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(54) **TWO HANDED PROTECTIVE COVERING**

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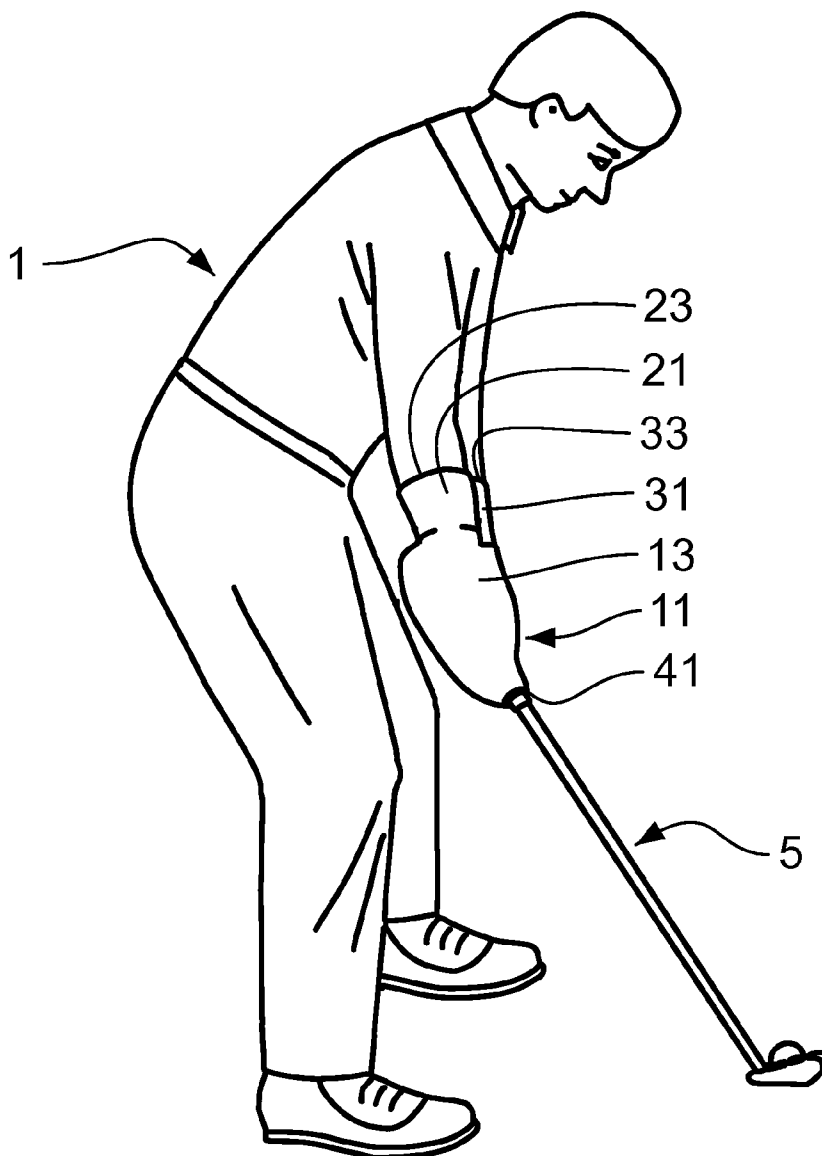
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(57) **ABSTRACT**

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A protective covering that envelops the left and right hands, wrists and lower forearms of a user and permits entry of an elongated handle of an object to be manipulated and gripped by the user within the covering.



