tape measure 44. The measure extends from point 46 and as the measure only extends from this one point, the orientation of the tape measure on the glove 1 is important in order that it is easy to use. Due to the number of fixing positions and ability to selectively position the member 12 on the glove this can be achieved regardless of whether the user is right handed or left handed. The accessory shown in figure 5b is an accessory holder 46. The holder is attached to the second member 12 and includes a number of formations formed in the same to hold drill bits 48, 48' in this example.

[0053] Turning to figure 6 wherein an alternative embodiment to the glove is shown, as sleeve 50. The sleeve is constructed principally from the same neoprene material as the glove and thereby has the same amount of support. The sleeve includes a jotting pad 52 and pencil 54 accessories attached to the second member (not shown). In addition to pencil and paper, pieces of white board material and dry markers could also be utilised as accessories which function in the same manner.

[0054] Figure 7a shows a further embodiment wherein the accessory holds a number of further accessories. The accessory is a sponge member 56, into which are inserted a number of rawl plugs 58 and screws 60. This type of accessory is particularly useful when drilling holes in walls and the like. Figure 7b shows a accessory which is particularly useful when a user is operating in dark areas. The flexible torch 62, includes a light source in the housing 64 and a flexible member 66 which contains light conducting material such as fibre optic cable and/or the like.

[0055] Figures 8a-d show a number of instruments which can be fitted to the glove 1 as accessories. Figure 8a shows a second member 12 which incorporates a radio. The antenna 16 and speaker 18 are incorporated to receive short wave radio transmissions. A microphone 20 and send button 22 are also incorporated so that the user can also send radio transmissions. Figure 8b also shows an embodiment of an accessory 24 which is capable of transmitting electromagnetic signals. This accessory includes a button 26 which is intended to sit in a users palm to be easily pressed by a user's fingers. On pressing the button 26 the accessory 24 transmits a radio signal and/or emits a light beam or laser from the LEDs 30. As the button 26 and accessory 24 are intended to be located on the same hand, the accessory can function as a 'point and shoot' device which has application is paintball-type and Laser Quest-type war games. For example the user can simply point their hand wearing the glove at the opponent and press the button to 'shoot' signals at the same. The accessory can be turned on and off by a switch 28.

[0056] Figure 8c shows an embodiment wherein the accessory is a compass 32 and figure 8d shows an embodiment wherein the accessory is a night vision telescope 34. The telescope 34 is mounted to the second member 12 by a pivot point or universal joint 36 to provide manoeuvrability. The compass 32 also includes a water proof cover 38 hingedly connected to the member 12 and secured over the compass by a fastener 38. Each of the accessories shown in figure 8 can be selectively positioned and orientated on the glove 1. In addition each accessory can be interchanged with another.

[0057] Advantages of this system include the fixing, access and interchange of a plethora of tools and accessories to work gloves or other garments, particularly non-metallic objects, allowing the operator maximum flexibility, time efficiency and handling safety.

[0058] Many simple tasks related to trades activities

and DIY around the home are prone to hazards and inefficiencies due to the nature and complexity involved in managing and co-ordinating tools and or objects. These tasks very often involve the use of both hands being engaged in the actual task, compounded by incidental hazards like working off the ground, in places with poor or no light, or working over a large area. Many people have tried to address this in the past with magnetic applications which end up attracting unwanted debris or objects and have no impact with non-metallic objects. It is well documented that there are severe inefficiencies and potential dangers associated with a worker carrying out repetitive applications or tasks, particularly where the surplus accessories are stored and accessed out of sight, with ad-hoc presentation in bags or pouches.

[0059] The attachment means in this example is referred to as the fixing or hot shoe (and herewith the first member referred to as Base Plate 2 for female section, and PODS 12 for male attachments), where the female fixing 4 is a permanent and integral part of the garment, and the detachable part of the second member 12 has the male fixings 10 and carries a plethora of accessories selectable by the operator;

[0060] Unique is the breadth of the range of practical accessories or appliances that can be supported on the interchangeable second member 12 concept. Also the degree of personalisation offered to the user is also an advantage and unique. Firstly, for example, at the point of sale and secondly individual second members 12 for positioning while in use.

[0061] This concept is specifically geared to retaining and giving speedy access to key tools, accessories and gadgets associated with a plethora of tasks activities and pastimes. Particularly when requiring a change of location, i.e. working up ladders; preparing materials away from the primary workface; military situations where physical movement may be prohibited or dangerous.

[0062] The speed and ease of access, selection, de-selection and retention of key tools and aides for that job/task are essential. Indeed my findings indicate that much time, energy and enthusiasm could be lost by the inability to locate quickly and repeatedly the marker, the flexible tape measure, the torch, the tile cutter, rawl plugs, screws etc.

[0063] With military or combat game situations movement and the noise associated with such movement could have negative consequences. One solution could be a second member 12 mounted on the rear of a glove consisting of a small two way radio transmitter would give the user the most appropriate user access to a communication tool.

[0064] The design of the attachment means is crucial to the quick, unfussy interchange and secure retention of the desired accessory to the garment.

[0065] The focus of this concept is for the operator to don a comfortable garment worn on either hand or wrist like a glove. The glove enables the user to attach and dismount various tools and accessories required for a

single or a multiple of tasks. The quick mount second members or plates 12 (male and female couplings) would allow the operator to determine the individual position of each accessory at the onset of work and then exchange or rotate their locations as the work developed or changed.

[0066] The garment would be able to be machine washable and adjustable to fit most arm and hand sizes or even be worn over other garments.

[0067] Advantages:

- The garment can be fully transferred from one task, trade or activity to another, as opposed to current ideas and inventions which tend to focus on assisting one task or activity. For example, a design for carrying golf accessories, or a gardening tool holder for attaching a hand hoe or similar item.
- Tools, aides and accessories can be selected and de-selected easily and rapidly.
- the first and/or second members are designed to be rotated to at least 4 different angles to aid use and access in all situations.
- The garment can be swapped from left to right handed people with no adjustment.
- Due to the first 2 and second members 12, appliances can be swapped from right side mounting to any of the other four mounting stations as desired by the operator.
- The garment worn as a type of glove would mean that the accessories are in almost permanent view for successful selection, attachment and de-selection.
- A range of task specific members or mounting dispensers can be added or selected at will.
- No corrosive pieces are permanently attached to the main garment, reducing weight, wear and tear; and allowing repeated machine washing of the garment.
- Elasticated fabric could be used to allow easy movement, access and exit for the hand and arm, and to cope with some of the operator size varieties which may be encountered.
- There are additional support and injury reducing benefits associated with sporting this garment. Operators can wear the garment with or without the accessories on one or both arm/wrists.

[0068] Examples;

- Drilling into a wall up a ladder, would mean the drill

held in the right hand for a right handed person; The garment would be also worn on the right hand and arm, so the left hand is free to select, drill bits, rawl plugs from another member, pencil or tape measure from further members etc.

- Combat games and exercises, team building activities where a short wave radio member, low level light member compass member, night vision member, and laser type 'tagging' member device could be loaded onto the garment, to simulate combat conditions. Then de-selected for the day job.

[0069] These abovementioned types of member are shown in figure 1, which shows a Plan View or view from directly over the garment. With four of the five first member bases in view. Figure 2 shows the plan and side elevation of the female and male mountings alongside each other. The extending pegs x 4 on the underside of each interchangeable second member, will locate with four matching entry points on the female part of the fixings (first member). Slight downward pressure against the dust plate in the female section allows the larger tip of the peg to enter up to its stops. A quarter turn of the male will find secondary stops. At this point releasing the male will allow the spring to right itself and ease the larger tip of each peg into its 'locked' location. The detachable part of the second member fixing will remain in place while the user operates at any angle or practising any movement i.e. running. The second member is removed by the operator exerting a downward pressure on the male member and a quarter reverse turn until the primary stops are found. Releasing the downward force will enable the spring to right itself and pop the pegs back out of the corresponding holes. The dust plate will seal the holes in the base of the fixing to prevent the unwanted ingress of dust and debris.

[0070] Furthermore, figure 3 shows a side elevation of the glove identifying the approximate locations for the plastic base plate first member female fixings or mountings. Four of the estimated five first member bases are in view from this elevation. Figure 4b shows an end elevation where the finger exit is at the far end of the garment. Therefore we are looking down a narrowing tube of material from the arm entry towards the finger exit at the far end. Also showing four female first member bases. The lower first member could be an integral part of the closure or adjustment flap of the glove. Figure 4a shows a front elevation of the glove identifying the approximate locations for the plastic base female fixings or mountings. Four of the estimated five first member bases are in view from this elevation. The lower first member could be an integral part of the closure or adjustment flap of the glove.

[0071] The figures show a versatile wrist and/or arm worm garment, made from flexible machine washable material, with specifically designed integral attachment bases (or female couplings); for attaching and interchanging the male coupling which form the mountings

and carriers for a plethora of tools, gadgets and accessories for professional trades people, DIY enthusiasts and military/combat games players amongst others.

[0072] Designed to be interchangeable from the left to the right hand, and lightweight to prevent damage or injury to the user over long term use. See Figure 1.

[0073] Elasticated exits and openings for the hand arm and thumb help improve the ability of the glove to meet the variety of hand and arm sizes of various operators. See Figure 3.

[0074] The design gives free movement to the hand, knuckles out towards the fingers. There is supported movement for the muscles of the forearm and tendons in the wrist.

[0075] The glove has several durable base plates (first members) permanently fixed to it, for receiving the opposite (male or female) part of the coupling. Making the attachments easy to move from one position or another. See figures.

[0076] It is envisaged that the base plate first member (fixings) mounted permanently on the glove would be the female (less bulky or easy to snag other items). The accessories will come with the male connection/fixing integrated second member in their design or with a mechanism for attachment of regular objects. See figures.

[0077] The male formations and/or members will have the flexibility to be mounted in several different directions on the garment; towards the front of the glove, towards the rear of the glove, towards the operator and away from the operator. Represented by a 'pick, rotate, and click in' type action. See figures.

[0078] Some bases would be mounted on the upper piece of the garment (between knuckle and wrist; others between wrist and elbow on the upper section of the glove. Another base plate would be positioned on the early part of the forearm just behind the wrist pivot on the far side of the arm/garment; A further base would be positioned on the early part of the forearm on the underside of the garment and another base fixing would be positioned symmetrically opposite and between the previous forearm mountings.

[0079] To summarise the positioning; Some of the bases are arranged around the part of the forearm immediately after the wrist joint and further base integrated into the garment on the back of the hand.

[0080] It is intended that the bases or members would be round or square shaped, somewhere between 3 and 5cms across the flats or diameter.

[0081] It is envisaged that the attachment means will owe their rapid interchange ability to a multi peg locator mechanism, having a male and female section.

[0082] The extending pegs on the underside of each interchangeable member, will locate with matching entry points on the female part of the fixings or other member, which are already integrated into the garment. Slight downward pressure applied to the member against the spring loaded dust plate in the female section; Compressing the concealed spring allows the larger extremity of

the peg to enter up to its' designed stops. A quarter turn of the male in a clockwise direction will find secondary stops. At this point releasing the male will allow the spring to right itself and ease the larger tip of each peg to find its 'locked' location. The detachable part of the fixing will remain in place while the user operates at any angle or practising any movement i.e. running.

[0083] The member is removed by the operator exerting a downward pressure on the male member and a quarter reverse (anticlockwise) turn until the primary stops are found. Releasing the downward force will enable the spring to right itself and pop the member pegs back out of the corresponding holes. The dust plate will revert to its original position covering the holes in the base of the fixing to prevent the unwanted ingress of dust and debris.

[0084] There are several separate start and lock positions for each member to be attached to, offering the user many variables in the functionality of the attachment mounted accessories i.e. the exit position for the beginning of a flexible tape measure.

[0085] The glove and accessories have been designed specifically to offer the user a comfortable, lightweight, streamlined, unobtrusive universal appliance carrier (with incidental qualities to give support to the wrist), and even when accessories are mounted these important operator qualities are at the forefront of the design thinking.

[0086] The attachment means, first and/or second members, male and/or female formations and the fixing mountings are designed to be lightweight, durable and most importantly having as slim a 'profile' as is practical for each accessory. For example, the tape measure member is unlikely to be more than 3 metres in length, and the actual blade or tape may not measure more than 8 mm in width.

[0087] Materials have been selected to allow the user to wear the garment next to the skin, only in very rare cases offering any irritation, and it may be possible for some operators to wear the garment over other clothes like cotton gloves.

[0088] The principle of the glove is it is designed to allow each user options to use their preferred configuration, and select their preferred tools and accessories for the job or desired activity. Due to the flexible nature of the attachment, users could buy a member designed to store their iPod (trademark) or mobile phone, or even sunglasses or reading glasses upon their tool glove.