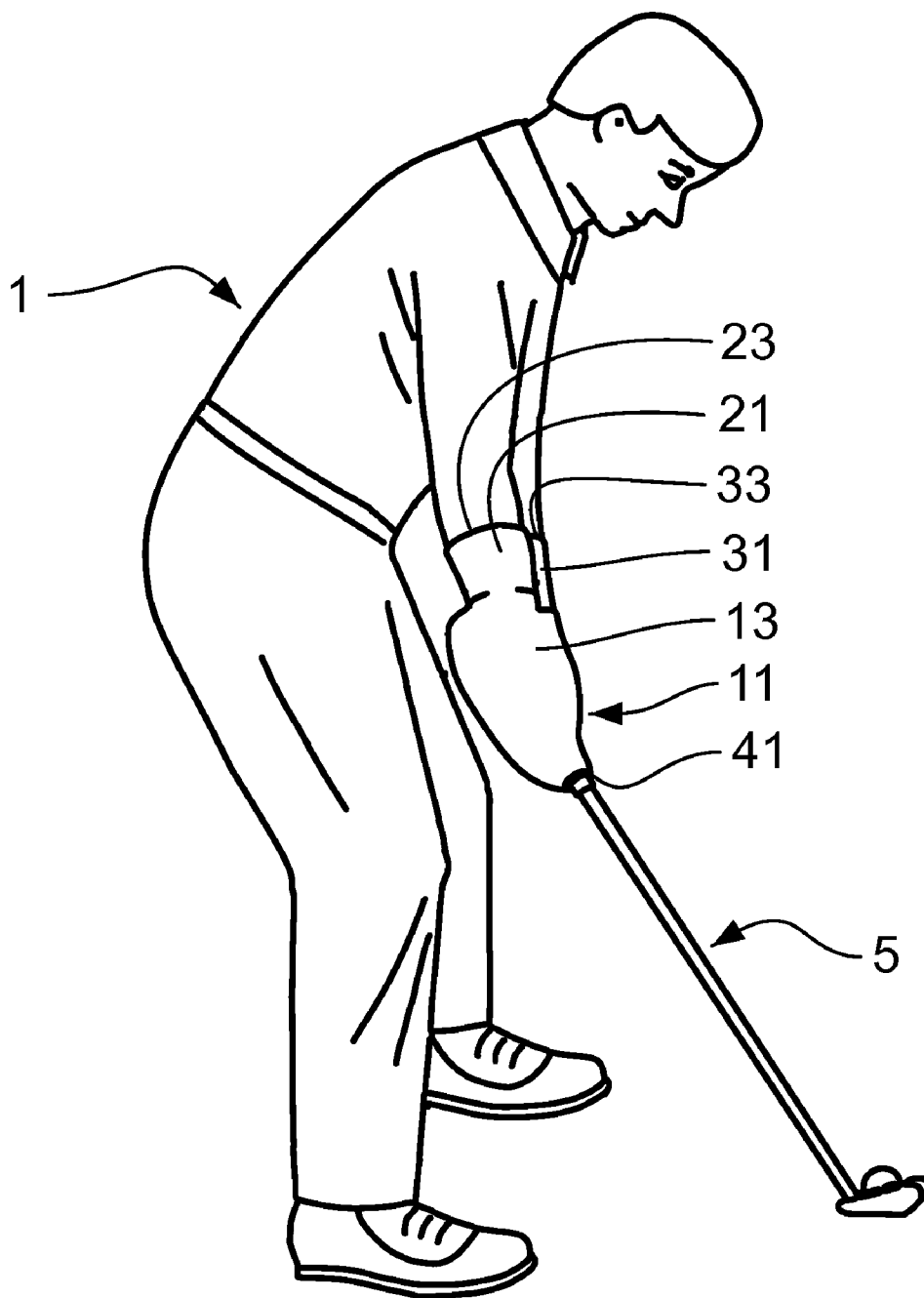


FIG 1

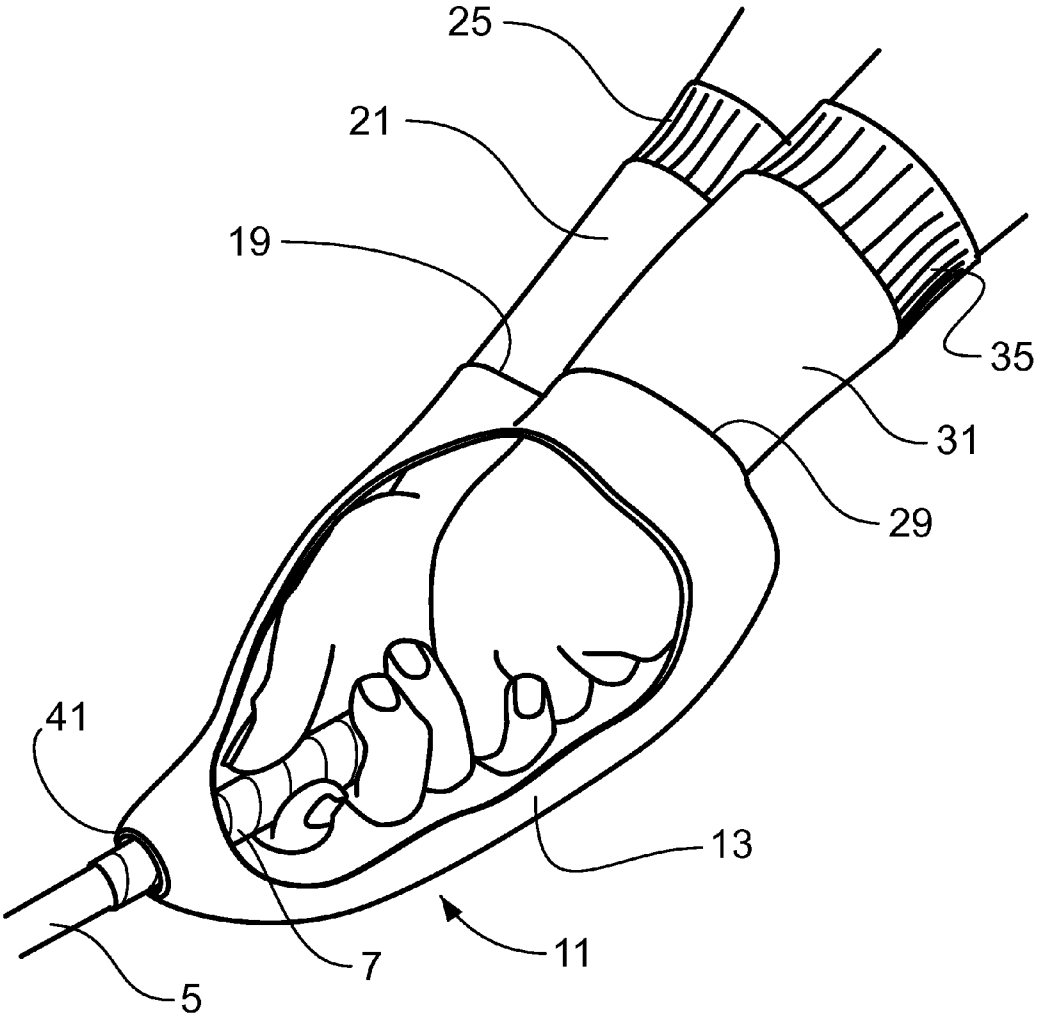


FIG 2

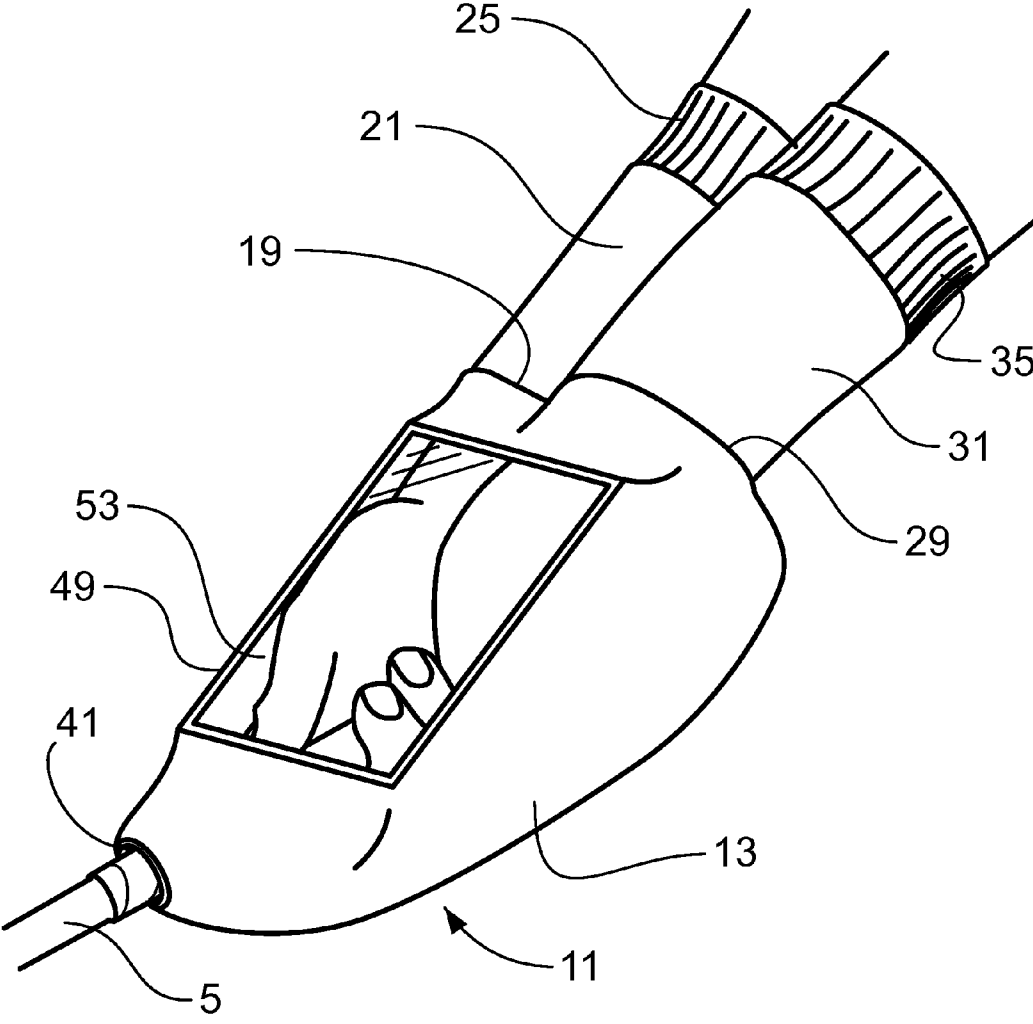


FIG 3

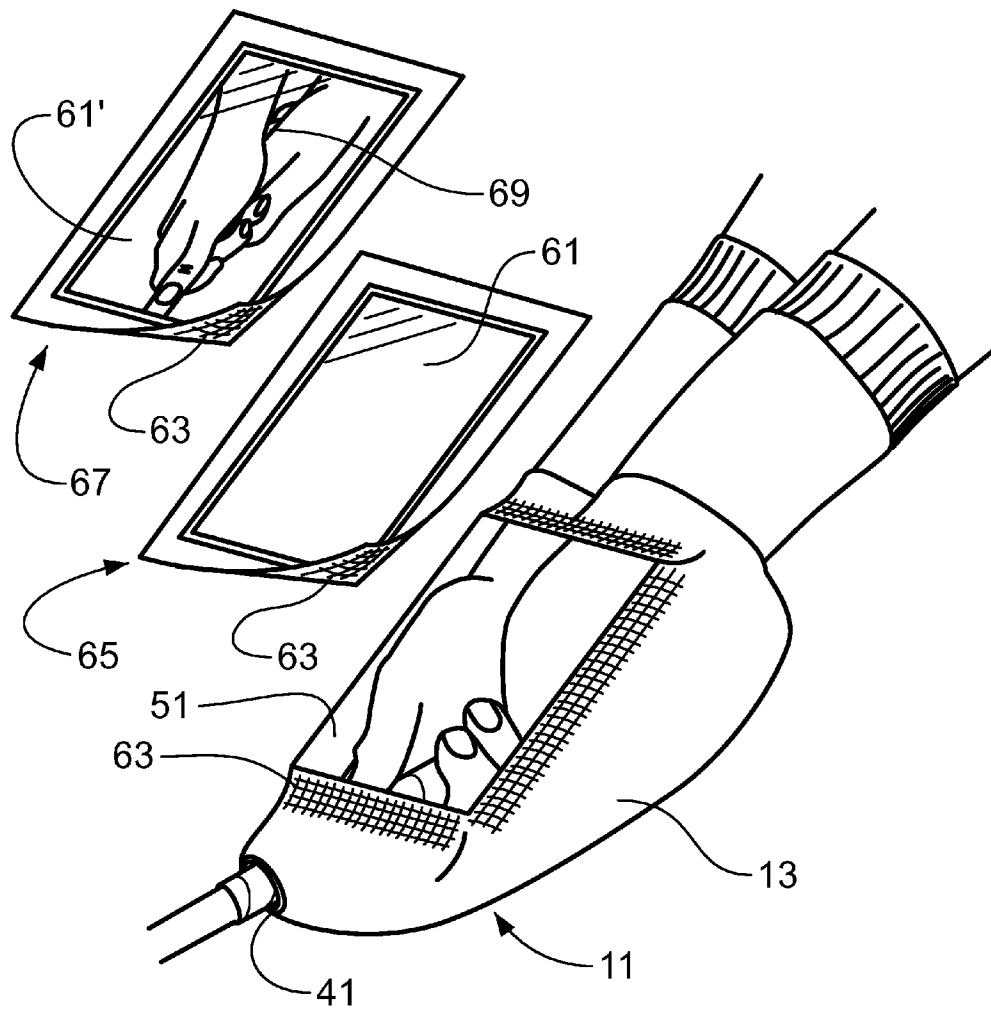


FIG 4

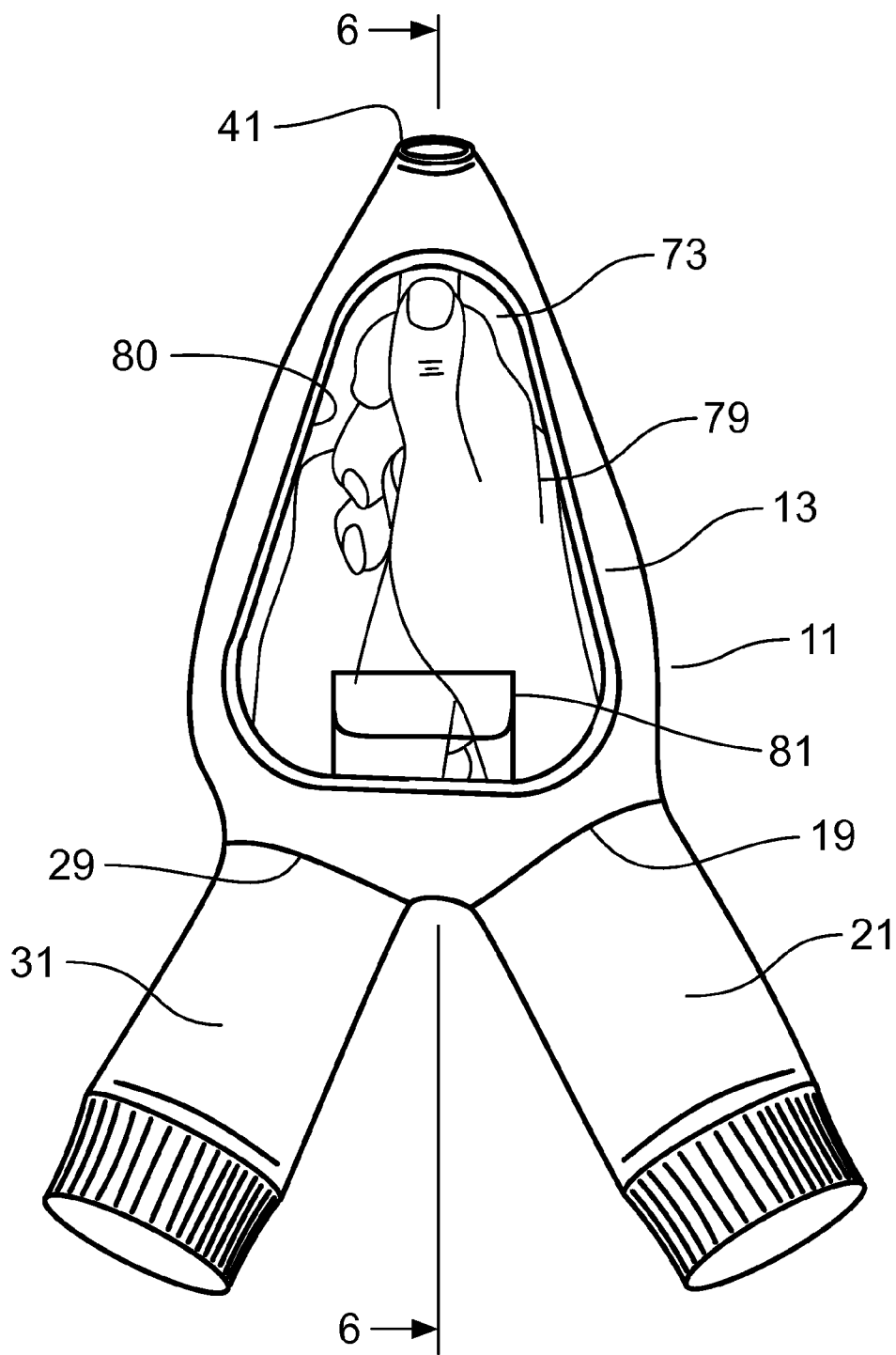


FIG 5

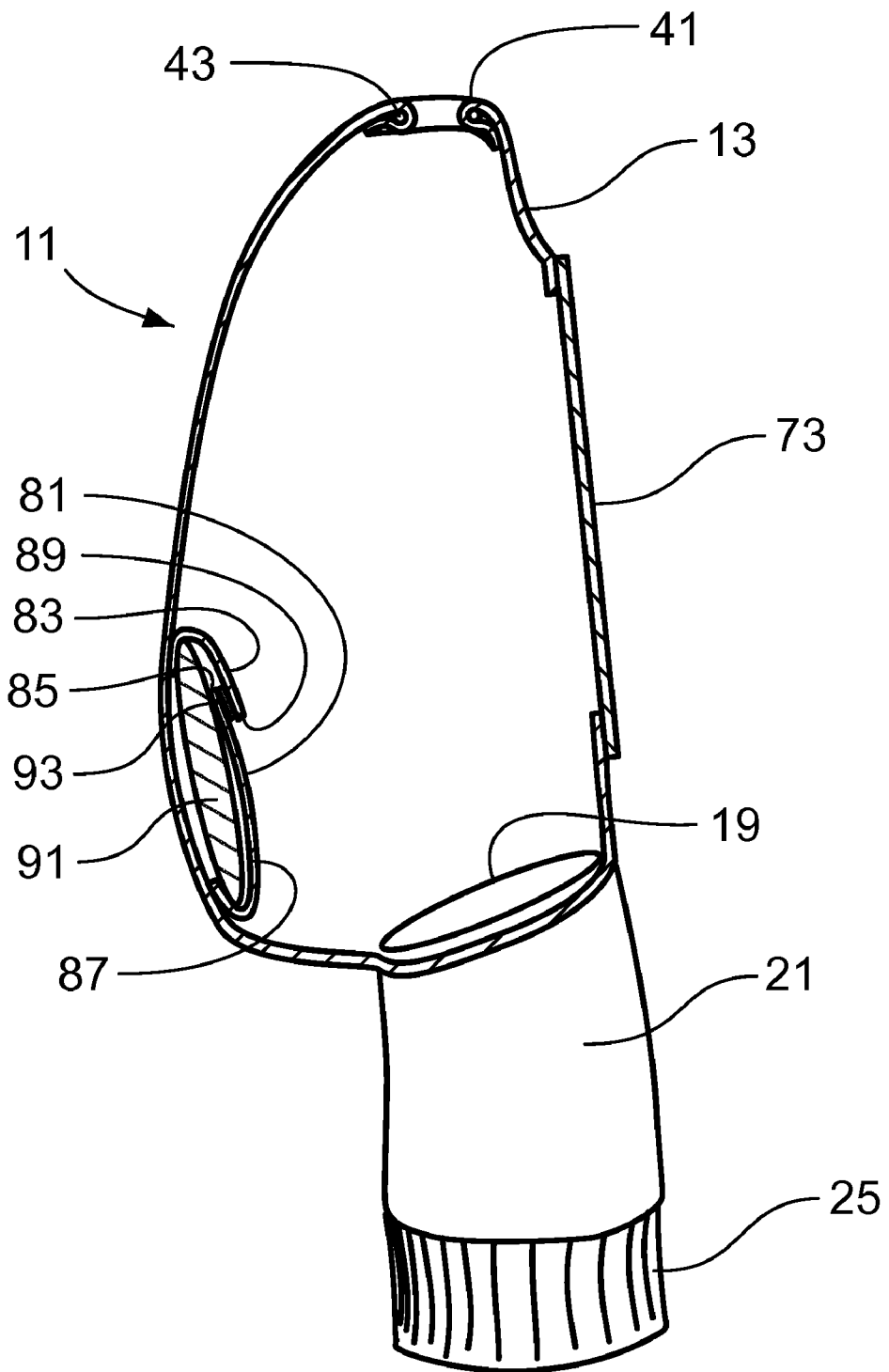


FIG 6

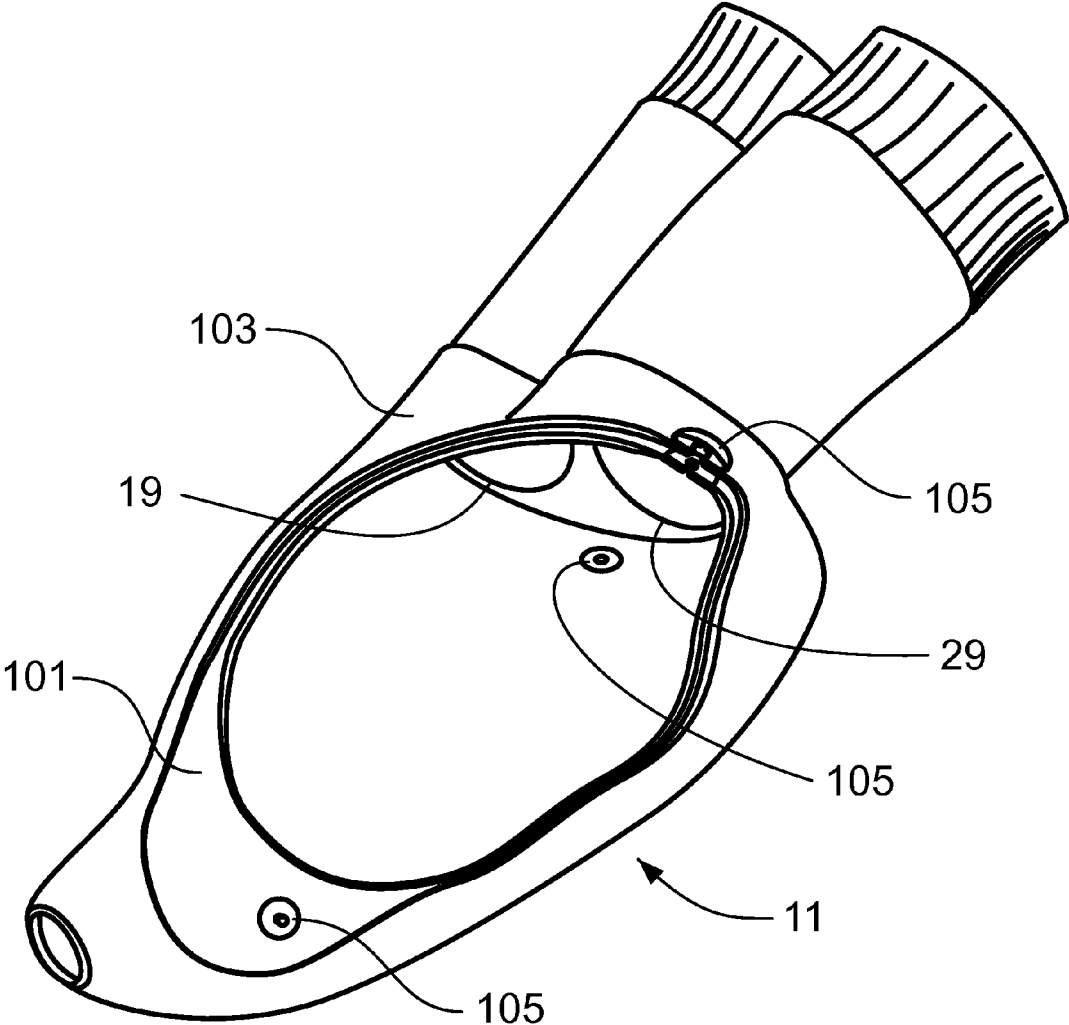


FIG 7

TWO HANDED PROTECTIVE COVERING

BACKGROUND OF THE INVENTION

[0001] In golf, the ability of a golfer to precisely and accurately hit the ball requires a repeated controlled swing of the club. The swing itself is a complex rotation of the body aimed at accelerating the club head to a great speed while orienting the face of the club in a desired direction at the moment of impact with the ball. To achieve precision and accuracy the golfer must be able to repeat a series of complex motions while maintaining alignment of the club face. Cold weather may affect a player's grip upon the club, numbing the hands, wrists and arms thus reducing the player's tactile feedback and decreasing the player's likelihood of being able to obtain a precise and accurate shot. Cold weather constricts blood vessels in the wrists and forearm, reducing blood flow further increasing the numbing sensation in the hand. While a golf glove is widely used by players to prevent callus formation, increase comfort and aid in control of the club, use of traditional mittens or insulating gloves further inhibit the player's tactile feedback, preventing use of mittens or insulating gloves during play. Wet weather also may affect a player's grip by modifying the frictional qualities of the grip, reducing the player's ability to adequately control the club during the swing.