[0089] Some mounting items or accessories would be stored on a block or base comprising of a hard outer shell with a sponge with lateral slots in, to allow the depositing and recognition of metallic and non metallic item like screws, rawl plugs drill bits etc. The user can pre-load the number of items required for the task from their tool box into the block, lock the member into its desired position and/or orientation on the glove to allow the easiest access when required.

[0090] Individual or a combination of members and/or

appliances could be utilised by plumbers, electricians, tilers, carpenters, carpet fitters, telephone engineers, clock makers, gardeners, military personnel, combat gamers or anyone where the principles of wearing the garment match the activity i.e. the access, control and manageability of a variety of small tools or accessories.

[0091] An orienteering enthusiast could apply a compass accessory, a Flexilite accessory, an additional battery accessory for elongated outings as a back up supply for the Flexilite torch (and even a solar panel accessory for those going to remote locations where recharge with electricity could be an issue). All housed on a quickly accessible, interchangeable, garment easily brought up to eye or usage level

[0092] The features which provide the garment with the aforementioned advantages are:

1. A glove type garment or sleeve with integrated base plates, capable of accepting various domestic trade or leisure style appliances, tools and accessories. The bases, made typically from hard plastic, would form the female and/or male part of member for fixing or mounting. Accessory carrying members (male or female coupling) possessing multi-positioning connectivity, usually male to female glove mounted base plate members. Male members are interchangeable to any one of the five available integrated female positions on said garment. Furthermore, Male formations can be 'loaded' and 'locked' in to one of four positions on each of the female base plates offering the operator a high degree of individuality and flexibility of use.

2. A glove type garment or sleeve with integrated base plates, capable of accepting various domestic trade or leisure style appliances, tools and accessories as in point 1; Designed to reduce unnecessary stress or agitation by allowing the rapid, easy and consistent location of key items which the operator is using or intending to use.

3. A glove type garment or sleeve with integrated base plates, capable of accepting various domestic trade or leisure style appliances, tools and accessories as in point 1; Features a completely interchangeable garment designed for left or right handed use.

4. A glove type garment or sleeve with integrated base plates, capable of accepting various domestic trade or leisure style appliances, tools and accessories as in point 1; Featuring multi-positioning of each accessory to the individual need or desire of the operator.

5. A glove type garment or sleeve with integrated base plates, capable of accepting various domestic trade or leisure style appliances, tools and accessories as in point 1; Features a main body which is completely machine washable, lightweight, durable and comfortable to wear and use.

6. A glove or sleeve with integrated base plates, capable of accepting various domestic trade or leisure

style appliances, tools and accessories as in point 1; Allows the additional benefit of a wrist support to help prevent strain and injury of the operator.

7. A glove or sleeve with integrated base plates, capable of accepting various domestic trade or leisure style appliances, tools and accessories as in point 1; Has the potential to offer the user personalisation tags to be easily recognisable as the owners property, and/or to allow for personal identity traits to be displayed or carried.

8. A glove or sleeve with integrated base plates, capable of accepting various domestic trade or leisure style appliances, tools and accessories as in point 1; Similarly could incorporate a 'dog tag' add on which could be personalised by the purchaser to contain vital information in the event of an accident, like blood group, donor details and next of kin.

[0093] The concept is to provide a user with a uniquely versatile accessory or device holder, allowing visual identification, to avoid inappropriate or dangerous items being selected by mistake, ultimately reducing time spent and risk of injury. The concept offers the user a personalised approach to both the task to be carried out and the range or scope of the product to meet their professional and leisure needs.

Claims

1. A garment (1) including attachment means (2) for attaching one or more accessories to the garment, **characterised in that** said at least one accessory is engaged with and/or disengaged from the garment by relative rotation between the garment and the accessory.

2. A garment according to claim 1 wherein the at least one accessory can be selectively located on the garment at a number of different orientations with respect to the garment.

3. A garment according to claim 1 wherein attachment means includes at least one first member attached to, and/or formed in, the garment and at least one second member attached to, and/or formed in, the one or more accessories.

4. A garment according to claim 3 wherein the first and/or second member includes a female formation to receive at least part of the other of the first or second member.

5. A garment according to claim 5 wherein the formations are engaged by rotating at least one member and/or formation relative to another member and/or formation thereby securing at least the first and second members together.

6. A garment according to any of claims 3-5 wherein a first and/or second member can be secured to the other of a first or second member in two or more positions on said other member.

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7. A garment according to any of claims 5-6 wherein the male and/or female formations which are attached to a surface of a first and or second member and/or are integrally formed with the same.

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8. A garment according to any preceding claim wherein the attachment means include a resilient member.

9. A garment according to any preceding claim wherein the accessory is a holder means in, or to, which one or more accessories can be located.

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10. A garment according to any preceding claim wherein the garment is a glove or strap.

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11. A glove according to claim 10 wherein the glove includes two thumb apertures such that the glove can be worn on either hand.

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12. A garment according to any preceding claim wherein the one or more accessories include a holder provided with attachment means to allow the same to be attached to the garment by relative rotation and said holder allows the location of one or more tools therewith.

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13. A garment according to any of the claims 1-11 wherein the at least one accessory is a tool which includes attachment means to allow the same to be attached to the garment.

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14. A plurality of holding means for location of at least one tool therewith, **characterised in that** each of said holding means includes attachment means to allow the same to be attached to a garment by relative rotation between the same and each of the holding means includes location means configured to allow a specific tool or tools to be located therewith such that a wearer of the garment can select which of the holding means from the range of holding means is appropriate to be located on the garment at that time so as to provide the appropriate tools. a set of accessories of a first type can be interchanged with a set of accessories of a second type.

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14. A method of attaching one or more accessories to a garment, said garment including at least one attachment means for attaching one or more accessories to the garment in use, wherein said method includes the steps of:

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- providing attachment means on the accessory;

and

- rotating the accessory attachment means relative to the garment attachment means to secure the same together.

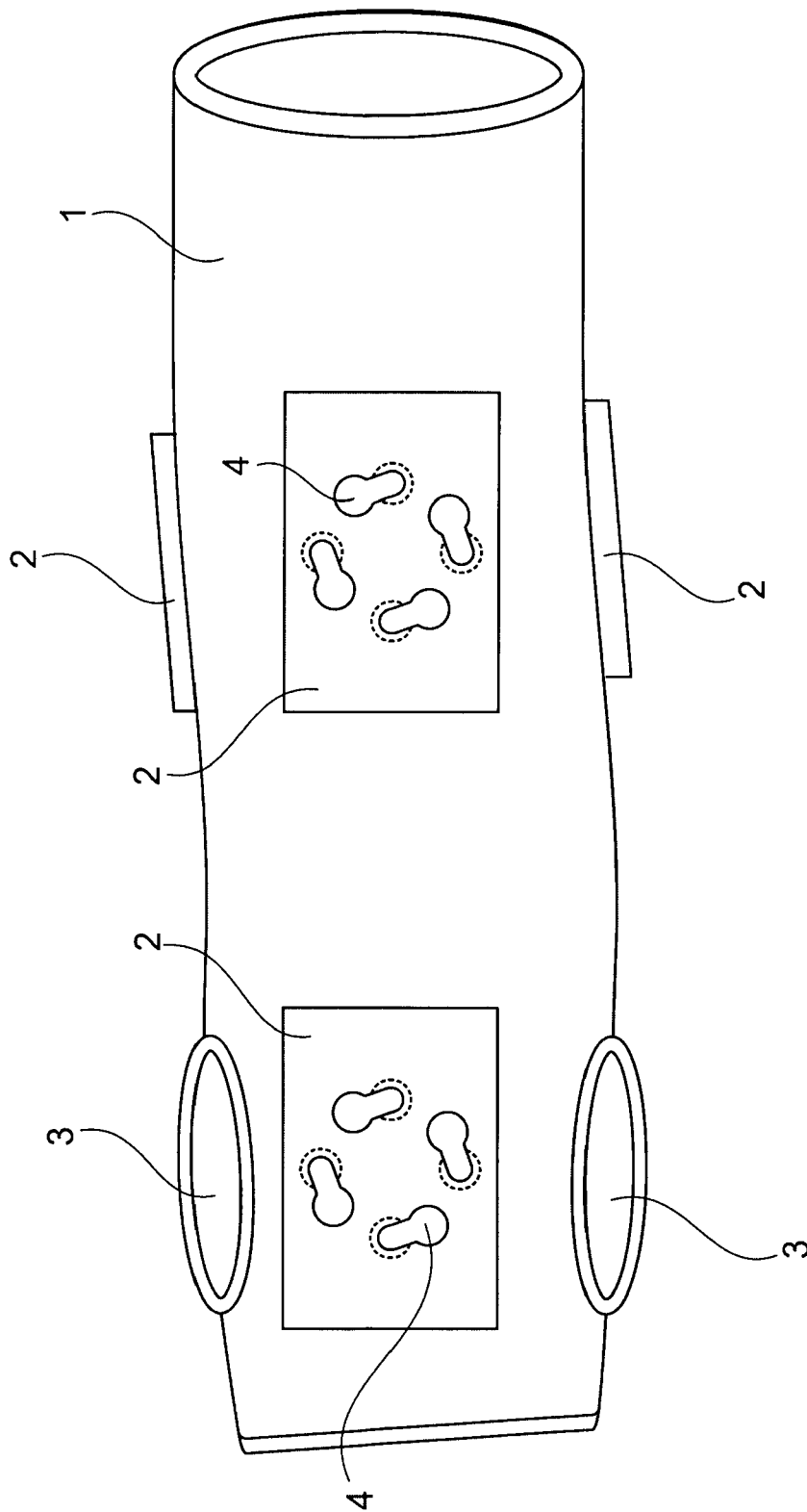


Fig. 1

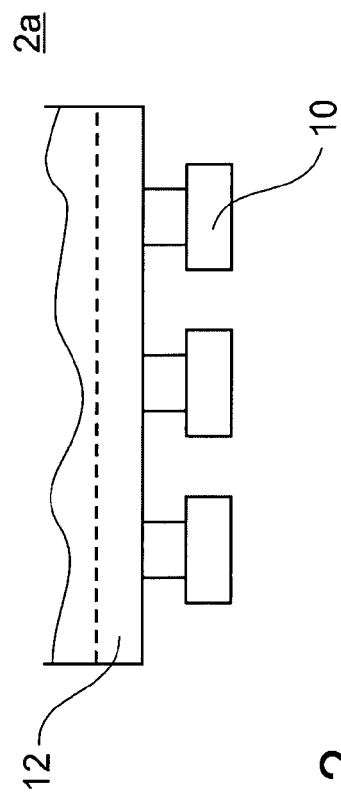
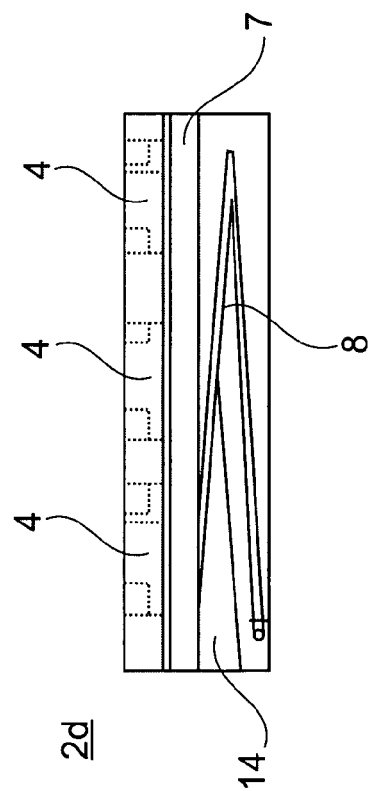
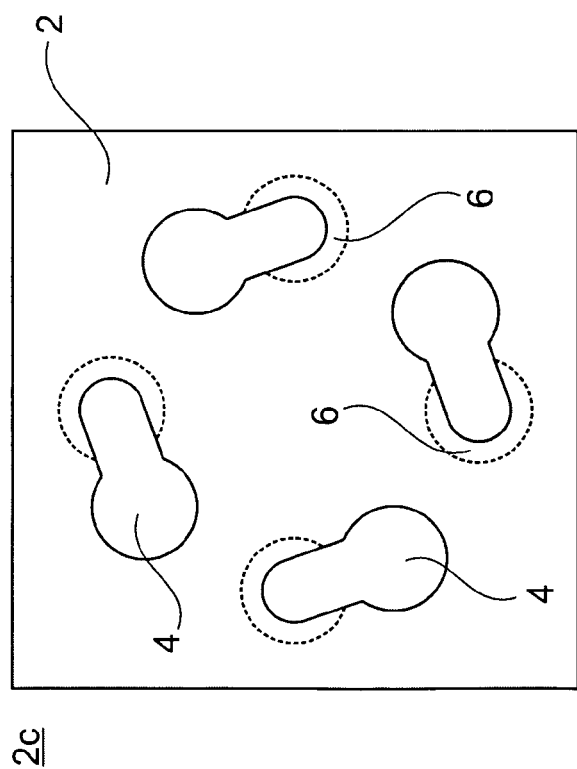
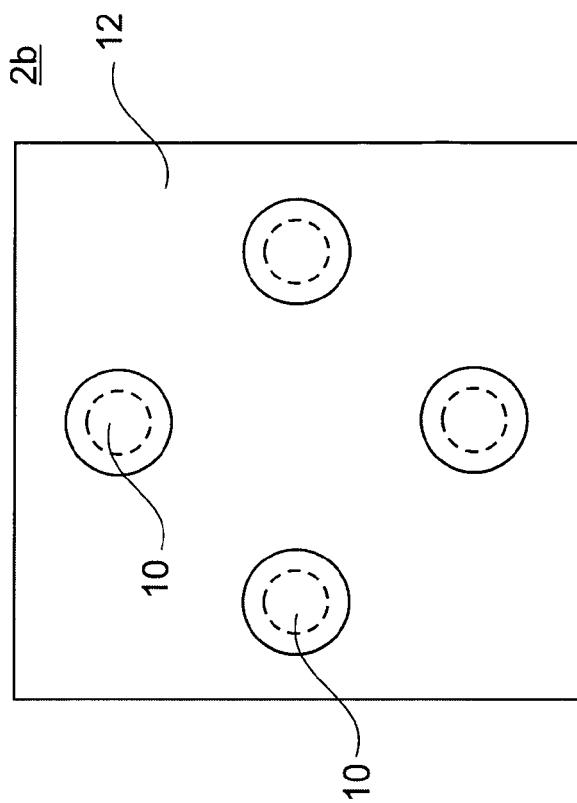