BRIEF SUMMARY OF THE INVENTION

[0002] The present invention allows the user to keep his hands, wrists and forearms comfortably warm and dry and allows use of one or more additional gloves if desired while not inhibiting the user's tactile sensation of the grip. While the preferred embodiment envisions the invention's use while golfing, it is to be understood that the invention may be used in other activities and sports including baseball batting and fishing.

[0003] An object of the present invention is to protect a user's hands from cold weather conditions while allowing the user to experience the same tactile sensations experienced as when not using the invention by providing an insulating covering that envelops both hands of the user and the handle or grip of the object manipulated.

[0004] A second object of the present invention is to protect a user's hands from wet weather conditions while allowing the user to experience the same tactile sensations experienced when not using the invention by providing a water repellant covering that envelops both hands of the user and the handle or grip of the object manipulated.

[0005] A third object of the present invention is to protect a user's hands from cold and wet weather conditions while allowing the user to experience the same tactile sensations experienced when not using the invention by providing an insulating and water repellant covering that envelops both hands of the user and the handle or grip of the object manipulated.

[0006] A fourth object of the present invention is to protect a user's wrists and lower forearms from cold and/or wet weather conditions by providing an insulating and/or water repellant covering that possesses sleeved hand openings for covering the wrists and lower forearms.

[0007] A fifth object of the present invention is to allow ingress and egress of the user's hands into the invention by providing sleeved openings of sufficient width and length to accommodate the user's hands, wrists and forearms.

[0008] A sixth object of the present invention is to allow ingress and egress of the handle of the object to be manipulated by providing an opening of sufficient width and length to accommodate the handle of the object to be manipulated.

[0009] A seventh object of the present invention is to allow viewing of the user's grip while protecting the user's hands from adverse elements by providing a transparent window in the protective covering.

[0010] An eighth object of the present invention is to protect a user's hands from cold and/or wet weather conditions and give visual guidance of proper hand positioning by providing a transparent window in the protective covering with visible markings for hand and/or finger position guidance.

[0011] A ninth object of the present invention is to protect a user's hands from cold weather conditions while allowing the user to experience the same tactile sensations experienced when not using the invention by providing a covering with an interior pocket for securing a chemical, electric or fuel hand warmer, the invention enveloping both hands of the user and the handle or grip of the object manipulated.

[0012] The two handed protective covering may be used in cold and wet weather during a variety of activities where the user desires to maintain the same tactile sensation as when it is not in use in warm dry weather conditions. Such activities may include recreational activities such as golf, baseball, or fishing.

[0013] The protective covering includes a central hand portion, a first sleeve portion and a second sleeve portion. The protective covering possesses at least three openings, a first opening for ingress and egress of a user's first hand, a second opening for ingress and egress of a user's second hand and a third opening for ingress and egress of the handle of an object to be manipulated by the user. The first and second sleeve portions extend from the first and second openings respectively.

[0014] The central portion is of sufficient size to allow a user to comfortably grip the handle of an object to be manipulated without restricting hand movement during intended use of the handled object. The central hand portion is of sufficient length to envelope both hands while allowing the user to properly grip the handle with both hands, generally one hand positioned slightly further down the handle than the other. The central hand portion may also have a transparent window for viewing the handle and hand position of the user.

[0015] Each first and second opening and sleeve portion is of sufficient diameter to allow ingress and egress of the user's hand into the central hand portion of the covering while resisting entry of moisture and preventing loss of heat from the central hand portion. Each sleeve is of sufficient length to cover and protect the user's wrists and lower forearms from cold or wet weather. For instance, when used to keep the user's hands, wrists and forearms warm and dry while playing golf, the sleeves should be of sufficient length to cover the lower forearm during initial set-up of the swing and during swing and in the finish position. In the preferred embodiment, the sleeves of the two handed protective covering will touch or overlap the user's long sleeved sweater or jacket during all phases of swing.

[0016] The two handed covering is constructed from materials selected to achieve desired wind resistance, breathability, water resistance and insulating characteristics. In the preferred embodiment, the two handed covering is constructed from an insulating hydrophobic material such as synthetic fleece. Other flexible materials and fabrics, including nylon,

polypropylene, polyester, and leather may be used to construct the covering. Two or more layers of fabric may be used to achieve the desired insulating and water repellent qualities, such as using a water repellent nylon outer shell combined with an insulating polar fleece inner layer. Various coatings and/or treatments may be applied to the material used to construct the two handed covering, including silicone, polyurethane, and expanded polytetrafluoroethylene to increase the material's water and/or wind resistance.

[0017] A pocket may optionally be positioned in the interior of the central hand portion to hold a hand warmer to generate additional warmth for the user. The pocket should be of sufficient size to accommodate a commercially available chemical, electric, or fuel powered hand warmer. A closure fastener, such as a snap, zipper, or hook-and-loop closure, secures the hand warmer in place to prevent its movement inside the two handed covering during use.

[0018] A transparent window is optionally positioned between the first and second opening and the third opening to permit view of the user's grip. The window is preferably constructed of a transparent material, such as plexiglass, polycarbonate, or vinyl. The window may be attached to the central portion in a permanent manner including bonding, gluing or sewing the window in place. Alternatively the window may be removably attached so that it can be removed and replaced when desired. The window may be removably attached with any removable fastener, including snaps, hook-and-loop material, buttons, zipper, magnetic fasteners, hook and eye, and slot and tab type fasteners.

[0019] Optionally a visual aid is included to help the user achieve a proper grip. In one embodiment markings upon the window visually help the user to obtain a proper grip. In a preferred embodiment, a golf grip is printed upon the window with markings indicating the proper position of the left and right hand thumbs and forefingers such that the golfer can be reminded of where the hands should be placed on the grip of the golf club. This window will allow the user to see his or her grip upon the handle in addition to feeling it. Alternatively, where a window is permanently attached to the two handed covering, a separate visual aid for the user's reference may be positioned over the permanently attached window.