Fig. 2

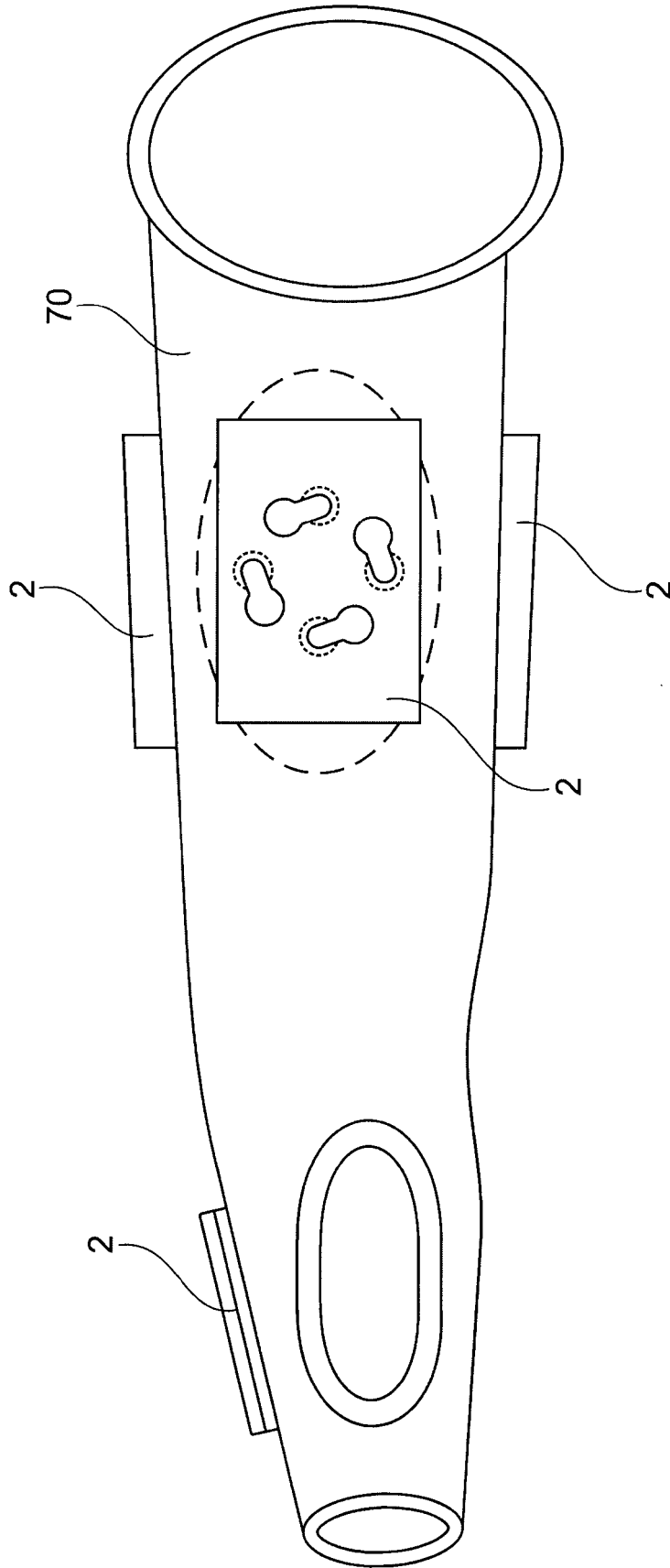


Fig. 3

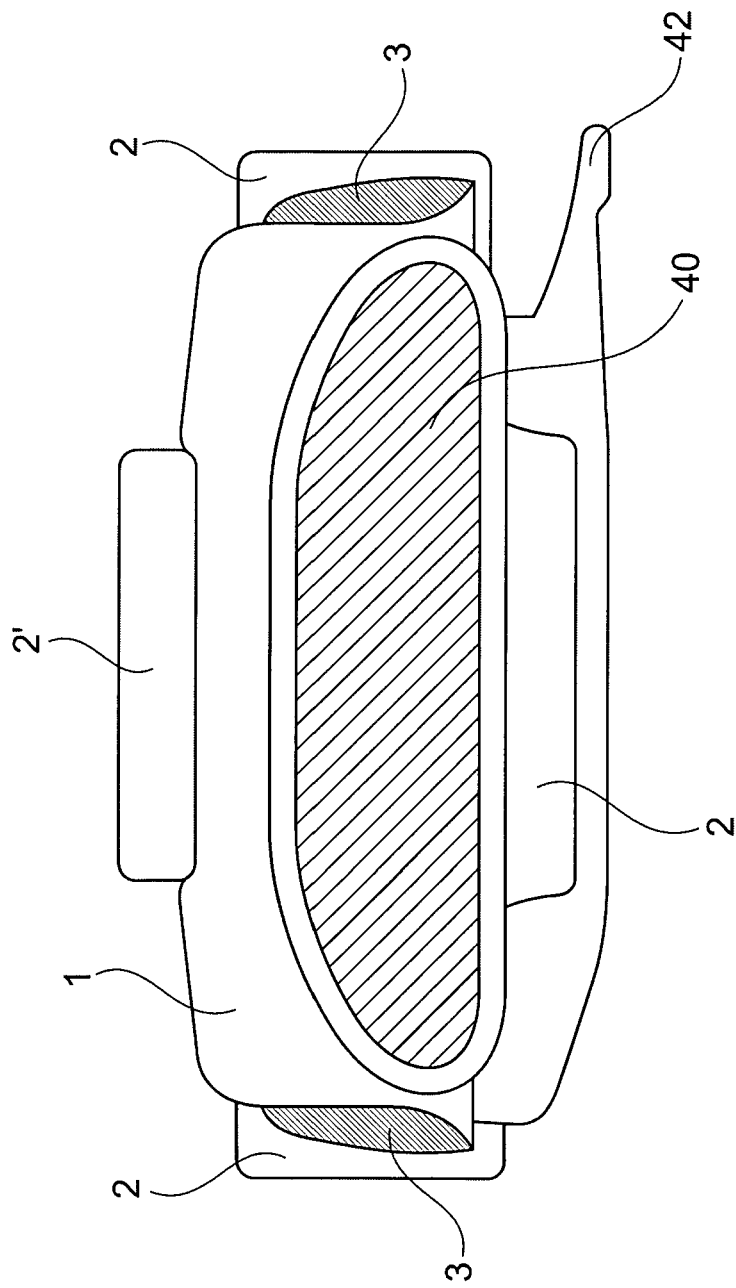


Fig. 4a

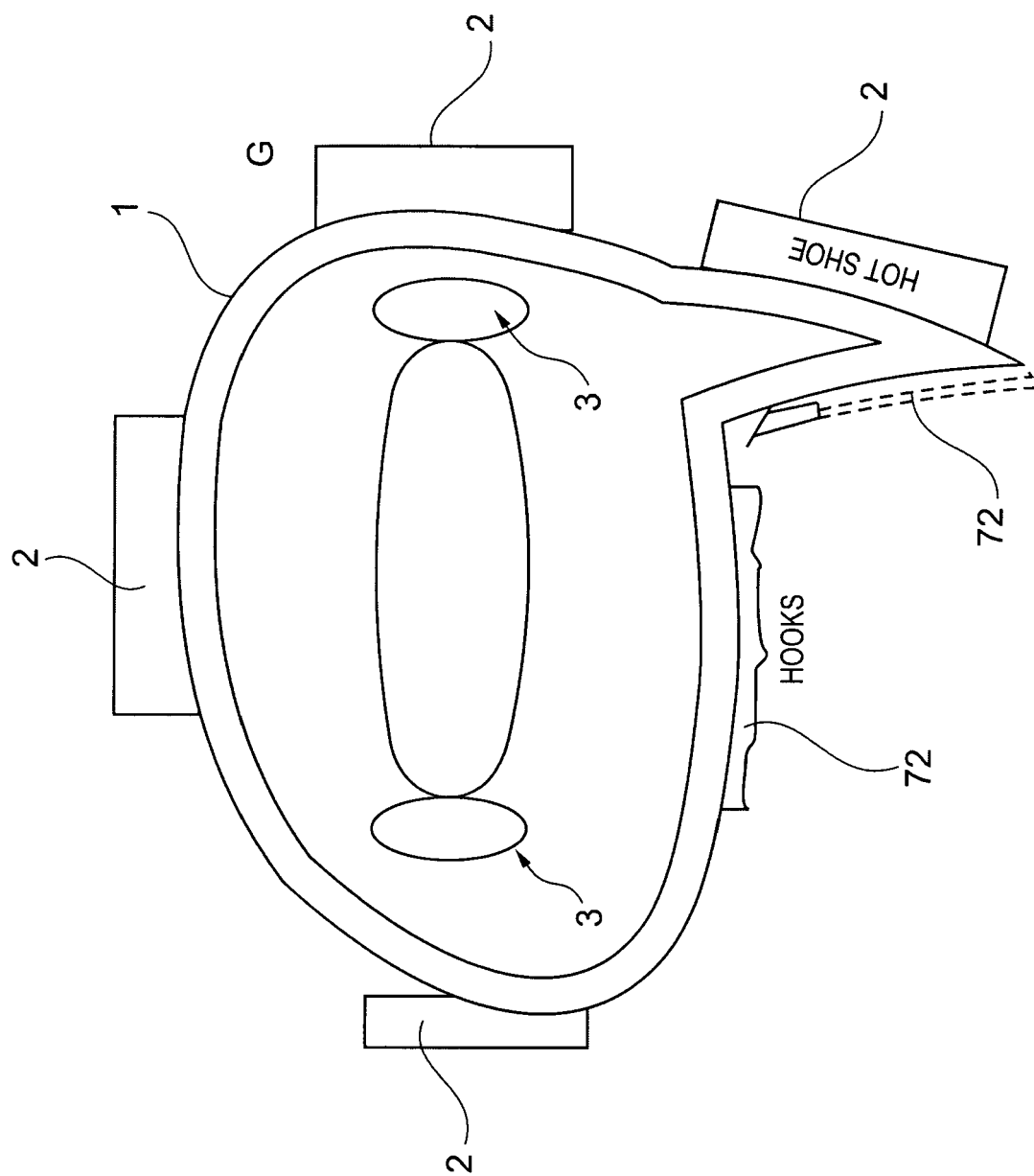


Fig. 4b

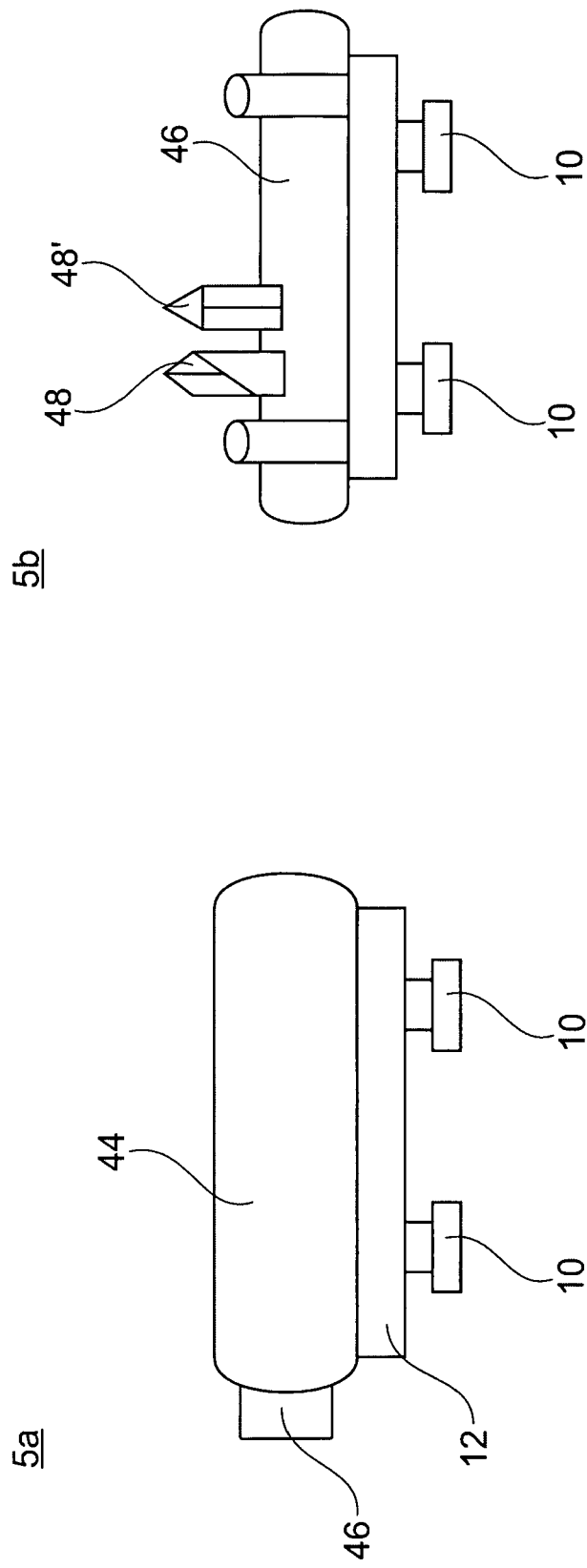


Fig. 5

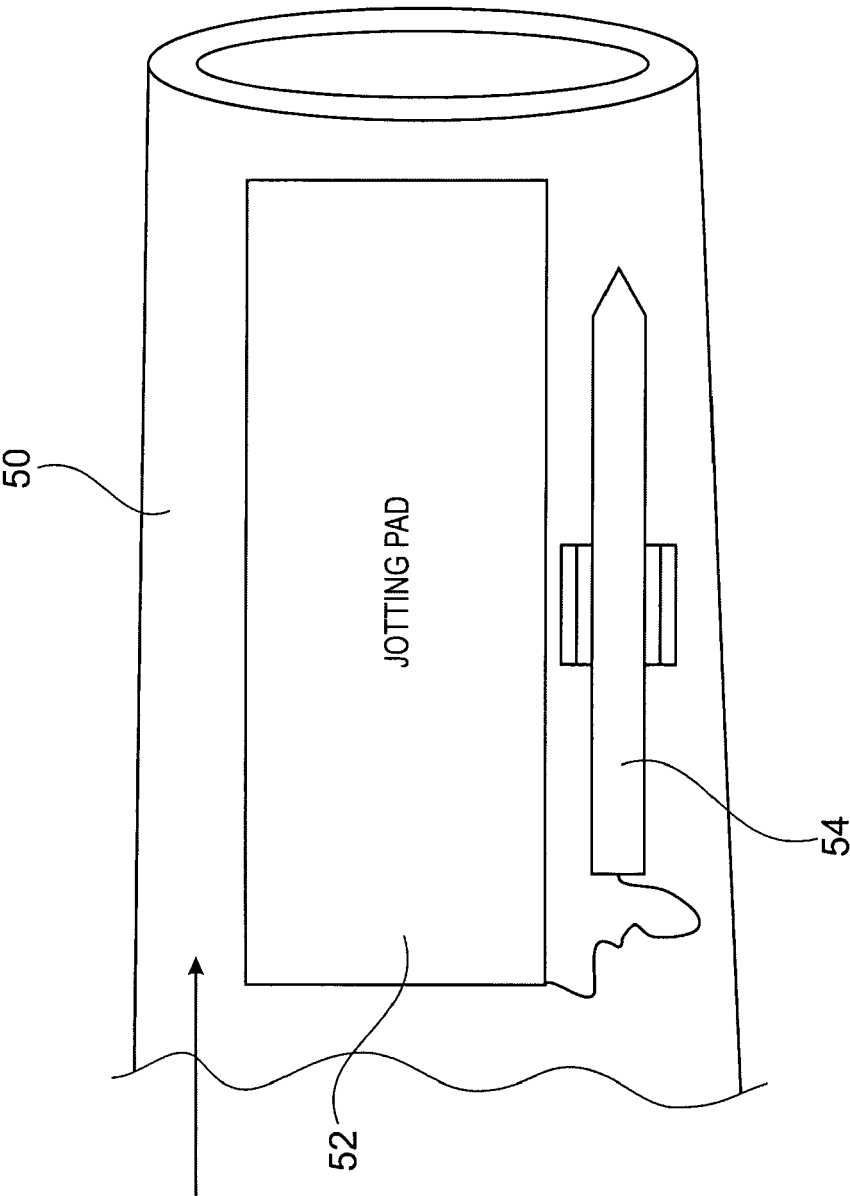