BRIEF DESCRIPTION OF THE DRAWINGS

[0020] The invention is illustrated by the accompanying drawings, in which:

[0021] FIG. 1 is a perspective view of a golfer using an embodiment of the present invention that lacks a window for viewing the hand grip;

[0022] FIG. 2 is a cutaway perspective view of the invention showing the user gripping the golf club within the invention;

[0023] FIG. 3 is a perspective view of an embodiment of the device having a transparent window for viewing the user's hands and grip;

[0024] FIG. 4 is a perspective view of an embodiment of the device having removable and interchangeable windows, one clear and one having a guide imprinted upon the window for user reference of proper hand position;

[0025] FIG. 5 is an elevated view of an embodiment of the device with a guide imprinted upon the window of the device for user reference of proper hand position;

[0026] FIG. 6 is a cutaway sectional view taken on line 6-6 in FIG. 5 showing the internal pocket for containing a hand warming apparatus; and

[0027] FIG. 7 is a cutaway perspective view of the invention showing an internal thermal liner.

DETAILED DESCRIPTION OF THE INVENTION

[0028] The drawings illustrate an apparatus that enable a user to grip the handle of object they intend to manipulate, particularly a golf club, while keeping the user's hands, wrists, lower forearms, and handle of the object warm and dry.

[0029] FIG. 1 shows a user 1 using one embodiment of the present invention 11 while manipulating a golf club 5. The protective covering 11 envelopes the user's left and right hands, wrists, lower forearms and handle of the golf club 5. The protective covering 11 comprises a central portion 13, a right sleeve 21 and a left sleeve 31. The user's right hand passes through a right wrist or wrist sleeve opening 23 and the user's left hand passes through a left wrist or wrist sleeve opening 33 entering the central portion 13 of the protective covering 11. The handle of the golf club 5 pass through a lower opening 41 to enter the central portion 13.

[0030] FIG. 2 shows another embodiment of the invention, having an extended elasticized cuffs 25 and 35 attached to the end of wrist or wrist sleeve portions 21 and 31. The elastic cuff portions 25 and 35 may also be integrated into the sleeve portions 21 and 31. The figure illustrates a cutaway view of the central portion 13 of the protective covering 11 showing the hands of the user 1 gripping the golf club handle 7. The central portion 13 is sufficiently voluminous to allow the user to grip the handle 7 of the golf club 5 without restricting the movement of the user's hands. The handle opening 41, has a diameter that is less than the diameter of the central portion 13 thereby restricting the loss of heat and entry of moisture, yet the handle opening 41 is sufficiently large enough to allow the handle 7 to enter the central portion 13. The two sleeve portions 21 and 31 each respectively extend from openings 19 and 29 in the central portion 13.

[0031] FIG. 3 shows yet another embodiment of the invention, having a transparent window 53 in the central portion 13 of the protective covering 11. In this embodiment, the window 53 is secured at the edges of a fourth opening 49. The window 53 is secured by any method suitable including thermal bonding, gluing, or sewing. The window 53 enables users 1 to view their hands gripping the handle 7 of the golf club 5. In this embodiment, the illustrated window 53 possess a rectangular planar shape, however, the window may be of any desired shape, including oval, circular, triangular, and may be planar, curved or multifaceted.

[0032] FIG. 4 shows another embodiment of the invention in which interchangeable window units 65, 67 may be removably attached to the surface of the central portion 13 of the covering 11 surrounding an alternate fourth opening 51. In this embodiment, interchangeable removable window units 65 and 67 attach using hook-and-loop material 63 located around the perimeter of the windows 61, 61'. Complimentary hook-and-loop material is attached to the surface of the central portion 13 surrounding the alternate fourth opening 51. While hook-and-loop material is used in this embodiment, the removable window unit 65 or 67 may be attached by any removable fastener, including snaps, hook-and-loop material, buttons, zipper, magnetic fasteners, hook-and-eye, or slot-and-tab type fasteners. Window unit 67 possesses a visible guide 69 in the window 61' to aid the user in establishing proper hand and finger placement upon the handle 7. Here the guide 69 is shown as a diagram of a proper grip as viewed

from the user's point-of-view. Other guide markings may be used including grids, finger tip placement markings or transparent pictorials. An opaque covering may also be used to cover the fourth opening, to allow use of the protective covering 11 without a clear window present.

[0033] FIG. 5 shows an elevated view of another embodiment wherein the window 73 is imprinted with a hand and finger placement guide 79. Here, the window 73 is triangular shaped with rounded vertices and is permanently attached to the central portion 13 at the edge of a triangular opening 80. It can be appreciated that the window 73 may also be removably attached and/or possess curvature as discussed with other embodiments herein. The protective covering 11 is generally symmetric across a plane extending from the center of the third opening 41 to midpoint between the first opening 19 and second opening 29 as shown by line 6-6. In this embodiment a small pocket 81 is attached to the interior of the central portion 13 of the protective covering 11. The pocket 81 allows the user to secure a warming pack 91 for maintaining hand warmth during cold weather. Such warming packs include those that generate heat by a chemical reaction, electricity, fuel or crystallization.

[0034] FIG. 6 is a cutaway sectional view taken on line 6-6 in FIG. 5. This view shows the warming pack 91 contained within the interior pocket 81. In this embodiment, a lower pocket flap 87 is secured to the central portion 13. The upper edge 85 of the lower pocket flap 87 is not secured to the central portion 13 to form a pouch for ingress and egress of the warming pack 91. An upper pocket flap 83 is secured to the central portion 13 of the protective covering 11. The lower edge 89 of the upper pocket flap 83 is not secured to the central portion 13. The upper pocket flap 83 is fastened to the lower pocket flap 87 by a releasable fastener 93 allowing the user to secure a heat pack 91 inside the pocket 81. The closure fastener 93 may include a snap, zipper, buckle, or hook-and-loop closure. A ring 43 around the third opening 41 maintains the aperture's circular shape for ease of inserting the handle 7 of the object to be manipulated 5. The ring 43 may be constructed from ridged or semi ridged material including plastic, rubber or metal. The window 73 is adhered to the central portion 13 of the protective covering 11 around the perimeter of the fourth opening.