Fig. 6

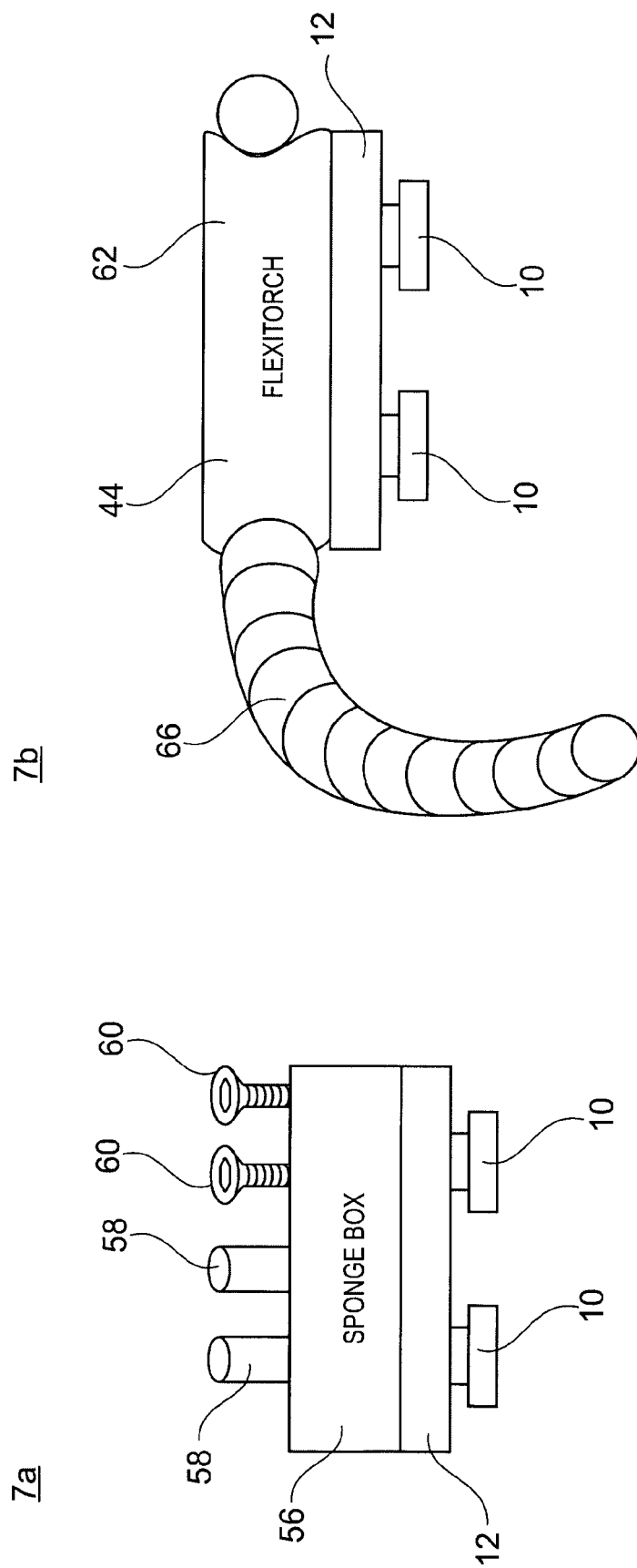


Fig. 7

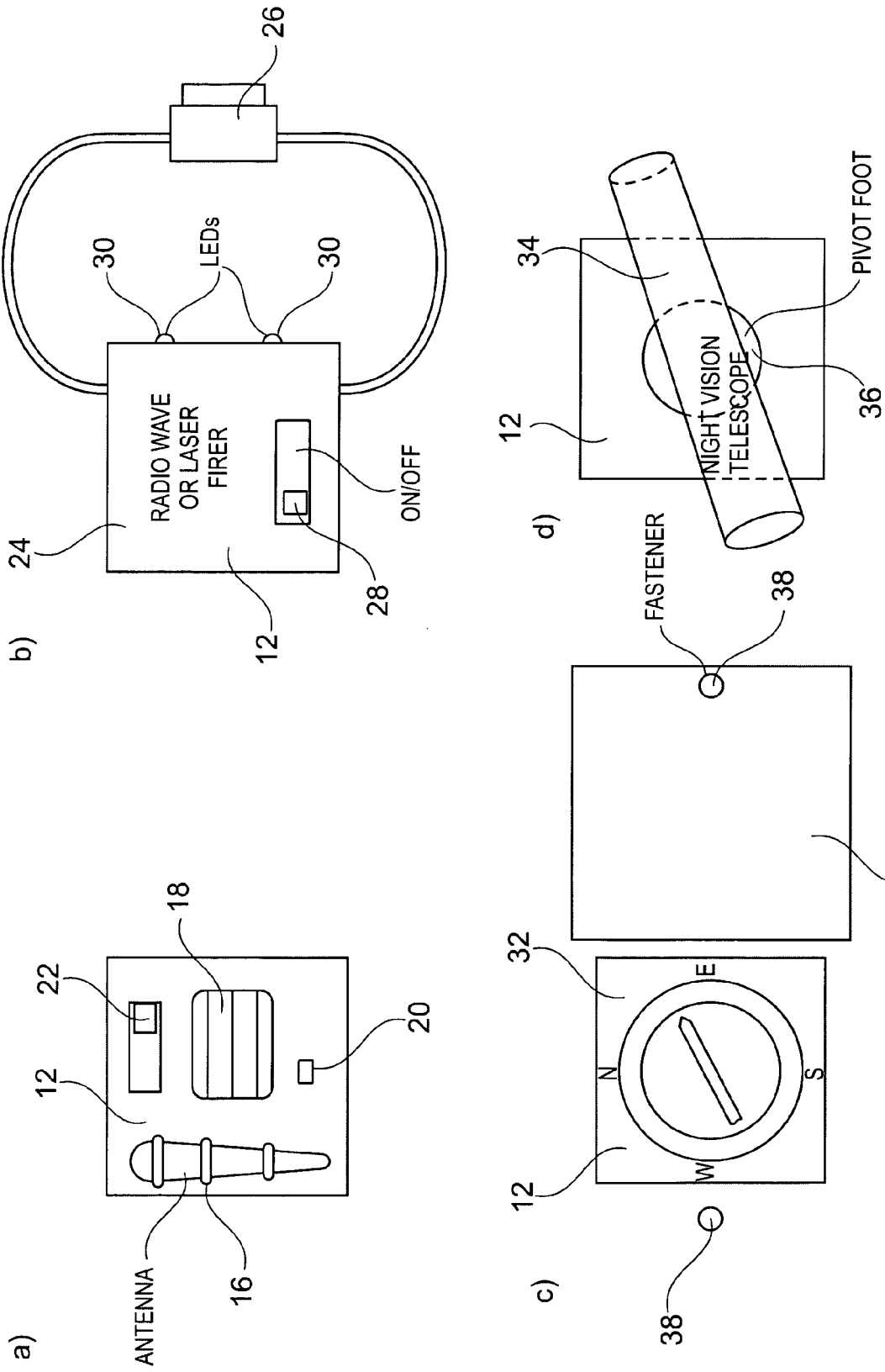


Fig. 8

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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