[0035] The protective covering 11 is constructed from a fabric chosen for the desired thermal and/or water resistance properties. The protective covering 11 may be lined or left unlined, and the fabric selected may possess multiple bonded layers to achieve the desired thermal retentive or water resistance properties. FIG. 7 shows an embodiment of the protective covering 11 having a removable internal liner 101 positioned on the interior of the exterior shell 103. In the preferred embodiment, the exterior shell 103 of the protective covering 11 is comprised of a lightweight synthetic woven material and an expanded polytetrafluoroethylene layer to provide a breathable, yet water resistant outer surface. The interior liner 101, may be constructed from a synthetic fleece fabric to provide additional warmth. The interior liner 101 is releasably fastened to the exterior shell 103 with snaps 105. Other releasable fasteners including zippers, buttons or hook-and-loop material may also be used.

What is claimed is:

1. A protective covering that envelops a user's hands, wrists, lower forearms, and handle of an object to be manipulated by the user comprising:

- a central hand enclosure portion having upper and lower ends, said central portion being adapted to accommodate the right and left hands of said user and an end portion of a handle of an object to be manipulated by the user, said central hand enclosure portion including first and second openings permitting insertion of said user's right and left hands respectively, and a third opening permitting insertion of said handle;
 - a first wrist portion of sufficient length to envelop the user's first wrist and lower forearm and of sufficient girth to permit egress and ingress of the user's first hand into said central portion, said first wrist portion secured to and extending from said first opening of said central hand portion;
 - a second wrist portion of sufficient length to envelop the user's second wrist and lower forearm and of sufficient girth to permit egress and ingress of the user's second hand into said central portion, said second wrist portion secured to and extending from said second opening of said central hand portion; and
 - said third opening being positioned at one end of said protective covering which is generally opposite to the positions of said first and second openings.
2. A protective covering according to claim 1, wherein said covering is substantially symmetrical across a plane extending from the center of the third opening to midpoint between the first and second opening.
 3. A protective covering according to claim 1, wherein said covering is constructed from a thermally insulating material.
 4. A protective covering according to claim 1, wherein said covering is constructed from a water repellent material.
 5. A protective covering according to claim 1, further comprising a removable liner.
 6. A protective covering according to claim 1, wherein said central hand portion contains a fourth opening wherein a sheet of transparent material is positioned over said fourth opening and attached to said protective covering to form a window.
 7. A protective covering according to claim 6, wherein said transparent material is non-removably attached.
 8. A protective covering according to claim 6, wherein said transparent material is removably attached.
 9. A protective covering according to claim 6, wherein a visual aid for positioning said user's hands on said grip is displayed upon said transparent material.
 10. A protective covering according to claim 7, wherein a second sheet of transparent material possessing a visual aid for positioning said user's hands on said grip is positioned over said fourth opening and removably attached to the circumference of said fourth opening.
 11. A protective covering according to claim 1, wherein said central portion contains an inner pocket of sufficient size to accommodate a hand warmer.
 12. A protective covering generally symmetric with respect to a first plane and that envelops the user's hands, wrists, and handle of an object to be manipulated by the user comprising:
 - a central hand portion adapted to accommodate said user's hands and a handle of an object to be manipulated by the user;
 - a first wrist portion of sufficient length to envelop the user's first wrist and lower forearm and of sufficient girth to permit egress and ingress of the user's first hand into said central portion, said first wrist portion extending from a

- first opening of said central hand portion and positioned on one side of said first plane;
 - a second wrist portion of sufficient length to envelop the user's second wrist and lower forearm and of sufficient girth to permit egress and ingress of the user's second hand into said central portion, said second wrist portion extending from a second opening of said central hand portion positioned on the second side of said plane mirror opposite of said first opening; and
 - a third opening positioned at one end of said protective covering which is generally opposite to the positions of said first and second openings.
13. A protective covering according to claim 12, wherein said covering is constructed from a thermally insulating material.
14. A protective covering according to claim 12, wherein said covering is constructed from a water repellent material.
15. A protective covering according to claim 12, further comprising a removable liner.
16. A protective covering according to claim 12, wherein said central hand portion contains a fourth opening wherein a sheet of transparent material is positioned over said fourth opening and attached to the circumference of said fourth opening.
17. A protective covering according to claim 16, wherein said transparent material is non-removably attached.
18. A protective covering according to claim 16, wherein said transparent material is removably attached.
19. A protective covering according to claim 16, wherein a visual aid for positioning said user's hands on said grip attaches to said transparent material.

20. A protective covering according to claim 17, wherein a second sheet of transparent material possessing a visual aid for positioning said user's hands on said grip is positioned over said fourth opening and removably attached to the circumference of said fourth opening.
21. A protective covering according to claim 12, further comprising an inner pocket of sufficient size to accommodate a hand warmer attached to said central portion.
22. A protective covering for enveloping a human's hands and wrists and the handle of an object gripped by said hands, comprising:
- a central hand enclosure adapted to accommodate said hands of said human gripping said handle of said object, said enclosure having an upper end presenting a pair of wrist openings and a lower end presenting an opening permitting insertion of said handle,
 - a pair of wrist sleeves secured to said enclosure in registration with said wrist openings, respectively, said wrist sleeves being of sufficient length to envelop said human's wrists and forearms and of sufficient girth to permit egress and ingress of said user's hands into said enclosure,
 - a fourth opening in said enclosure intermediate said upper and lower ends thereof and a sheet of transparent material attached to said enclosure in covering relation to said fourth opening, thereby forming a window through which said user can observe his hands gripping said handle.

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